**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Application of Aqua Pennsylvania Wastewater, Inc. (hereinafter referred to as "Aqua" or "Applicant") pursuant to Sections 1102 and 1329 of the Public Utility Code for:** | : | **Docket No. A-2022-3033138** |
| **(1) approval of the acquisition by Aqua of the wastewater system assets of the City of Beaver Falls ("Beaver Falls" or "City") situated within the City of Beaver Falls Eastvale Borough, and West Mayfield Borough, Beaver County, Pennsylvania;** | : | |
| **(2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the City of Beaver Falls, Beaver County, Pennsylvania; and** | : | |
| **(3) an order approving the acquisition that includes the ratemaking rate base of the City of Beaver Falls wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code.** | : | |
| **Request for Approval of Contracts, between Aqua and the City of Beaver Falls, Pursuant to Section 507 of the Public Utility Code** | : | |

**EVIDENCE LIST OF AQUA PENNSYLVANIA, INC.**
**AND AQUA PENNSYLVANIA WASTEWATER, INC.**

1. **Aqua Pennsylvania Wastewater, Inc.'s ("Aqua" or the "Company") Initial Application Dated February 17, 2023, including:**

   - Aqua Exhibit 1 – Application dated February 17, 2023
   - Exhibit A – Map of Requested Territory
   - Exhibit B – Asset Purchase Agreement – PUBLIC and **CONFIDENTIAL** versions
   - Exhibit C – Aqua Balance Sheet and Income Statement Reports for Calendar Year 2021

- Exhibit D – Asset Inventory – PUBLIC and **CONFIDENTIAL** version (CONFIDENTIAL version including Appendix B thereto)

- Exhibit E – Beaver Falls WWTP Chapter 94 Report to DEP

- Exhibit F1 – Agreement Between the City of Beaver Falls and Township of Patterson

- Exhibit F2 – Agreement Between the Borough of Eastvale and the City of Beaver Falls

- Exhibit F3 – Agreement Between the Big Beaver Municipal Authority and the City of Beaver Falls

- Exhibit F4 – Agreement Between North Sewickly Township Sewer Authority and the City of Beaver Falls

- Exhibit F5 – Capital Lease Agreement Between the City of beaver Falls and the Joint Sewer Users

- Exhibit F6 – Right to Know Request and Response of Patterson Heights Borough

- Exhibit F7 – Right to Know Request and Response of West Mayfield Borough

- Exhibit F8 – Right to Know Request and Response of White Township

- Exhibit F9 – Pro-Forma Wastewater Service Agreements Between Aqua and Contributing Municipalities

- Exhibit F10 – Pro-Forma Wastewater Service Agreements Between Aqua and Contributing Municipalities

- Exhibit F11 – Agreement Between Aqua and the City of Beaver Falls for Charitable Contributions

- Exhibit F12 – Pro-Forma Water Meter Read Agreement Between Beaver Falls Municipal Authority and Aqua

- Exhibit G – Post-Closing Schedule of Rates Tariff Page Implementing Monthly and Quarterly Rates for City of Beaver Falls Customers

- Exhibit H – City of Beaver Falls' Currently Effective Rate Ordinance

- Exhibit I1 – Notice to Aqua Customers Describing the Filing and Anticipated Effect on Rates

- Exhibit I2 – Notice to City of Beaver Falls Customers Describing the Filing and the Anticipated Effect on Rates

- Exhibit J1 – City of Beaver Falls' Annual Financial Report for 2020

- Exhibit J2 – City of Beaver Falls' Annual Financial Report for 2021
- Exhibit J3 – City of Beaver Falls' Annual Financial Report for 2022
- Exhibit J4 – City of Beaver Falls' Annual Financial Report for 2023
- Exhibit K – City of Beaver Fall's Annual Report Filed with the Department of Community and Economic Development
- Exhibit L – Certificated Wastewater Operator Joseph Durish's Wastewater Operator's License
- Exhibit M1 – Water Quality Management Permit for Beaver Falls WWTP and Related Permits
- Exhibit M2 – Water Quality Management Permit for Eastvale Pump Station
- Exhibit N1 – National Pollution Discharge Elimination System Permit for Beaver Falls WWTP
- Exhibit N2 – Discharge Monitoring Reports for Beaver Falls WWTP from 2017 to November 2022
- Exhibit O1 – Notices of Violation issued to the City of beaver Falls and accompanying Responses
- Exhibit O2 – Consent Assessment of Civil Penalty Between DEP and the City of Beaver Falls
- Exhibit O3 – City of Beaver Falls' Corrective Action Plan Submitted to DEP
- Exhibit O4 – Big Beaver Municipal Authority's Corrective Action Plan Submitted to DEP
- Exhibit O5 – North Sewickley's Corrective Action Plan Submitted to DEP
- Exhibit O6 – Patterson Township's Corrective Action Plan Submitted to Dep
- Exhibit O7 – White Township's Corrective Action Plan Submitted to DEP
- Exhibit O11 – Gannett Technical Memorandum, Phase I Environmental Site Assessment and Beaver Falls' Memo to Bidders
- Exhibit P1 – City of Beaver Falls' Act 537 Plan Documents
- Exhibit Q – Fair Market Value Appraisal Report of ScottMadden
- Exhibit R – Fair Market Value Appraisal Report of Gannett Fleming

- Exhibit T1 – Verification of ScottMadden
- Exhibit T2 -Verification of Gannet Fleming
- Exhibit U – Aqua Statement No. 1 – Direct Testimony of William C. Packer, including Appendix A
- Exhibit V – Aqua Statement No. 2 – Direct Testimony of Mark J. Bubel, Sr.
- Exhibit W – Aqua Statement No. 3 – Direct Testimony of Zach Martin
    - PUBLIC and **CONFIDENTIAL** versions
- Exhibit X – Aqua Statement No. 4 – Direct Testimony of Charles R. Jones, Jr.
- Exhibit Y – Aqua Statement No. 5 – Direct Testimony of Dylan W. D'Ascendis
- Exhibit Z – Aqua Statement No. 6 – Direct Testimony of Harold Walker, III
- Exhibit AA – Answers to the Section 1329 Application SDRs
- Exhibit BB1 – Verification of Aqua
- Exhibit BB2 – Verification of the City of Beaver Falls
- Exhibit CC -Aqua's Proposed Modifications to the Agreements with the Contributing Municipalities

2. **Aqua's Amended Application Dated March 29, 2024, including the following Amended and Supplemental Materials:**

- Aqua Exhibit 2 – Amended Application dated March 28, 2024
- Exhibits F9-F15 – New Wastewater Service Agreements
- Renumbered Exhibit F16 – Agreement Between Aqua and the City of Beaver Falls for Charitable Contributions (formerly Exhibit F11)
- Renumbered Exhibit F17 – Pro-Forma Water Meter Read Agreement Between Beaver Falls Municipal Authority and Aqua (formerly Exhibit F12)
- Exhibit F18 – Settlement Agreement between Aqua, the City, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township
- Amended Exhibit G – Proposed Tariff
- Amended Exhibits I1, I2 and I3 – Notices to Customers

- Supplement Exhibit U – Aqua Statement No. 1 Supp – Supplemental Direct Testimony of William C. Packer and associated Appendix A

- Supplement Exhibit W – Aqua Statement No. 3 Supp – Supplemental Direct Testimony of Zach Martin (PUBLIC) and associated Appendix A (PUBLIC)

- **CONFIDENTIAL** Supplement Exhibit W – Aqua Statement No. 3 Supp – Supplemental Direct Testimony of Zach Martin (**CONFIDENTIAL**) and associated Appendix A (**CONFIDENTIAL**)

- **HIGHLY CONFIDENTIAL** Supplement Exhibit W – Aqua Statement No. 3 Supp – Supplemental Direct Testimony of Zach Martin (**HIGHLY CONFIDENTIAL**)

- Supplement Exhibit X – Aqua Statement No. 4 Supp – Supplemental Direct Testimony of Charles R. Jones, Jr.

**3. Aqua's Additional Direct Testimony Dated December 23, 2024:**

- Exhibit DD – Aqua Statement No. 7-R – Direct Testimony of Dr. Kenya Johns

- Exhibit EE – Aqua Statement No. 8-R – Direct Testimony of Sandra Wilkins, including Appendix A

**4. Aqua's Rebuttal Dated February 24, 2025:**

- Aqua Statement No. 1-R – Rejoinder Testimony of William C. Packer
    - Aqua Exhibit WCP-1R
- Aqua Statement No. 2-R – Rejoinder Testimony of Mark J. Bubel, Sr.
    - Aqua Exhibit MJB-1R
    - Aqua Exhibit MJB-1R
- Aqua Statement No. 3-R – Rejoinder Testimony of Zach Martin
    - PUBLIC and **HIGHLY CONFIDENTIAL** versions
- Aqua Statement No. 4-R – Rejoinder Testimony of Charles R. Jones, Jr.
- Aqua Statement No. 5-R – Rejoinder Testimony of Dylan W. D'Ascendis
- Aqua Statement No. 6-R – Rejoinder Testimony of Harold Walker, III
    - Aqua Exhibit HW-1R

- Aqua Statement No. 8-R – Rejoinder Testimony of Sandra Wilkins
- Aqua Statement No. 9-R – Rejoinder Testimony of Rita F. Black
    - Aqua Exhibit RFB-1R

**5. Aqua's Rejoinder Testimony Dated March 7, 2025:**

- Aqua Statement No. 1-RJ – Rejoinder Testimony of William C. Packer
- Aqua Statement No. 3-RJ – Rejoinder Testimony of Zach Martin
    - PUBLIC and **HIGHLY CONFIDENTIAL** versions
- Aqua Statement No. 5-RJ – Rejoinder Testimony of Dylan W. D'Ascendis
- Aqua Statement No. 6-RJ – Rejoinder Testimony of Harold Walker, III

Post & Schell P.C.
ATTORNEYS AT LAW

17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
717-731-1970 Main
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www.postschell.com

File #: 196374

February 17, 2023

***VIA ELECTRONIC FILING***

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

**Re: Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 507, 508, 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls**
**Docket No. A-2022-3033138**

Dear Secretary Chiavetta:

Enclosed for filing with the Pennsylvania Public Utility Commission ("Commission") are the above-referenced Application and related filings for Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") acquisition of all of the assets, properties and rights related to the wastewater collection and treatment system owned by the City of Beaver Falls ("Beaver Falls" or "the City"). The filing is made pursuant to Sections 507, 508, 1102, and 1329 of the Pennsylvania Public Utility Code (the "Code"), 66 Pa.C.S. §§ 507, 508, 1102, 1329.

Copies of the Application have been served as indicated on the Certificate of Service and in accordance with the Commission's *Final Supplemental Implementation Order* entered February 28, 2019 at Docket No. M-2016-2543193. Due to the size of the filing, and consistent with instructions provided by the Secretary's Bureau, the filing and related CONFIDENTIAL materials will be uploaded to the Commission's SharePoint site. In addition, due to the size of the filing, and consistent with the agreement of the parties listed on the Certificate of Service, an electronic version of the materials associated with the filing will be served upon the parties listed on the Certificate of Service via a secure download link.

Also enclosed in support of the Application as a part of the Section 1329 filing requirements are the Direct Testimonies and associated exhibits of the following:

1. Direct Testimony of William C. Packer, Vice President, Regulatory Accounting and Regional Controller, Essential Utilities, Inc. (**Exhibit U**, Aqua Statement No. 1);

2. Direct Testimony of Mark J. Bubel, Sr., Project Engineer III, Aqua Pennsylvania, Inc. (**Exhibit V**, Aqua Statement No. 2);

3. Direct Testimony of Zach Martin, Western Pennsylvania Area Manager, Aqua Pennsylvania, Inc. (**Exhibit W**, Aqua Statement No. 3);

4. Direct Testimony of Charles R. Jones, Jr., City Manager, City of Beaver Falls (**Exhibit X**, Aqua Statement No. 4);

5. Direct Testimony of Dylan W. D'Ascendis, Partner, ScottMadden, Inc. (**Exhibit Y**, Aqua Statement No. 5); and

6. Direct Testimony of Harold W. Walker, III, Manager, Financial Studies, Gannett Fleming Valuation and Rate Consultants, LLC (**Exhibit Z**, Aqua Statement No. 6).

## REQUEST FOR CONFIDENTIAL TREATMENT OF PROPRIETY INFORMATION

As noted above, Aqua's filing includes information that Aqua considers to be proprietary and confidential, as follows:

- **Exhibit B** – Asset Purchase Agreement and associated schedules (CONFIDENTIAL Version);

- **Exhibit D** – Engineer's Assessment of Wastewater System Assets, prepared by Gannett Fleming, Inc. (CONFIDENTIAL Version including Appendix B thereto);

- CONFIDENTIAL Workpaper Files, in Excel Format, of ScottMadden, Inc. and Gannett Fleming Valuation and Rate Consultants, LLC associated with **Exhibits Q** and **R**;

- CONFIDENTIAL Workpaper Files, in Excel Format, of Appendix A to **Exhibit U**, Aqua Statement No. 1; and

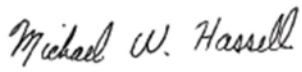
- **Exhibit W**, Aqua Statement No. 3 - Direct Testimony of Zach Martin, Western Pennsylvania Area Manager, Aqua Pennsylvania, Inc. (CONFIDENTIAL Version).

Copies of these documents have been conspicuously labeled as "CONFIDENTIAL," and have been separately compiled and submitted to the Commission. Aqua requests that the copies of the materials that have been labeled "CONFIDENTIAL" and that have been separately submitted to the Commission as "CONFIDENTIAL" documents be given confidential treatment by the Commission, including its various offices and bureaus. That is, Aqua requests that the confidential materials be excluded from the Commission's public document folder and that the confidential copies of these documents not be disclosed to the public.

The $350.00 filing fee for this Application has been paid as of the time of its submission to the Commission.

Thank you for your attention to this matter. Please do not hesitate to contact the undersigned if you have any questions.

Respectfully submitted,



Michael W. Hassell

MWH/kls
Attachments

cc: Christine Hoover, Esquire
Allison Curtin Kaster, Esquire
Certificate of Service

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

**VIA FIRST-CLASS MAIL AND E-MAIL**

Richard Kanaskie, Esquire
Allison Curtin Kaster, Esquire
Pennsylvania Public Utility Commission
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Commonwealth Keystone Building
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Paul Diskin, Director
Dan Searfoorce
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Bureau of Technical Utility Services
Commonwealth Keystone Building
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dsearfoorc@pa.gov
sdonnelly@pa.gov

Date: February 17, 2023

Michael W. Hassell

Michael W. Hassell

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Application of Aqua Pennsylvania Wastewater, Inc. (hereinafter referred to as "Aqua" or "Applicant") pursuant to Sections 1102 and 1329 of the Public Utility Code for:** | **:** | **Docket No. A-2022-3033138** |
| **(1) approval of the acquisition by Aqua of the wastewater system assets of the City of Beaver Falls ("Beaver Falls" or "City") situated within the City of Beaver Falls Eastvale Borough, and West Mayfield Borough, Beaver County, Pennsylvania;** | **:** | |
| **(2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the City of Beaver Falls, Beaver County, Pennsylvania; and** | **:** | |
| **(3) an order approving the acquisition that includes the ratemaking rate base of the City of Beaver Falls wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code.** | **:** | |
| **Request for Approval of Contracts, including Assignments of Contracts, between Aqua and the City of Beaver Falls, Pursuant to Section 507 of the Public Utility Code** | **:** | |
| **Request for Approval to Modify Agreements with Municipal Corporations to be Assigned to Aqua Upon Closing of the Acquisition by Aqua of the Wastewater System Assets of Beaver Falls, to the Extent Such Modifications are Necessary, Pursuant To Section 508 of the Public Utility Code** | **:** | |

## APPLICATION

**To the Pennsylvania Public Utility Commission ("Commission"):**

## I. BACKGROUND

1. The name and address of Applicant are:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

2. The name, address and contact information for Applicant's counsel are:

Michael W. Hassell, Esq. (ID # 34851)
Garrett P. Lent, Esq. (ID # 321566)
Post & Schell, P.C.
17 North Second Street, 12th Floor
Harrisburg, PA 17101
Phone: 717-731-1970
E-mail: mhassell@postschell.com
E-mail: glent@postschell.com

3. Pursuant to Sections 1102 and 1329 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 1102 and 1329, Applicant hereby requests that the Commission: (1) approve Aqua's acquisition of the wastewater system assets ("**Acquired Assets**") of the City of Beaver Falls ("Beaver Falls" or "the City"); (2) approve the right of Aqua to begin providing wastewater service in the requested territory, as shown as the area outlined in red on the map attached hereto as **Exhibit A** (the "**Requested Territory**");[1] and (3) include, in its Order approving the acquisition, the ratemaking rate base of the Assets as determined under Section 1329(c)(2) of the Public Utility Code, 66 Pa.C.S. § 1329(c)(2). As discussed in Section XII *infra*, Aqua also requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507 of the Public Utility Code, 66 Pa.C.S. § 507, for certain municipal contracts that Aqua has included in the Application, including new service agreements that Aqua will negotiate and enter into with Big Beaver Borough, West Mayfield Borough, White Township, North Sewickley Township, Eastvale Borough, Patterson Township, and Patterson Heights Borough ("Contributing Municipalities") prior to Closing and which will replace any prior agreements. Finally, as discussed

[1] A CONFIDENTIAL facilities map is included with the Asset Inventory as addressed *infra*.

in Section XIII *infra*, Aqua also requests that, to the extent necessary, certain existing agreements between Aqua and the Contributing Municipalities identified in Paragraph 25 *infra* be modified because the agreements contain a rate formula that is not consistent with the rates charged by the City to the Contributing Municipalities.

4. The map of the Requested Territory includes a north arrow depicting map orientation, a graphic scale, the municipal boundaries of Beaver Falls and identification and depiction of all private and public roads relative to the Requested Territory. A bearing and angle description of the Requested Territory is included on Exhibit A. The Requested Territory is approximately 2.3 square miles (1,468.8 acres).

5. Aqua and Beaver Falls have reached an agreement regarding the acquisition of the Acquired Assets, as evidenced by the *Asset Purchase Agreement*, dated as of October 20, 2021, and attached hereto as **Exhibit B** (the "**Agreement**"). Applicant respectfully requests that the Commission issue an *Order* and *Certificates of Public Convenience* approving and addressing the items requested in this Application.

6. An **Application Filing Checklist** identifying topics addressed and the section, paragraph and page number where they can be found is included with this Application as Appendix 1.

## II. AFFECTED ENTITIES

7. Aqua is a regulated public utility company, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua is engaged in the wastewater service business and furnishes wastewater service to approximately 60,000 customer accounts, as reflected in documents already on file with the Commission. Aqua's existing service territories cover various Counties throughout Pennsylvania with wastewater operations in nearby Venango County and water operations under Aqua Pennsylvania, Inc. (“Aqua PA”) in nearby Lawrence County.

8. Beaver Falls is a duly organized and validly existing city under a Home Rule Charter. The City owns the sanitary wastewater collection and treatment system which provides sanitary wastewater service to approximately 3,190 customers in the City, and provides transmission and treatment service for the seven (7) Contributing Municipalities.

9. Applicant incorporates into this Application other information on file with the Commission that establishes the fact that Aqua is qualified to provide adequate public wastewater service. Aqua will supplement this Application with all additional information the Commission may require. Balance Sheet and Income Statement reports from Aqua's financial system for calendar year 2021 are attached hereto as **Exhibit C**.

## III. PLANT-IN-SERVICE

10. Aqua will acquire Beaver Falls' wastewater collection and treatment system assets as defined in the Agreement, i.e., the Acquired Assets. All of the Acquired Assets are located in the City except for the Eastvale Pump Station which is located in Eastvale Borough, the force main that connects the Eastvale Pump Station to the City collection system, and a meter located in West Mayfield Borough.

11. An Engineer's Assessment of Wastewater System Assets, prepared by Gannett Fleming, Inc. ("Asset Inventory"), is attached hereto as **Exhibit D**. The facilities map included with the Asset Inventory as Appendix B thereto is considered CONFIDENTIAL.

12. The Asset Inventory explains that the Beaver Falls' collection and treatment system has one wastewater treatment plant, approximately 36 miles of gravity sewer collection mains, in sizes ranging from 8 inches to 24 inches in diameter, and the system has approximately 1,400 lineal feet ("LF") of 8 inch force mains. The Asset Inventory also details the one City owned pump station.

13. A list of non-depreciable property is presented in Appendix A of the Asset Inventory. The Beaver Falls System has no plant held for future use and none is included in the Asset Inventory.

14. All component facilities are installed. The approximate time of installation of component facilities is addressed in Appendix A of the Asset Inventory and in Mr. Bubel's testimony (Application **Exhibit V**, Aqua Statement No. 2).

15. Wastewater treatment is provided by the City at its Wastewater Treatment Plant ("WWTP") located in Beaver Falls, Beaver County. The Chapter 94 Report to the Department of Environmental Protection ("DEP") of Beaver Falls for the Beaver Falls WWTP, which includes Chapter 94 Report questionnaires for the Contributing Municipalities, is attached hereto as **Exhibit E**. The Beaver Falls WWTP has a permitted capacity of 4.8 million gallons per day ("MGD") with elevation ("EL") between EL 722 and 738.

16. Beaver Falls accepts wastewater flow into its collection system from the Contributing Municipalities, which is treated at the Beaver Falls WWTP. Flow is conveyed from the Contributing Municipalities through gravity sewers, force mains, and pump stations owned by the Contributing Municipalities. Once flow enters the City from Big Beaver Borough, West Mayfield, White Township, Patterson Township and Patterson Heights Borough, it is conveyed by gravity to the WWTP. Flow coming from Eastvale Borough and North Sewickley Township is conveyed to the Eastvale Pump Station and pumped into the City. The Eastvale Pump Station has design capacity of 610 gallons per minute ("gpm"). The arrangement for conveyance and treatment of flow from the Contributing Municipalities is discussed below in paragraph 25 and Sections XII and XIII.

17. Elevation of the Beaver Falls collection system and the service area varies:

EL 885 to EL 1150 along the western boundary.

EL 720 to EL 985 along the southern boundary.

EL 755 to EL 850 along the northern boundary.

EL 720 to EL 820 along the eastern boundary.

18. Water service in the Requested Territory is provided by the Beaver Falls Municipal Authority ("BFMA").

19. The original cost, by year and major plant category, of Beaver Falls' used and useful plant in service is $12,898,487 with a related calculated depreciation reserve of $7,866,277.

20. Tentative journal entries to record the transaction are presented in Section IV.

## IV. ASSET PURCHASE AGREEMENT

21. The Asset Purchase Agreement is dated October 20, 2021. The purchase price is Forty-One Million Two Hundred and Fifty Thousand Dollars ($41,250,000.00).

22. The purchase price is based on arm's length negotiations. Aqua and the City are not affiliated with each other.

23. Aqua will use short term debt initially for the purchase of the Acquired Assets with the expectation that the short-term debt will be converted to long-term debt and equity capital at a later date.

24. The wastewater system Acquired Assets to be transferred are the "Acquired Assets" and have the meaning specified in Section 2.01 of the Agreement. The Acquired Assets include the assets, properties and rights of the City used in the system and all treatment facilities, pipes, pumping stations, generators, manholes and pipelines and billing and collections related assets necessary to run the system.

25. Acquired Assets also include the four contracts identified on Schedule 4.15 of the Agreement to which City is a party (the "Assigned Contracts"). The Assigned Contracts are attached hereto as **Exhibit F1**, **Exhibit F2**, **Exhibit F3**, and **Exhibit F4**, respectively:[2]

F1 – Agreement, dated April 28, 1977, between the City of Beaver Falls and Township of Patterson.

F2 – Cooperation Agreement, dated May 1, 1983, between the Borough of Eastvale and the City of Beaver Falls.

F3 – Agreement, dated November 1998, between the Big Beaver Municipal Authority and the City of Beaver Falls.[3]

F4 – Agreement, dated January 9, 2003, between North Sewickley Township Sewer Authority and the City of Beaver Falls.[4]

While these agreements are listed as part of the Acquired Assets, the Company is submitting with this Application forms of pro-forma Wastewater Service Agreements which the Company will negotiate and enter into with the Contributing Municipalities to be executed upon Closing which will terminate and replace all prior agreements for the conveyance and treatment of wastewater. The pro-forma agreements are meant to standardize wastewater conveyance and treatment service to each of the Contributing Municipalities, including the Contributing Municipalities which do not have a conveyance and treatment agreement that could be located.[5] The Company requested any agreements regarding conveyance and treatment under the RTKL to Patterson Heights Borough, West Mayfield Borough, and White Township and those responses are attached as **Exhibit F6**, **Exhibit F7**, and **Exhibit F8**. The pro-forma agreements are included in this Application as **Exhibit F9** and **Exhibit**

[2] As noted below, Exhibits F3 and F4 are missing certain pages and/or exhibits. The Company and Beaver Falls have sought to obtain the missing items from the parties to the contracts through Right to Know Law ("RTKL") requests. Should the documents/information requested via RTKL be located and become available, Aqua will supplement the Application and record accordingly.

[3] Missing Signature Pages for Big Beaver Municipal Authority and City of Beaver Falls, and Exhibit A.

[4] Missing Exhibits A and B.

[5] The Company could not locate any conveyance and treatment agreements for Patterson Heights Borough, West Mayfield Borough, and White Township.

**F10**. The City has disclosed an April 8, 2014 Capital Lease Agreement, which is attached as **Exhibit F5**. The City notes that it included the document for the sake of disclosure, but has not been able to identify the counterparty entity and makes no representation as to the validity of that agreement. Additionally, included as **Exhibit F11** is an agreement between Aqua and the City for certain charitable contributions. The Company is also submitting a pro-forma meter reading agreement between Aqua and BFMA for the provision of water meter read data for billing purposes post-closing. The meter read agreement is included in this Application as **Exhibit F12**.

26. Acquired Assets also include all Authorizations and Permits of or held by Beaver Falls (to the extent transferrable to Aqua under applicable Law), including all Authorizations and Permits which are environmental permits, other operating permits and those items listed or described on Schedule 4.14 of the Agreement.

27. "Excluded Assets," which are those assets not being transferred to Aqua, has the meaning specified in Section 2.02 of the Agreement. Excluded Assets include Stormwater System Assets, contracts that are not Assigned Contracts, cash and cash equivalents and the assets, insurance policies, Beaver Falls' Plans, properties and rights set forth in Schedule 2.02(h) of the Agreement.

28. "Assumed Liabilities" has the meaning specified in Section 2.04(a) of the Agreement and include all liabilities and obligations arising out of or relating to Aqua's ownership or operation of the wastewater system and the Acquired Assets on or after Closing.

29. The tentative journal entries to record the transfer in Aqua's accounts are:

| | Debit | Credit |
|---|---|---|
| Utility Plant Purchased | $41,250,000 | |
| Cash/Short Term Debt | | $41,250,000 |

## V. CUSTOMERS

30. Beaver Falls provides wastewater service to approximately 3,197 customers, which includes 2,879 residential, 276 commercial, 7 industrial, 17 public, 7 Contributing Municipalities, and 1 bulk pumping and hauling customer.

31. Wastewater flow billed for Beaver Falls customers within the City was approximately 162,435,115 gallons for 2021.[6] Wastewater flow billed to the Contributing Municipalities was 177,925,000 gallons.[7]

32. City projects growth of 183 Equivalent Dwelling Units ("EDUs") over the next five years.

## VI. RATES

33. After Closing, Aqua will implement Beaver Falls' sanitary wastewater rates in effect at closing as reflected on Schedule 7.04 of the Agreement. The City presently bills on a quarterly and monthly basis. Aqua will continue to bill Beaver Falls customers on a quarterly basis and monthly basis. A schedule of rates tariff page implementing monthly and quarterly rates for City customers post-closing is attached hereto as **Exhibit G**.

34. As presented in Schedule 7.04 of the Agreement, Beaver Falls bills customers inside the City of Beaver Falls a quarterly base fee of $42.37 ($14.12 monthly) which includes an allowance of 3,000 gallons and a consumption charge of $8.46 per 1,000 gallons based on water usage. The Contributing Municipalities and Dalton Service Company, LLC are billed $4.54 per 1,000 gallons based on water usage. A copy of the City's currently effective Rate Ordinance is attached hereto as **Exhibit H**.

[6] Billed flow is based on water usage.
[7] Billed flow is based on water usage.

35. Upon Commission approval of this Application and completion of the proposed transaction, Aqua will begin to provide wastewater service in its name to the customers in the Requested Territory. It will implement its *Rules and Regulations* to govern the provision of wastewater service in the Requested Territory, as those *Rules and Regulations* are in effect from time to time for Aqua.

36. Copies of the notices that will be sent to customers of Aqua and to customers of Beaver Falls describing the filing and the anticipated effect on rates are attached hereto as **Exhibit I1**, **Exhibit I2**, and **Exhibit I3**.

## VII. COST OF SERVICE

37. Copies of Beaver Falls' Annual Financial Report for 2020 and 2021 are attached hereto as **Exhibit J1** and **Exhibit J2**. For the year ended December 31, 2021, the City had approximately $6,899,152 of long-term debt, and the details of long-term debt obligations are described in Note 9 in Exhibit J2. This debt is the long-term debt of the City, and there are no outstanding loans on the utility plant.

38. Copies of Beaver Falls' Adopted Annual Budgets for 2022 and 2023 are attached hereto as **Exhibit J3** and **Exhibit J4**.

39. A copy of Beaver Falls' most recent annual report filed with the Department of Community and Economic Development is attached hereto as **Exhibit K**.

40. Aqua projects annual revenue of $2,463,118 from the City's customers based on City's current rate schedule, calculated as follows:

| *Address Type* | *Service* | *Billed Dollars* | *Quarterly Minimum Fee Up to 3 Kgal* | *Rate per Kgal* | *Customers* | *EDUs* | *Total Usage* |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Domestic | Wastewater | $1,119,810 | $42.37 | $8.46 | 2,879 | 3,078 | 109,238,000 |
| | | | | | | | |
| **Domestic / Residential Total** | | **$1,119,810** | | | **2,879** | **3,078** | **109,238,000** |
| | | | | | | | |
| Commercial | Wastewater | $391,141 | $42.37 | $8.46 | 276 | 376 | 44,017,000 |
| | | | | | | | |
| **Commercial Total** | | **$391,141** | | | **276** | **376** | **44,017,000** |
| | | | | | | | |
| Industrial | Wastewater | $23,385 | $42.37 | $8.46 | 7 | 7 | 2,708,000 |
| | | | | | | | |
| **Industrial Total** | | **$23,385** | | | **7** | **7** | **2,708,000** |
| | | | | | | | |
| Public | Wastewater | $41,002 | $42.37 | $8.46 | 17 | 17 | 4,710,000 |
| | | | | | | | |
| **Public Total** | | **$41,002** | | | **17** | **17** | **4,710,000** |
| | | | | | | | |
| Bulk | Wastewater | $807,780 | | $4.54 | 7 | 3,767 | 177,925,000 |
| | | | | | | | |
| **Bulk Total** | | **$807,780** | | | **7** | **3,767** | **177,925,000** |
| | | | | | | | |
| Bulk Other | | $80,000 | | $4.54 | 1 | 1 | 1,762,115 |
| | | | | | | | |
| **Bulk Other Total** | | **$80,000** | | | **1** | **1** | **1,762,115** |
| **Total Service Revenue** | | **$2,463,118** | | | **3,187** | **7,246** | **340,360,115** |

41. Aqua estimates annual operating and maintenance expenses of $1,462,000 based on Beaver Falls' operating expenses presented in the 2021 financial statements, adjusted by the Company.

## VIII. PROOF OF COMPLIANCE

42. Aqua will operate and manage the Beaver Falls wastewater system as a standalone collection system, but within Aqua's footprint, from its Western Division Office in Sharon, Pennsylvania with operations and management support from Aqua's Southeastern Division Office in Bryn Mawr,

Pennsylvania. The system is approximately 32 miles from the Company's Western Division Office. Mr. Joseph Durish will be the assigned Certified Wastewater Operator for the system. Mr. Durish's currently effective Wastewater Operator's License is attached hereto as **Exhibit L**.

43. The Water Quality Management ("WQM") Permit for the Beaver Falls WWTP issued in 1996 is attached as **Exhibit M1**. Other WQM permits related to the WWTP and the System are included in **Exhibit M1**, in reverse chronological order. The WQM permit for the Eastvale Pump Station is attached as **Exhibit M2**. The National Pollution Discharge Elimination System ("NPDES") Permit for the Beaver Falls WWTP is attached hereto as **Exhibit N1**. Copies of Discharge Monitoring Reports ("DMR") for the Beaver Falls WWTP from 2017 through November 2022, are attached hereto as **Exhibit N2**.

44. Notices of Violation ("NOVs") issued to Beaver Falls are attached hereto as **Exhibit O1**. Beaver Falls' response to the NOVs is also included in Exhibit O1. Beaver Falls entered into a Consent Assessment of Civil Penalty ("CACP") with DEP on September 26, 2019 in relation to violations of effluent limitations between December 2016 and June 2019. The CACP is attached hereto as **Exhibit O2**. Beaver Falls and the Contributing Municipalities have entered into Corrective Action Plans submitted to DEP and attached hereto as **Exhibit O3** (Beaver Falls), **Exhibit O4** (Big Beaver Municipal Authority), **Exhibit O5** (North Sewickley), **Exhibit O6** (Patterson), and **Exhibit O7** (White), respectively. Eastvale Borough, Patterson Heights Borough, and West Mayfield Borough have not submitted CAPs to DEP. Beaver Falls employed Gannett Fleming, Inc. ("Gannett") to perform a limited hazardous materials assessment at the WWTP in 2021, and Gannett reported through a technical memo that there were suspected asbestos containing materials at the WWTP. Gannett then performed a Phase I Environmental Site Assessment of the WWTP in July 2021. Beaver Falls informed the bidders that it would be engaging professionals to safely remove the material as of July 19, 2021. Attached hereto as

**Exhibit O11** is the Gannett Technical Memorandum, the Phase I Environmental Site Assessment, and Beaver Falls' memo to bidders. As stated in Schedule 4.12 to the APA (*see* Application **Exhibit B**) the City removed asbestos in 2021.

45. Aqua is a Class A utility. It is in good standing with DEP and in general compliance with DEP with regard to the provision of wastewater service.

46. The service area comprising the Requested Territory is consistent with Beaver Falls' sewage planning and in compliance with DEP approved Act 537 Plans. A copy of Beaver Falls' Act 537 Plan documents is attached hereto as **Exhibit P1**.

47. The web address for the Beaver Falls Comprehensive Plan is: https://beaverfallspa.org/wp-content/uploads/2022/03/Beaver-Falls-Comprehensive-Plan-2013.pdf. The web address for the Beaver County Comprehensive Plan is: https://www.beavercountypa.gov/Depts/Planning/Documents/BC_ComprehensivePlan_May2010.pdf. Aqua is not requesting service territory beyond the existing plant footprint.

48. Aqua has wastewater operations in Venango County and Aqua PA has water operations in Lawrence County. The acquisition will easily fold into Aqua's existing wastewater operations. A listing of Aqua's nearby territory and facilities is as follows:

| Aqua Facilities | Location | Distance from City |
|---|---|---|
| Emlenton System | Emlenton, PA | 42 miles |
| Western Division Office | Sharon, PA | 32 miles |
| Mahoning Township System | Hillsville, PA | 19 miles |

49. Aqua is not anticipating any physical, operational or managerial changes at its Southeastern Office as a result of the acquisition. Aqua also does not anticipate any physical, operation, or managerial changes at its Western Division Office. Aqua will be offering employment to seven (7) operational staff from Beaver Falls to address the day-to-day operations of Beaver Falls.

50. Planned capital improvements are addressed in Mr. Bubel's testimony (Application **Exhibit V**, Aqua Statement No.2).

## IX. AFFECTED PERSONS

51. No corporation or entity, except Beaver Falls, is now furnishing or has corporate or franchise rights to furnish wastewater service in the Requested Territory, and no competitive condition will be created by approval of this Application. Water and wastewater service providers abutting or within one mile of the Requested Territory are as follows:

i. Within neighboring Big Beaver Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Bradys Run Sanitary Authority and private septic systems.

ii. Within neighboring West Mayfield Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by West Mayfield Municipal Authority and private septic systems.

iii. Within neighboring Chippewa Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Bradys Run Sanitary Authority and private septic systems.

iv. Within neighboring White Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by White Township Municipal Authority and private septic systems.

v. Within neighboring Patterson Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Patterson Township Municipal Authority and private septic systems.

vi. Within neighboring Patterson Heights Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Patterson Township Municipal Authority and private septic systems.

vii. Within neighboring Fallston Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

viii. Within neighboring New Brighton Borough, water service is provided by Beaver Falls Municipal Authority. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

ix. Within neighboring Pulaski Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

x. Within neighboring Daugherty Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

xi. Within neighboring Eastvale Borough, water service is provided by Beaver Falls Municipal Authority. Wastewater service is provided by Eastvale Borough.

xii. Within neighboring North Sewickley Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater Service is provided by North Sewickley Township Sewer Authority and private septic systems.

## X. REASONS SUPPORTING THIS APPLICATION

52. Approval of this Application is necessary or proper for the service, accommodation, convenience or safety of the public. As summarized below and discussed further in the testimonies of Mr. Packer, Mr. Bubel, and Mr. Martin which as identified in Section XI below, are attached hereto as **Exhibit U**, **Exhibit V**, and **Exhibit W**:

a. Aqua has the technical, regulatory, financial and legal fitness to operate the Acquired Assets of Beaver Falls, and to maintain the operations and make improvements to meet continuing and future customer needs.[8] The proposed transaction will not have an adverse effect on the service provided to existing customers of Aqua;

b. Beaver Falls has agreed to sell its assets. The public interest and need will be served by allowing Aqua, in lieu of Beaver Falls, to provide wastewater service in the Requested Territory and to address the issues of regulatory requirements and capital

[8] As a certificated provider of utility service, Aqua's fitness is presumed. *See Re Pennsylvania-American Water Company*, 85 PA PUC 548 (1995).

expenditures. The Beaver Falls system will benefit from the support of wastewater professionals throughout Aqua's organization;

c. The acquisition is consistent with the Commission's long-standing policy supporting the consolidation/regionalization of water/wastewater systems. Through consolidation/regionalization, the utility industry has a better chance to realize the benefits of better management practices, economies of scale, and the resulting greater environmental/economic benefits. The Commission has previously stated that "acquisitions of smaller systems by larger more viable systems will likely improve the overall long-term viability of the water and wastewater industry."[9] The benefits of consolidation/regionalization, ultimately, inure to customers both existing and acquired;

d. Aqua provides utility service to approximately 60,000 wastewater customers and has years of experience operating wastewater treatment and collection systems in a safe, reliable and efficient manner. Aqua has the managerial, technical, and financial resources to improve the operations of the City;

e. In *McCloskey v. Pa. P.U.C.*, 195 A.3d 1055 (Pa. Cmwlth. 2018), *petition for allowance of appeal denied* No. 703 MAL 2018 (April 23, 2019), the Commonwealth Court held that Commission findings: (i) that Aqua, as the owner of numerous water and wastewater systems has sufficient operational expertise and ability to raise capital to support system operations; and (ii) that the Commission has a policy of consolidation/regionalization of wastewater system assets that allows for increased maintenance, upgrade and expansion of public sewer and water facilities, are substantial

[9] Pennsylvania Public Utility Commission, Final Policy Statement on Acquisitions of Water and Wastewater Systems, Docket No. M-00051926, Final Order at 18 (Aug. 17, 2006).

evidence, consistent with *Popowsky v. Pa. P.U.C.*, 937 A.2d 1040 (Pa. 2007), to support a conclusion that there is a public benefit to a transaction;

f. The acquisition of the Beaver Falls Sewer system will increase Aqua's customer base by approximately 5%. With a larger customer base, future infrastructure investments, Statewide, will be shared at a lower incremental cost per customer for all Aqua customers; and

g. The acquisition will not have any immediate impact on the rates of either existing customers of Aqua or City customers. As discussed in the testimony of Mr. Packer and presented in the Notice to customers, the increase in rate base may ultimately require an increase in revenue. The hypothetical impact on rates is outweighed by the recognized benefits of Aqua's ownership including its expertise and ability to raise capital; the furtherance of consolidation/regionalization of wastewater services; and the spreading of costs over a larger customer base. Perhaps more significantly, the acquisition furthers the objective of the General Assembly with the enactment of Section 1329. While *McCloskey* concludes that rate impact should be addressed, it recognizes that it is not dispositive in the Commission's determination of substantial affirmative benefits.

## XI. ADDITIONAL INFORMATION REQUIRED BY SECTION 1329 OF THE PUBLIC UTILITY CODE AND THE PUBLIC UTILITY COMMISSION'S 1329 CHECKLIST

53. Aqua and Beaver Falls have agreed to use the process presented in Section 1329 of the Public Utility Code, 66 Pa.C.S. § 1329, to determine the fair market value of the Acquired Assets and the ratemaking rate base. Aqua's verified statement that it selected ScottMadden, Inc. ("ScottMadden") as its Utility Valuation Expert is attached hereto as **Exhibit BB1**. Beaver Falls'

verified statement that it selected Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") as its Utility Valuation Expert is attached hereto as **Exhibit BB2**.

54. As required by Section 1329(d)(1)(i), copies of the Fair Market Value Appraisal Reports of ScottMadden, Utility Valuation Expert, and Gannett Fleming, Utility Valuation Expert, are attached hereto as **Exhibit Q** and **Exhibit R**, respectively. Confidential and Proprietary Work Paper Files, in Excel Format, of ScottMadden and Gannett Fleming are provided with the Application, as explained in the cover letter thereto.

55. Applicant states that the purchase price of the Acquired Assets of the selling utility as agreed to by Aqua and Beaver Falls is $41,250,000.

56. The ratemaking rate base determined pursuant to Section 1329(c)(2) of the Public Utility Code is $41,250,000, being the lesser of the purchase price of $41,250,000 negotiated by Aqua and Beaver Falls and the average of the fair market value appraisals which is $42,245,674 – determined by $40,199,348 presented in the appraisal of ScottMadden and $44,292,000 presented in the appraisal of Gannett Fleming.

57. Aqua will incur transaction and closing costs of approximately $714,980, which it will include in its rate base.

58. A schedule of rates tariff page implementing rates equal to the rates of Beaver Falls at the time of closing is attached hereto as Exhibit G, as previously stated.

59. Applicant verifies that ScottMadden was selected by Aqua, the acquiring public utility, and that Gannett Fleming was selected by Beaver Falls, the selling municipality.

60. The Utility Valuation Experts were paid $71,297.50 for the completed Fair Market Value Appraisal Reports. Documentation of the fees paid to ScottMadden and Gannett Fleming, including the valuation service agreements and all associated invoices, are attached hereto as **Exhibit**

**S1** and **Exhibit S2**, respectively. Fees paid to the Utility Valuation Experts did not exceed 5% of the fair market value of the selling utility.

61. Statements of ScottMadden and of Gannett Fleming verifying that they have no affiliation with Aqua or Beaver Falls as specified in Section 1329; that their Appraisals determined fair market value in compliance with the most recent edition of the Uniform Standards of Professional Appraisal Practice as of the date of their report, employing the cost, market and income approaches; and that they applied applicable jurisdictional exceptions to their submitted Appraisal are attached hereto as **Exhibit T1** and **Exhibit T2**, respectively.

62. The testimony of William C. Packer, in support of this Application is attached hereto as **Exhibit U**.[10] Mr. Packer's testimony explains that Aqua is not presenting a rate stabilization plan. Aqua is proposing to implement Beaver Falls' existing rates after Closing and to maintain those rates until the next Aqua rate proceeding following Closing of the transaction.

63. The testimony of Mark J. Bubel, Sr., in support of this Application is attached hereto as **Exhibit V**.

64. The testimony of Zach Martin, in support of this Application is attached hereto as **Exhibit W**.

65. The testimony of Charles R. Jones, Jr., City Manager, in support of the Application is attached hereto as **Exhibit X**.

66. The testimony of Dylan W. D'Ascendis in support of the ScottMadden Appraisal is attached hereto as **Exhibit Y**.

67. The testimony of Harold Walker, III, in support of the Gannett Fleming Appraisal is attached hereto as **Exhibit Z**.

[10] Electronic workpapers of Appendix A to Aqua Statement No. 1 are being submitted to the Commission under CONFIDENTIAL cover.

68. Answers to the Section 1329 Application Standard Data Requests are attached hereto as **Exhibit AA.**

## XII. SECTION 507 APPROVAL OF ASSIGNMENT OF CONTRACTS

69. Section 507 of the Code, 66 Pa.C.S. § 507, provides that, except for contracts between a public utility and a municipal corporation to furnish service at tariff rates, no contract or agreement between a public utility and a municipal corporation shall be valid unless filed with the Commission at least 30 days prior to its effective date.

70. Aqua requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507, upon the execution and filing of the pro-forma agreements which are included in this Application in the form Aqua will negotiate and enter into prior to Closing with the Contributing Municipalities. The form of the pro-forma agreements are included as Exhibit F9 and Exhibit F10 to the Application. Aqua requests approval of the charitable contribution agreement between Aqua and the City included as Exhibit F11 to the Application. Aqua also requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507, upon execution and filing of the pro-forma meter read agreement with the BFMA included as **Exhibit F12** to the Application.

## XIII. SECTION 508 APPROVAL OF MODIFICATION OF CONTRACTS

71. Section 508 of the Code, 66 Pa.C.S. § 508, permits the Commission to modify any contract between a public utility and a person, corporation or municipal corporation that concerns the public interest. If, after reasonable notice and hearing, the Commission finds that the terms or conditions of the contract are unreasonable, inequitable, or otherwise contrary to the public interest

and general well-being of the Commonwealth, the Commission may determine and prescribe the reasonable and equitable terms and conditions of the contract.

72. The agreements to be modified are the municipal agreements for bulk service with the Contributing Municipalities identified in Paragraph 25, above, which will be assigned to Aqua at closing, if not replaced by the pro-forma agreement for wastewater conveyance and treatment.

73. Modifications are necessary because the above-identified agreements contain a rate formula that is not consistent with the rates charged by the City to the Contributing Municipalities as set forth in the City's ordinance. The rates currently being charged by the City are contained in the ordinance attached hereto as **Exhibit H**.

74. The modification will be limited to setting forth that a Commission established rate, as set forth in Aqua's tariff, as amended from time to time, will apply to the Contributing Municipalities for service after closing.

75. Attached as **Exhibit CC** is the specific language of the modification that Aqua requests the Commission make under 66 Pa.C.S. § 508, to make to the agreements with the Contributing Municipalities identified in Paragraph 25, above.

76. The requested modification to these agreements would be equitable and in the public interest because they adopt the rates currently charged by the City to the Contributing Municipalities. Moreover, 66 Pa.C.S. § 508 is a statutory tool that the Pennsylvania Legislature afforded to the Commission that allows the Commission to ensure that regionalization and consolidation of wastewater systems in the Commonwealth—along with the attendant public benefits—is not unreasonably hindered through the reasonable modification of service contracts that have been lawfully assigned to (pursuant to the express terms of the contracts) the public utility. It is reasonable and lawful for the Commission to modify contracts—a subject matter under the Commission's primary

and exclusive jurisdiction—upon such contract being assigned to or assumed by a public utility. *See* 66 Pa.C.S. § 508.

77. The modifications would be limited to setting rates to be charged by Aqua during the period between Closing and the earlier of (i) termination of the assumed agreements or (ii) renegotiation of the assumed agreements in accordance with the pro forma agreements attached as **Exhibit F9** and **Exhibit F10**.

78. When the renegotiated agreements become effective, or the existing assigned agreements are terminated, the Contributing Municipalities will be served by Aqua either pursuant to renegotiated bulk service agreements or pursuant to Aqua's tariffed bulk service rates. For those Contributing Municipalities that have no existing bulk service agreements, they will be served by Aqua either pursuant to negotiated bulk service agreements or pursuant to Aqua's tariffed bulk service rates. In the event that service is provided pursuant to default tariffed bulk service rates, future changes to those rates will be set by the Commission in the context of Aqua's base rate proceedings.

79. The foregoing provisions are just and reasonable because they maintain rates that are revenue neutral in comparison to rates that the Contributing Municipalities are charged by the City. Further, they remove uncertainty as to the rates to be charged to bulk wastewater customers who do not have an existing contract with the City or that do not negotiate a new agreement with Aqua to be effective at Closing.

## XIV. OTHER APPROVALS, CERTIFICATES, REGISTRATIONS AND RELIEF, IF ANY

80. Aqua asks that the Commission issue such other approvals, certificates, registrations and relief, if any, that may be required with respect to Aqua's acquisition of the Beaver Falls wastewater system assets.

## XV. CONCLUSION

**WHEREFORE**, Aqua requests that the Public Utility Commission approve this Application, filed pursuant to Sections 1102, 1329, 507, and 508 of the Public Utility Code, and:

a. Issue *Certificates of Public Convenience* under §1102 of the Pennsylvania Public Utility Code:

(1) Authorizing Aqua to acquire, by purchase, the wastewater system assets of the City of Beaver Falls; and

(2) Authorizing Aqua to begin to offer, render, furnish and supply wastewater service to the public in the Requested Territory covered by this Application.

b. Authorize Aqua to file tariff revisions, effective upon one day's notice, to:

(1) Include within its territory all the Requested Territory covered by this Application;

(2) Adopt and apply the City of Beaver Falls' rates as set forth in this Application as Aqua's Base Rates within the Requested Territory; and

(3) Apply Aqua's *Rules and Regulations* within the Requested Territory.

c. Enter an *Order* approving this Application and Aqua's acquisition of the Acquired Assets and, as part of that *Order* include the ratemaking rate base of the City of Beaver Falls as $41,250,000 pursuant to Section 1329(c)(2) of the Public Utility Code;

d. Approve Contracts, including executed copies of the pro-forma agreements to be negotiated and entered into by Aqua and the Contributing Municipalities, and by Aqua and the BFMA pursuant to Section 507 of the Public Utility Code; and

e. Approve the Modification of Agreements with Municipal Corporations to be Assigned to Aqua Upon Closing of the Acquisition by Aqua of the Wastewater System Assets of Beaver Falls, to the Extent Such Modifications are Necessary, pursuant to Section 508 of the Public Utility Code;

e. Issue such other approvals, certificates, registrations and relief, if any, under the Public Utility Code that may be required with respect to Aqua's acquisition of the City of Beaver Falls wastewater system assets.

Respectfully submitted,

**AQUA PENNSYLVANIA WASTEWATER, INC.**

By Michael W. Hassell

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Garrett P. Lent, Esq. (ID # 321566)
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E-mail: glent@postschell.com

*Counsel for Aqua Pennsylvania Wastewater, Inc.*

Date: February 17, 2023

# Appendix 1

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| 1. | Transmittal letter with caption and statement that the filing is pursuant to 66 Pa. C.S. § 1329. | | Yes | |
| | | | | |
| 2. | Verification form that is signed by an officer or authorized employee of the company, is dated, and accurately references the case. | | Yes | |
| | | | | |
| 3. | Certificate of Service indicating that a complete copy of the application with exhibits was served by registered or certified mail, return receipt requested, or by hand delivery, upon the statutory advocates (OCA, OSBA) and the Bureau of Investigation and Enforcement. | | Yes | A Certificate of Service is included with the Application |
| | | | | |
| 4. | Provide responses to Section 1329 Application Standard Data Requests, including electronic working documents (i.e., Excel spreadsheets) for all the filing's schedules, studies, and working papers to the extent practicable. | | Yes | Section XI, Paragraph 68, and Exhibit AA |
| | | | | |
| 5. | Provide copies of two independent appraisals by separate utility valuation experts for use in establishing the fair market value of the Selling Utility. | | Yes | Section XI, Paragraph 54, and Exhibits Q and R |
| | | | | |
| 6. | State the purchase price of the seller as agreed to by the buyer and seller. | | Yes | Section XI, Paragraph 55 |
| | | | | |
| 7. | State the total fees paid to the utility valuation experts for providing the completed appraisals for the acquisition and provide documentation, i.e., the valuation service agreement and all associated invoices, supporting the subject fee amounts. | | Yes | Section XI, Paragraph 60, and Exhibits S1 and S2 |
| | | | | |
| 8. | Buyer and Seller Verification Statements: | | | |
| | a. Provide a verification statement of the Buyer that its utility valuation expert was selected by the Buyer. | | Yes | Section XI, Paragraph 59, and Exhibit BB1 |
| | b. Provide a verification statement of the Seller that its utility valuation expert was selected by the Seller. | | Yes | Section XI, Paragraph 59, and Exhibit BB2 |
| | | | | |
| 9. | Utility Valuation Expert Verification Statements: | | | |
| | a. Buyer Utility Valuation Expert has no affiliation with the buyer or seller | | Yes | Section XI, Paragraph 61, and Exhibit T1 |
| | b. Buyer Utility Valuation Expert determined fair market value in compliance with the most recent edition of the Uniform Standards of Professional Appraisal Practice as of the date of the report employing the cost, market, and income approaches. | | Yes | Section XI, Paragraph 61, and Exhibit T1 |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| | c. Buyer Utility Valuation Expert applied applicable jurisdictional exceptions to the submitted appraisal. | | Yes | Section XI, Paragraph 61, and Exhibit T1 |
| | d. Seller Utility Valuation Expert has no affiliation with the buyer or seller | | Yes | Section XI, Paragraph 61, and Exhibit T2 |
| | e. Seller Utility Valuation Expert determined fair market value in compliance with the most recent edition of the Uniform Standards of Professional Appraisal Practice as of the date of the report employing the cost, market, and income approaches. | | Yes | Section XI, Paragraph 61, and Exhibit T2 |
| | f. Seller Utility Valuation Expert applied applicable jurisdictional exceptions to the submitted appraisal. | | Yes | Section XI, Paragraph 61, and Exhibit T2 |
| | | | | |
| 10. | Estimated or, if available, actual transaction and closing costs incurred by the buyer that will be included in its rate base. | | Yes | Section XI, Paragraph 57 |
| | | | | |
| 11. | State the ratemaking rate base as required in 66 Pa. C.S. § 1329 and specify whether it is based on either the fair market value determined by the valuation experts or the asset purchase price. | | Yes | Section XI, Paragraph 56 |
| | | | | |
| 12. | Provide a proposed tariff containing a rate equal to the existing rates of the seller at the time of the acquisition and a rate stabilization plan, if applicable to the acquisition. | | Yes | Section VI, Paragraph 33, and Exhibit G |
| | | | | |
| 13. | Seller Testimony | | | |
| | a. Provide seller direct testimony supporting the application, if any. | | Yes | Section XI, Paragraph 65, and Exhibit X |
| | b. Provide seller UVE direct testimony. | | Yes | Section XI, Paragraph 67, and Exhibit Z |
| | | | | |
| 14. | Buyer Testimony: | | | |
| | a. Provide buyer direct testimony supporting the application. | | Yes | Section XI, Paragraphs 62-64, and Exhibits U, V and W |
| | b. Provide buyer UVE direct testimony. | | Yes | Section XI, Paragraph 66, and Exhibit Y |
| | | | | |
| 15. | Plant in Service: | | | |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| | a. Provide an inventory of the used and useful plant assets to be transferred. Identify separately any utility plant that is held for future use. | | Yes | Section III, Paragraphs 11, 12 and 13, and Exhibit D |
| | b. Provide a list of all non-depreciable property such as land and rights-of-way. | | Yes | Section III, Paragraph 13, and Exhibit D (Appendix A thereto) |
| | c. State the DEP-permitted productive or treatment capacity of sources or treatment facility and the pipe sizes and material used for construction for all transmission and distribution or collection facilities. | | Yes | Section III, Paragraphs 12, 15 and 16, Exhibits D, E and V |
| | d. State the elevations of major facilities and service areas. | | Yes | Section III, Paragraph 17, and Exhibit V |
| | e. State the approximate time schedule for installation of the various component facilities. | | Yes | Section III, Paragraph 14, and Exhibits D and V |
| | f. State the tentative journal entries for booking the acquisition. | | Yes | Section IV, Paragraph 29 |
| | | | | |
| 16. | Map of Service Area - provide a scalable map or plan of suitable scale highlighting the boundaries of the proposed service area that includes: | | | |
| | a. The extent of the proposed service area with any existing adjoining service areas identified. | | Yes | Section I, Paragraph 3, and Exhibit A |
| | b. A north arrow depicting map orientation. | | Yes | Section I, Paragraph 4, and Exhibit A |
| | c. A written description of the boundaries for the service territory utilizing bearing angles and distances. | | Yes | Section I, Paragraph 4, and Exhibit A |
| | d. Size of the service territory area in terms of acres or square miles. | | Yes | Section I, Paragraph 4, and Exhibit A |
| | e. Identification and depiction of all municipal boundaries relative to the service area. | | Yes | Section I, Paragraph 4, and Exhibit A |
| | f. Depiction of the location or route of the waterworks or wastewater collection, treatment or disposal facilities. | | Yes | Section III, Paragraph 11, Exhibit D and Confidential Sewage Facilities Maps |
| | | | | |
| 17. | Customers: | | | |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| | a. State the seller's actual number of customers by class and quantify the related consumption or gallons treated in the current calendar year and future number of connections anticipated for the next 5 years and, if available, the next 10 years. | | Yes | Section V, Paragraph 30, and Exhibits U (Appendix A), V and W |
| | b. Buyer shall demonstrate its ability to provide adequate water supply, treatment, storage and distribution or adequate wastewater collection, treatment or disposal capacity to meet present and future customer demands. | | Yes | Exhibit V |
| | c. For **water** system acquisitions, quantify the number of public and private fire hydrants. | | N/A | |
| | | | | |
| 18. | Rates: | | | |
| | a. State the current rates of the seller. | | Yes | Section VI, Paragraph 34, and Exhibit H |
| | b. Provide a copy of the seller's current rules and regulations for service. | | Yes | Section VI, Paragraph 34, and Exhibit H |
| | c. Provide a proposed tariff or tariff supplement showing the rates, proposed rules, and conditions of service. | | Yes | Section VI, Paragraph 33, and Exhibit G |
| | d. Provide a copy of the notification sent, or which will be sent, to affected customers describing the filing and the anticipated effect on rates. | | Yes | Section VI, Paragraph 36, and Exhibits I1, I2 and I3 |
| | | | | |
| 19. | Cost of Service: | | | |
| | a. Provide a copy of the seller's two most recent audited financial statements. | | Yes | Section VII, Paragraph 37, and Exhibits J1 and J2 |
| | b. Provide a copy of the seller's two most recent adopted budgets. | | Yes | Section VII, Paragraph 38, and Exhibits J3 and J4 |
| | c. Provide a copy of the seller's most recent annual report filed with the Commonwealth's Department of Community and Economic Development. | | Yes | Section VII, Paragraph 39, and Exhibit K |
| | d. Provide calculations quantifying the projected revenues and expenses for the acquisition. | | Yes | Section VII, Paragraph 40 |
| | e. State whether the seller has any outstanding loans on the utility plant and identify the nature, terms, and payment history. | | Yes | Section VII, Paragraph 37 |
| | | | | |
| 20. | Proof of Compliance - provide proof of compliance with applicable design, construction and operation standards of DEP or of the county health department, or both, including: | | | |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| | a. For **water** system acquisitions, provide copies of the public water supply/water quality management permits for the utility plant. | | N/A | |
| | b. For **wastewater** system acquisitions, provide copies of the water quality management and National Pollution Discharge Elimination System (NPDES) permits for the utility plant. | | Yes | Section VIII, Paragraph 43, Exhibits M1 and M2 and Exhibits N1 and N2 |
| | c. For **wastewater** system acquisitions, provide a copy of the Chapter 94 Municipal Wasteload Management Report that was most recently submitted to DEP. | | Yes | Section III, Paragraphs 15 and 16, Exhibit E |
| | d. Valid buyer's certified operators' certificates appropriate to the facilities being acquired. | | Yes | Section VIII, Paragraph 42, and Exhibit L |
| | e. Provide documentation evidencing a 5-year compliance history with DEP with an explanation of each violation for the seller's utilities that have been providing service as well as provide a copy of any DEP-approved corrective action plans. | | Yes | Section VIII, Paragraph 44, and Exhibits O1-O7, O11, and V |
| | f. Provide documentation of all Notices of Violation issued to seller by DEP for the last 5 years, an explanation of each, including a description of any corrective or compliance measures taken. | | Yes | Section VIII, Paragraph 44, and Exhibits O1-O7 and O11 |
| | g. Statement attesting to Aqua's compliance history with DEP | | Yes | Section VIII, Paragraph 45 |
| | h. Provide a statement clarifying whether the acquired plant will be physically interconnected to the buyer's system or be operated as a standalone system. | | Yes | Section VIII, Paragraph 42 |
| | i. Provide a statement that explains how the acquisition will fit into the current operations of the buyer. | | Yes | Section VIII, Paragraph 48 |
| | j. Provide a statement that identifies the staff, district or division of the buyer that will operate and manage the acquisition. | | Yes | Section VIII, Paragraphs 42 and 48 |
| | k. Provide a statement quantifying the distance in miles the acquisition is from the buyer's existing system or facilities. | | Yes | Section VIII, Paragraphs 42 and 48 |
| | l. Provide a statement that identifies all planned physical, operational and managerial changes of the buyer that will occur after closing and state the timeframe and cost for each. | | Yes | Section VIII, Paragraph 49, and Exhibit V |
| | | | | |
| 21. | Affected Persons. State the identity of all public utilities, municipalities, municipal authorities, cooperatives and associations which provide public water service or wastewater collection, treatment or disposal service within each municipality, or a municipality directly adjacent to the municipality(ies), in which the applicant seeks to provide service that abuts or is situated within one mile of the applicant's proposed facilities. | | Yes | Section IX, Paragraph 51 |
| | | | | |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| 22. | Other requirements - demonstrate compliance with the following: | | | |
| | a. For **wastewater** system acquisitions, demonstrate compliance with the DEP-approved Act 537 Official Sewage Facilities Plans for the affected municipalities (including the extent of the requested service territory). | | Yes | Section VIII, Paragraph 46 |
| | b. For **wastewater** system acquisitions, provide a copy of the DEP-approved Act 537 Official Sewage Facilities Plans for the affected municipalities. | | Yes | Section VIII, Paragraph 46, and Exhibit P1 |
| | c. For **wastewater** system acquisitions, state the method of water service being provided in the requested wastewater service territory (i.e., public water or private wells) and identify the name of water utility, if applicable. | | Yes | Section III, Paragraph 18 |
| | d. For **water** system acquisitions, state the method of wastewater service being provided in the requested water service territory (i.e., public wastewater or private on-lot) and identify the name of wastewater utility, if applicable. | | N/A | |
| | e. Provide evidence the filing is consistent with the affected municipality and county comprehensive plans if the filing proposes to expand service beyond the existing plant footprint. | | Yes | Section VIII, Paragraphs 46 and 47 |
| | | | | |
| 23. | Verification: | | | |
| | a. For **water** system acquisitions, provide a verification that the water sources and customers are metered in accordance with 52 Pa. Code § 65.7 (relating to metered service). If unmetered water service is currently provided, the applicant shall provide a metering plan to the Commission. | | N/A | |
| | b. Include a statement that there is no affiliation between the buyer and seller. | | Yes | Section IV, Paragraph 22 |
| | c. Include a statement that the agreement was conducted at arm's length. | | Yes | Section IV, Paragraph 22 |
| | d. Include a statement explaining how the customers will benefit from the Buyer's ownership. | | Yes | Section X and Exhibits U, V and W |
| | | | | |
| 24. | Asset Purchase Agreement (APA): | | | |
| | a. Provide a copy of the APA that is signed by all parties. | | Yes | Section I, Paragraph 5, and Exhibit B |
| | b. APA clearly states the purchase price and terms. | | Yes | Section IV, Paragraph 21, Exhibit B |
| | c. APA clearly states whether all assets or only a portion of the assets are to be purchased (e.g., water treatment and distribution or wastewater collection and treatment). | | Yes | Section IV, Paragraph 24, and Exhibit B |

# APPLICATION CHECKLIST

| | | | | |
|---|---|---|---|---|
| | d. APA adequately describes the assets to be acquired. | | Yes | Section IV, Paragraphs 24, 25 and 26, and Exhibit B |
| | e. APA adequately describes the assets to be excluded. | | Yes | Section IV, Paragraph 27, and Exhibit B |
| | | | | |
| 25. | Provide a copy of all municipal and affiliate contracts to be assumed by buyer as part of the acquisition and a list and annual dollar value of other contracts. | | Yes | Section IV, Paragraph 25, and Exhibits F1 through F12 |

# Appendix 2

| Exhibit | Description |
|---|---|
| Exhibit A | Map of the Requested Territory |
| Exhibit B | Asset Purchase Agreement |
| Exhibit C | Aqua Balance Sheet and Income Statement Reports for Calendar Year 2021 |
| Exhibit D | Asset Inventory |
| Exhibit E | Beaver Falls WWTP Chapter 94 Report to DEP |
| Exhibit F1 | Agreement Between the City of Beaver Falls and Township of Patterson |
| Exhibit F2 | Agreement Between the Borough of Eastvale and the City of Beaver Falls |
| Exhibit F3 | Agreement Between the Big Beaver Municipal Authority and the City of Beaver Falls |
| Exhibit F4 | Agreement Between North Sewickley Township Sewer Authority and the City of Beaver Falls |
| Exhibit F5 | Capital Lease Agreement Between the City of Beaver Falls and the Joint Sewer Users |
| Exhibit F6 | Right to Know Request and Response of Patterson Heights Borough |
| Exhibit F7 | Right to Know Request and Response of West Mayfield Borough |
| Exhibit F8 | Right to Know Request and Response of White Township |
| Exhibit F9 | Pro-Forma Wastewater Service Agreements Between Aqua and Contributing Municipalities |
| Exhibit F10 | Pro-Forma Wastewater Service Agreements Between Aqua and Contributing Municipalities |
| Exhibit F11 | Agreement Between Aqua and the City of Beaver Falls for Charitable Contributions |
| Exhibit F12 | Pro-Forma Water Meter Read Agreement Between Beaver Falls Municipal Authority and Aqua |
| Exhibit G | Post-Closing Schedule of Rates Tariff Page Implementing Monthly and Quarterly Rates for City of Beaver Falls Customers |
| Exhibit H | City of Beaver Falls' Currently Effective Rate Ordinance |
| Exhibit I1 | Notice to Aqua Customers Describing the Filing and Anticipated Effect on Rates |
| Exhibit I2 | Notice to City of Beaver Falls Customers Describing the Filing and Anticipated Effect on Rates |
| Exhibit I3 | Notice to Contributing Municipalities Describing the Filing and the Anticipated Effect on Rates |
| Exhibit J1 | City of Beaver Falls' Annual Financial Report for 2020 |
| Exhibit J2 | City of Beaver Falls' Annual Financial Report for 2021 |
| Exhibit J3 | City of Beaver Falls' Adopted Annual Budget for 2022 |
| Exhibit J4 | City of Beaver Falls' Adopted Annual Budget for 2023 |
| Exhibit K | City of Beaver Falls' Annual Report Filed with the Department of Community and Economic Development |
| Exhibit L | Certified Wastewater Operator Joseph Durish's Wastewater Operator's License |
| Exhibit M1 | Water Quality Management Permit for Beaver Falls WWTP and Related Permits |
| Exhibit M2 | Water Quality Management Permit for the Eastvale Pump Station |

| Exhibit | Description |
|---|---|
| Exhibit N1 | National Pollution Discharge Elimination System Permit for Beaver Falls WWTP |
| Exhibit N2 | Discharge Monitoring Reports for Beaver Falls WWTP from 2017 to November 2022 |
| Exhibit O1 | Notices of Violation issued to the City of Beaver Falls and Accompanying Responses |
| Exhibit O2 | Consent Assessment of Civil Penalty Between DEP and the City of Beaver Falls |
| Exhibit O3 | City of Beaver Falls' Corrective Action Plan Submitted to DEP |
| Exhibit O4 | Big Beaver Municipal Authority's Corrective Action Plan Submitted to DEP |
| Exhibit O5 | North Sewickley's Corrective Action Plan Submitted to DEP |
| Exhibit O6 | Patterson Township's Corrective Action Plan Submitted to DEP |
| Exhibit O7 | White Township's Corrective Action Plan Submitted to DEP |
| Exhibit O11 | Gannett Technical Memorandum, Phase I Environmental Site Assessment, and Beaver Falls' Memo to Bidders |
| Exhibit P1 | City of Beaver Falls' Act 537 Plan Documents |
| Exhibit Q | Fair Market Value Appraisal Report of ScottMadden |
| Exhibit R | Fair Market Value Appraisal Report of Gannett Fleming |
| Exhibit S1 | Documentation of the Fees Paid to ScottMadden |
| Exhibit S2 | Documentation of the Fees Paid to Gannett Fleming |
| Exhibit T1 | Verification of ScottMadden |
| Exhibit T2 | Verification of Gannett Fleming |
| Exhibit U | Testimony of William C. Packer |
| Exhibit V | Testimony of Mark J. Bubel, Sr. |
| Exhibit W | Testimony of Zach Martin |
| Exhibit X | Testimony of Charles R. Jones |
| Exhibit Y | Testimony of Dylan W. D'Ascendis |
| Exhibit Z | Testimony of Harold Walker, III |
| Exhibit AA | Answers to the Section 1329 Application Standard Data Requests |
| Exhibit BB1 | Verification of Aqua |
| Exhibit BB2 | Verification of the City of Beaver Falls |
| Exhibit CC | Aqua's Proposed Modification to the Agreements with the Contributing Municipalities |
| Appendix 1 | Application Filing Checklist |
| Appendix 2 | Exhibit List |

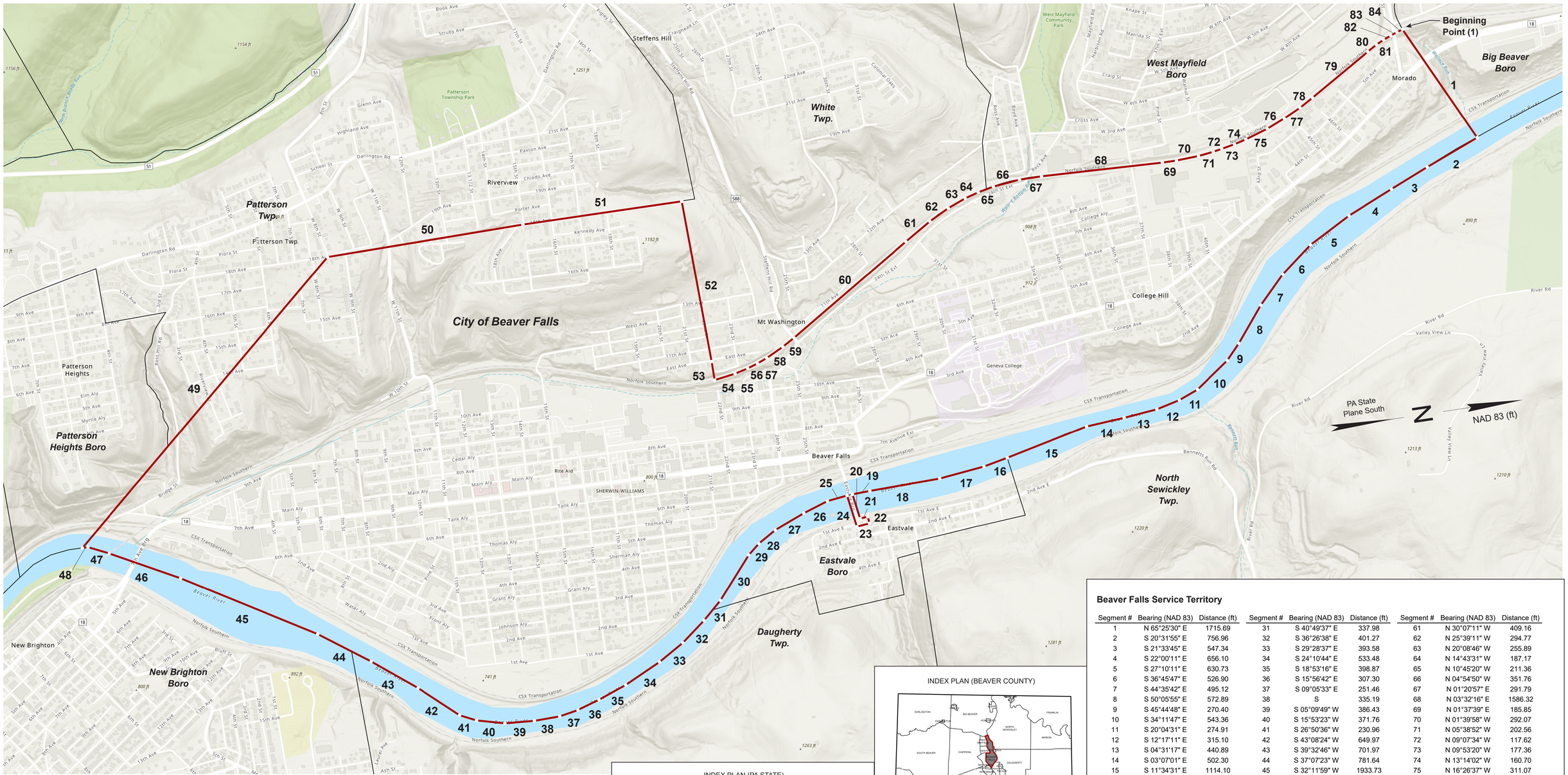
## VERIFICATION

I, William C. Packer, Vice President, Regulatory Accounting and Regional Controller of Aqua Pennsylvania, Inc., hereby state that the facts set forth in the foregoing Application of Aqua Pennsylvania Wastewater, Inc., pursuant to Sections 1102, 1329, 507 and 508 of the Public Utility Code, for approvals and an order relating to the acquisition of the wastewater system assets of the City of Beaver Falls are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

William C. Packer
Vice President, Regulatory
Accounting and Regional Controller
Aqua Pennsylvania, Inc.

Dated: February 17, 2023

# EXHIBIT A




SERVICE AREA TERRITORY

**SERVICE AREA**
63,982,036 square ft.
1,468.825 acres
2.295 square miles

(1) Beginning Point: PASPC Coordinates: North: 540,525.05', East: 1,252,764.93'; at a point at the approximate intersection of Norfolk Southern Railroad with Wallace Run, said point being the intersection of Beaver Falls City with Big Beaver Boro and West Mayfield Boro in Beaver Falls City, Beaver County, PA and proceeding according to the listed bearings and distances noted in the table on this plan.

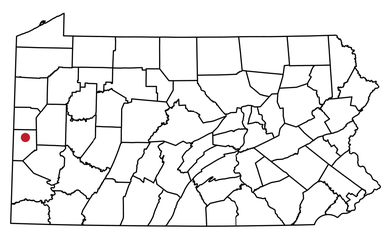
LEGEND

Requested Territory

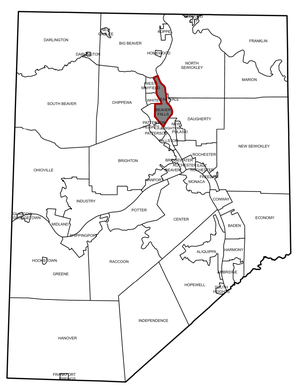
SCALE IN FEET

0 300 600 1,200

INDEX PLAN (PA STATE)



INDEX PLAN (BEAVER COUNTY)




## Beaver Falls Service Territory

| Segment # | Bearing (NAD 83) | Distance (ft) | Segment # | Bearing (NAD 83) | Distance (ft) | Segment # | Bearing (NAD 83) | Distance (ft) |
|---|---|---|---|---|---|---|---|---|
| 1 | N 65°25'30" E | 1715.69 | 31 | S 40°49'37" E | 337.98 | 61 | N 30°07'11" W | 409.16 |
| 2 | S 20°31'55" E | 756.96 | 32 | S 36°26'38" E | 401.27 | 62 | N 25°39'11" W | 294.77 |
| 3 | S 21°33'45" E | 547.34 | 33 | S 29°28'37" E | 393.58 | 63 | N 20°08'46" W | 255.89 |
| 4 | S 22°00'11" E | 656.10 | 34 | S 24°10'44" E | 533.48 | 64 | N 14°43'31" W | 187.17 |
| 5 | S 27°10'11" E | 630.73 | 35 | S 18°53'16" E | 398.87 | 65 | N 10°45'20" W | 211.36 |
| 6 | S 36°45'47" E | 526.90 | 36 | S 15°56'42" E | 307.30 | 66 | N 04°54'50" W | 351.76 |
| 7 | S 44°35'42" E | 495.12 | 37 | S 09°05'33" E | 251.46 | 67 | N 01°20'57" E | 291.79 |
| 8 | S 50°05'55" E | 572.89 | 38 | S | 335.19 | 68 | N 03°32'16" E | 1586.32 |
| 9 | S 45°44'48" E | 270.40 | 39 | S 05°09'49" W | 386.43 | 69 | N 01°37'39" E | 185.85 |
| 10 | S 34°11'47" E | 543.36 | 40 | S 15°53'23" W | 371.76 | 70 | N 01°39'58" W | 292.07 |
| 11 | S 20°04'31" E | 274.91 | 41 | S 26°50'36" W | 230.96 | 71 | N 05°38'52" W | 202.56 |
| 12 | S 12°17'11" E | 315.10 | 42 | S 43°08'24" W | 649.97 | 72 | N 09°07'34" W | 117.62 |
| 13 | S 04°31'17" E | 440.89 | 43 | S 39°32'46" W | 701.97 | 73 | N 09°53'20" W | 177.36 |
| 14 | S 03°07'01" E | 502.30 | 44 | S 37°07'23" W | 781.64 | 74 | N 13°14'02" W | 160.70 |
| 15 | S 11°34'31" E | 1114.10 | 45 | S 32°11'59" W | 1933.73 | 75 | N 16°26'37" W | 311.07 |
| 16 | S 10°34'15" E | 324.37 | 46 | S 29°12'28" W | 987.11 | 76 | N 21°26'45" W | 261.09 |
| 17 | S 05°14'16" E | 598.42 | 47 | S 26°20'47" W | 290.95 | 77 | N 24°04'24" W | 248.93 |
| 18 | S 00°00'01" W | 928.62 | 48 | S 01°39'55" W | 73.18 | 78 | N 29°00'03" W | 208.68 |
| 19 | S 01°01'04" E | 231.36 | 49 | N 39°51'29" W | 4965.30 | 79 | N 29°42'59" W | 940.27 |
| 20 | N 82°23'07" E | 331.96 | 50 | N 00°33'19" E | 2584.99 | 80 | N 28°54'26" W | 146.04 |
| 21 | N 04°14'08" W | 102.68 | 51 | N 01°41'38" E | 2095.44 | 81 | N 23°44'25" W | 112.47 |
| 22 | N 85°45'52" E | 91.07 | 52 | N 89°25'45" E | 2126.59 | 82 | N 20°33'14" W | 108.80 |
| 23 | S 04°14'08" E | 169.48 | 53 | S 89°12'35" E | 244.85 | 83 | N 19°51'42" W | 91.20 |
| 24 | S 82°23'07" W | 425.28 | 54 | N 07°26'55" W | 279.14 | 84 | N 15°14'56" W | 81.69 |
| 25 | S 05°54'27" E | 266.44 | 55 | N 12°46'03" W | 178.48 | | | |
| 26 | S 17°08'04" E | 345.58 | 56 | N 16°30'27" W | 142.74 | | | |
| 27 | S 20°30'58" E | 432.11 | 57 | N 20°23'05" W | 139.88 | | | |
| 28 | S 29°33'08" E | 276.88 | 58 | N 24°56'01" W | 255.96 | | | |
| 29 | S 38°26'27" E | 199.72 | 59 | N 28°37'47" W | 186.40 | | | |
| 30 | S 48°09'57" E | 699.83 | 60 | N 30°40'40" W | 1927.97 | | | |

AQUA

NOTES

Bearings, distances, area derived from spatial data including municipal boundaries, and physical features obtained from http://www.pasda.psu.edu/. The resultant bearings, distances and area do not result from a physical survey on the ground and are approximate and not intended to represent a legal description of property.

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 6. | | |
| 5. | | |
| 4. | | |
| 3. | | |
| 2. | | |
| 1. | | |

**EXHIBIT A**
**Proposed Service Territory**
Aqua Pennsylvania, Inc.
Beaver Falls, Beaver County, Pennsylvania

DATE: 11/4/22 | SCALE: 1" = 600 ft. | SHEET 1

# EXHIBIT AA

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

1. Estimate the potential monthly incremental cost impact on existing and acquired customers following the actual results of the Buyer's most recently adjudicated base rate proceeding, whether litigated or settled, allocating the fair market value of the acquired system according to the Buyer's previously approved single-tariff pricing model.

   a. In the case of a wastewater acquisition, a Buyer that employs a combined revenue requirement pursuant to 66 Pa. C.S. § 1311 will provide information assuming a combined water and wastewater revenue requirement consistent with its most recent adjudicated base rate proceeding.

   b. If a Buyer has filed the thirty-day notice of 52 Pa. Code § 53.45(a), or has filed a rate case, it should calculate the above using data as proposed in its upcoming or filed rate case.

Response: Regarding a. and b. above, please refer to Appendix A of Aqua Statement No. 1, Direct Testimony of William C. Packer, included as Exhibit U to the Application.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

2. If the Buyer has a present intention to increase the acquired system's rates to a certain level, please state the basis for the targeted rate.

Response: Aqua has no present intention to increase the City of Beaver Falls ("City" or "Beaver Falls") rates to a targeted rate. Please see the pro forma agreements for the Contributing Municipalities, included as Application Exhibit F9 and F10.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

3. Provide the annual depreciation expense using the purchase price/proposed rate base. If the exact depreciation expense is not available, provide the best estimate of the annual depreciation expense. Show how the depreciation expense is calculated.

Response: Please refer to Appendix A of Aqua Statement No. 1, Direct Testimony of William C. Packer, included as Exhibit U to the Application.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

4. Provide an estimate of the annual revenue requirement of the municipal system under the Buyer's ownership. Provide the assumptions for the annual revenue requirement, including expected rate of return, expected depreciation expense, O&M expenses, etc.

Response: Please refer to Appendix A of Aqua Statement No. 1, Direct Testimony of William C. Packer, included as Exhibit U to the Application.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

5. Other than the STAS, does Buyer's current water/wastewater tariff include any provisions that would fall under "pass-through costs or charges imposed by the Commonwealth of Pennsylvania"?

Response: Aqua has a Distribution System Improvement Charge ("DSIC") in its current wastewater tariff.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

6. Provide a listing of any entities that currently receive free service from the Seller.

Response: There are no entities that receive free wastewater service from Beaver Falls.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

7. In the next rate case, does buyer anticipate including the acquired system in a combined revenue requirement?

Response: Aqua anticipates including the Beaver Falls system in a combined revenue requirement in the next rate case.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

8. If Seller has increased rates in the last year, please state the date of the increase and provide a copy of the new rate schedule and the total annual revenues produced under the new rates.

Response: Beaver Falls' currently effective rate ordinance imposes a 3% increase per year to both inside City customers and the Contributing Municipalities. This rate increase was effective January 1, 2023. Please see Application Exhibit X, the Direct Testimony of Charles R. Jones, Jr., Aqua Statement No. 4, page 10. Please see Application Exhibit U, the Direct Testimony of William C. Packer, Aqua Statement No. 1, Appendix A for total annual revenues under the new rates. Please see Application Exhibit H for the City's rate ordinance.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Rates/Ratemaking**

9. Are there any leases, easements, and access to public rights-of-way that Buyer will need in order to provide service which will not be conveyed at closing? If yes, identify when the conveyance will take place and whether there will be additional costs involved.

Response: The Company is not presently aware of any needed leases, easements or access to public rights-of-way that will not be transferred at closing. Beaver Falls and the Abstractor are currently reviewing real property records to determine any needed easements and will be obtaining any needed easements in accordance with Article 6 of the Asset Purchase Agreement, including the real property interests of the Eastvale Pump Station as noted in Schedule 4.09 of the Asset Purchase Agreement (Application Exhibit B). In addition, the City notes that it included for the sake of disclosure an April 8, 2014 Capital Lease Agreement, but has not been able to identify the counterparty entity and makes no representation as to the validity of that agreement.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Costs/Benefits**

10. Provide a breakdown of the estimated transaction and closing costs. Provide invoices to support any transaction and closing costs that have already been incurred.

Response: The estimated total transaction and closing costs are included in the application at paragraph 57. Please see below for a breakdown of costs projected through closing. Please see Application Exhibit S1 for ScottMadden UVE invoices. Please see the attachments to SDR-10 for copies of other invoices incurred to date on the Application.

| | |
|---|---|
| Legal | $650,000 |
| UVE | $50,000 |
| Engineering Assessment | $14,980 |
| **Total** | **$714,980** |

The costs shown above are estimated costs and are subject to change.

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1100521 |
| INVOICE DATE | 07/15/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 06/30/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 1,595.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **1,595.00** |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1100521 |
| INVOICE DATE | 07/15/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | |

BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 06/30/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 06/13/22 | [redacted] | | 210.00 |
| 06/15/22 | | | 860.00 |
| 06/16/22 | | | 525.00 |
| **TOTAL** | | 5.50 | 1,595.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 1,595.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1104440 |
| INVOICE DATE | 08/14/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 07/31/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 2,855.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **2,855.00** |
| PREVIOUS BALANCE DUE | 1,595.00 |
| **TOTAL AMOUNT DUE** | **4,450.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 07/15/2022 | 1100521 | 1,595.00 | 0.00 | 0.00 | 1,595.00 |
| 08/14/2022 | 1104440 | 2,855.00 | 0.00 | 0.00 | 2,855.00 |
| | Totals: | 4,450.00 | 0.00 | 0.00 | 4,450.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

INVOICE NUMBER 1104440
INVOICE DATE 08/14/2022
CLIENT NUMBER [redacted]
MATTER NUMBER

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 07/31/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 07/05/22 | [redacted] | | 63.00 |
| 07/08/22 | | | 126.00 |
| 07/08/22 | | | 215.00 |
| 07/12/22 | | | 63.00 |
| 07/12/22 | | | 129.00 |
| 07/19/22 | | | 210.00 |
| 07/19/22 | | | 210.00 |
| 07/19/22 | | | 172.00 |
| 07/20/22 | | | 420.00 |
| 07/20/22 | | | 1,075.00 |
| 07/26/22 | | | 172.00 |
| **TOTAL** | | 9.30 | 2,855.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 2,855.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1109692 |
| INVOICE DATE | 09/20/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 08/31/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 1,882.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **1,882.00** |
| PREVIOUS BALANCE DUE | 2,855.00 |
| **TOTAL AMOUNT DUE** | **4,737.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 08/14/2022 | 1104440 | 2,855.00 | 0.00 | 0.00 | 2,855.00 |
| 09/20/2022 | 1109692 | 1,882.00 | 0.00 | 0.00 | 1,882.00 |
| | Totals: | 4,737.00 | 0.00 | 0.00 | 4,737.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

INVOICE NUMBER 1109692
INVOICE DATE 09/20/2022
CLIENT NUMBER [redacted]
MATTER NUMBER [redacted]

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 08/31/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 08/02/22 | [redacted] | | 210.00 |
| 08/02/22 | | | 147.00 |
| 08/02/22 | | | 301.00 |
| 08/09/22 | | | 86.00 |
| 08/09/22 | | | 42.00 |
| 08/11/22 | | | 210.00 |
| 08/23/22 | | | 172.00 |
| 08/23/22 | | | 63.00 |
| 08/29/22 | | | 567.00 |
| 08/30/22 | | | 84.00 |
| **TOTAL** | | 7.60 | 1,882.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 1,882.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1113565 |
| INVOICE DATE | 10/15/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 09/30/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 4,315.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **4,315.00** |
| PREVIOUS BALANCE DUE | 1,882.00 |
| **TOTAL AMOUNT DUE** | **6,197.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 09/20/2022 | 1109692 | 1,882.00 | 0.00 | 0.00 | 1,882.00 |
| 10/15/2022 | 1113565 | 4,315.00 | 0.00 | 0.00 | 4,315.00 |
| | Totals: | 6,197.00 | 0.00 | 0.00 | 6,197.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

INVOICE NUMBER 1113565
INVOICE DATE 10/15/2022
CLIENT NUMBER [redacted]
MATTER NUMBER

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 09/30/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 09/06/22 | [redacted] | | 129.00 |
| 09/07/22 | | | 430.00 |
| 09/13/22 | | | 42.00 |
| 09/13/22 | | | 210.00 |
| 09/13/22 | | | 129.00 |
| 09/14/22 | | | 252.00 |
| 09/14/22 | | | 420.00 |
| 09/14/22 | | | 645.00 |
| 09/15/22 | | | 63.00 |
| 09/15/22 | | | 1,720.00 |
| 09/16/22 | | | 105.00 |
| 09/20/22 | | | 86.00 |
| 09/27/22 | | | 84.00 |
| **TOTAL** | | 12.90 | 4,315.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 4,315.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1117497 |
| INVOICE DATE | 11/12/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 10/31/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 857.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **857.00** |
| PREVIOUS BALANCE DUE | 4,315.00 |
| **TOTAL AMOUNT DUE** | **5,172.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 10/15/2022 | 1113565 | 4,315.00 | 0.00 | 0.00 | 4,315.00 |
| 11/12/2022 | 1117497 | 857.00 | 0.00 | 0.00 | 857.00 |
| | Totals: | 5,172.00 | 0.00 | 0.00 | 5,172.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

INVOICE NUMBER 1117497
INVOICE DATE 11/12/2022
CLIENT NUMBER [redacted]
MATTER NUMBER

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 10/31/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 10/04/22 | [redacted] | | 63.00 |
| 10/04/22 | | | 301.00 |
| 10/11/22 | | | 129.00 |
| 10/18/22 | | | 63.00 |
| 10/18/22 | | | 172.00 |
| 10/19/22 | | | 129.00 |
| **TOTAL** | | 2.30 | 857.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 857.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1121795 |
| INVOICE DATE | 12/14/2022 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 11/30/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 4,039.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **4,039.00** |
| PREVIOUS BALANCE DUE | 5,172.00 |
| **TOTAL AMOUNT DUE** | **9,211.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 10/15/2022 | 1113565 | 4,315.00 | 0.00 | 0.00 | 4,315.00 |
| 11/12/2022 | 1117497 | 857.00 | 0.00 | 0.00 | 857.00 |
| 12/14/2022 | 1121795 | 4,039.00 | 0.00 | 0.00 | 4,039.00 |
| | Totals: | 9,211.00 | 0.00 | 0.00 | 9,211.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

INVOICE NUMBER 1121795
INVOICE DATE 12/14/2022
CLIENT NUMBER [redacted]
MATTER NUMBER

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 11/30/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 11/01/22 | [redacted] | | 630.00 |
| 11/01/22 | | | 21.00 |
| 11/08/22 | | | 42.00 |
| 11/15/22 | | | 420.00 |
| 11/15/22 | | | 42.00 |
| 11/15/22 | | | 215.00 |
| 11/16/22 | | | 42.00 |
| 11/16/22 | | | 430.00 |
| 11/18/22 | | | 420.00 |
| 11/21/22 | | | 168.00 |
| 11/22/22 | | | 84.00 |
| 11/22/22 | | | 172.00 |
| 11/23/22 | | | 860.00 |
| 11/29/22 | | | 63.00 |

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 11/30/22 | [redacted] | | 430.00 |
| **TOTAL** | | 14.10 | 4,039.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 4,039.00

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1124950 |
| INVOICE DATE | 01/13/2023 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | [redacted] |

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION
[redacted]

FOR PROFESSIONAL SERVICES RENDERED THROUGH 12/31/2022

| | |
|---|---|
| PROFESSIONAL CHARGES | 511.00 |
| EXPENSES | 0.00 |
| **CURRENT INVOICE** | **511.00** |
| PREVIOUS BALANCE DUE | 4,896.00 |
| **TOTAL AMOUNT DUE** | **5,407.00** |

**Account Statement**

| Date | Invoice # | Fees Due | Costs Due | Other Due | Total Due |
|---|---|---|---|---|---|
| 11/12/2022 | 1117497 | 857.00 | 0.00 | 0.00 | 857.00 |
| 12/14/2022 | 1121795 | 4,039.00 | 0.00 | 0.00 | 4,039.00 |
| 01/13/2023 | 1124950 | 511.00 | 0.00 | 0.00 | 511.00 |
| | Totals: | 5,407.00 | 0.00 | 0.00 | 5,407.00 |

**WIRE INSTRUCTIONS**

**TAX ID #** [redacted]

**Bank Name:**
**Bank Address:**
[redacted]

**ABA No.:**
**Account Name:**
**Account Number:**
**Swift Code:**
[redacted]

POST & SCHELL, P.C.
FOUR PENN CENTER
1600 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PENNSYLVANIA19103
215-587-1000

**TAX ID #** [redacted]

ALEXANDER STAHL, ESQUIRE
AQUA PENNSYLVANIA, INC.
762 W LANCASTER AVENUE
BRYN MAWR, PA 19010-3489

| | |
|---|---|
| INVOICE NUMBER | 1124950 |
| INVOICE DATE | 01/13/2023 |
| CLIENT NUMBER | [redacted] |
| MATTER NUMBER | |

2022-00135
BILLING ATTORNEY MICHAEL W HASSELL

DATE OF ASSIGNMENT: 06/10/22

RE: AQUA - BEAVER FALLS SECTION 1329 ACQUISITION

FOR PROFESSIONAL SERVICES RENDERED THROUGH 12/31/22:

| DATE | ATTORNEY | HOURS | VALUE |
|---|---|---|---|
| 12/02/22 | [redacted] | | 105.00 |
| 12/06/22 | | | 105.00 |
| 12/13/22 | | | 215.00 |
| 12/20/22 | | | 86.00 |
| **TOTAL** | | 1.70 | 511.00 |

**ATTORNEY TIME SUMMARY:**

| ATTORNEY | STATUS | HOURS | RATE | VALUE |
|---|---|---|---|---|
| [redacted] | | | | |

TOTAL CURRENT INVOICE: 511.00

**City of Beaver Falls**
715 15th St.
Beaver Falls, PA 15010

# Invoice

12/15/2022

**Invoice #:** 1025

**Due Date:** 12/15/2022

AQUA

**P.O. Number:**

| Date | Description | QTY | Rate | Amount |
|---|---|---|---|---|
| 12/15/2022 | CITY OF BEAVER FALLS ENGINEERING ASSESSMENT | 1 | 14,979.58 | 14,979.58 |

AQUA TO PAY HALF OF ENGINEERING ASSESSMENT FOR SALE OF THE WASTEWATER SYSTEM

| Phone # | Fax: |
|---|---|
| 724-847-2800 | 724-847-4748 |

| | |
|---|---|
| **Total** | $14,979.58 |
| **Payments/Credits** | $0.00 |
| **Balance Due** | $14,979.58 |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

October 5, 2022
336572

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of September 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $1,702.00 |
| Expenses billed | $0.00 |
| Current charges | $1,702.00 |
| **PLEASE PAY THIS AMOUNT** | **$1,702.00** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

September 21, 2022
335572

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of August 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $2,368.00 |
| Expenses billed | $0.00 |
| Current charges | $2,368.00 |
| **PLEASE PAY THIS AMOUNT** | **$2,368.00** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

September 9, 2022
335119

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of July 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $6,364.00 |
| Expenses billed | $0.00 |
| Current charges | $6,364.00 |
| **PLEASE PAY THIS AMOUNT** | **$6,364.00** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

September 6, 2022
335022

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of May 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $6,844.00 |
| Expenses billed | $0.00 |
| Current charges | $6,844.00 |
| **PLEASE PAY THIS AMOUNT** | **$6,844.00** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

July 6, 2022
334127

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of June 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $14,832.00 |
| Expenses billed | $57.04 |
| Current charges | $14,889.04 |
| **PLEASE PAY THIS AMOUNT** | **$14,889.04** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

May 19, 2022
332278

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of April 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $555.00 |
| Expenses billed | $0.00 |
| Current charges | $555.00 |
| **PLEASE PAY THIS AMOUNT** | **$555.00** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

April 20, 2022
331454

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of March 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $8,301.50 |
| Expenses billed | $0.00 |
| Current charges | $8,301.50 |
| **PLEASE PAY THIS AMOUNT** | **$8,301.50** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

March 16, 2022
330446

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of February 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $629.00 |
| Expenses billed | $0.00 |
| Current charges | $629.00 |
| **PLEASE PAY THIS AMOUNT** | **$629.00** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

February 23, 2022
329604

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of January 2022 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $1,215.00 |
| Expenses billed | $0.00 |
| Current charges | $1,215.00 |
| **PLEASE PAY THIS AMOUNT** | **$1,215.00** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

January 25, 2022
328536

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of December 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $825.00 |
| Expenses billed | $0.00 |
| Current charges | $825.00 |
| **PLEASE PAY THIS AMOUNT** | **$825.00** |

Houston Harbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

October 13, 2021
325370

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of September 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $2,759.50 |
| Expenses billed | $0.00 |
| Current charges | $2,759.50 |
| **PLEASE PAY THIS AMOUNT** | **$2,759.50** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

September 29, 2021
324807

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of August 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $2,595.00 |
| Expenses billed | $0.00 |
| Current charges | $2,595.00 |
| **PLEASE PAY THIS AMOUNT** | **$2,595.00** |

HH
Houston Harbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

August 19, 2021
323492

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of July 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $6,757.50 |
| Expenses billed | $0.00 |
| Current charges | $6,757.50 |
| **PLEASE PAY THIS AMOUNT** | **$6,757.50** |

HH
HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

July 27, 2021
322854

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of June 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $2,772.00 |
| Expenses billed | $0.00 |
| Current charges | $2,772.00 |
| **PLEASE PAY THIS AMOUNT** | **$2,772.00** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

June 17, 2021
321751

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of May 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $7,280.00 |
| Expenses billed | $0.00 |
| Current charges | $7,280.00 |
| **PLEASE PAY THIS AMOUNT** | **$7,280.00** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

May 24, 2021
320854

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the month of April 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $10,431.50 |
| Expenses billed | $0.00 |
| Current charges | $10,431.50 |
| **PLEASE PAY THIS AMOUNT** | **$10,431.50** |

HoustonHarbaugh
ATTORNEYS AT LAW
Three Gateway Center
401 Liberty Avenue, 22nd Floor
Pittsburgh, PA 15222-1005

412/281-5060 FAX 412/281-4499

File Number 41751-0001

April 21, 2021
319688

Billed via: Legal Tracker
Essential Utilities
Aqua Pennsylvania Wastewater, Inc.

Acquisition of Beaver Falls Plant

For professional services rendered to Aqua Pennsylvania Wastewater, Inc for the months of February and March 2021 related to the acquisition of the Beaver Falls sanity sewer system.

| | |
|---|---|
| Fees billed | $5,867.50 |
| Expenses billed | $0.00 |
| Current charges | $5,867.50 |
| **PLEASE PAY THIS AMOUNT** | **$5,867.50** |

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Costs/Benefits**

11. Please describe known and anticipated general expense savings and efficiencies under Buyer's ownership. State the basis for all assumptions used in developing these costs and provide all supporting documentation for the assumptions, if available.

Response: Aqua estimates annual operating and maintenance expenses of approximately $1.46M based on Beaver Falls' operating expenses presented in the 2021 financial statements adjusted by the Company. This represents an approximate 29% decrease in annual expenses. The assumed reduction in operating costs is based on Aqua's experience and estimates of costs during the first year of operations. Please also refer to the direct testimonies of William C. Packer (Aqua Statement No. 1) and Zach Martin (Aqua Statement No. 3), included in the Application as Exhibit U and Exhibit W, respectively, for further costs/benefits of the system under the Buyer's ownership.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Costs/Benefits**

12. Please provide a copy of the Seller's request for proposals (if there was one) and any accompanying exhibits with respect to the proposed sale of the system.

Response: Please see the attachment to SDR-12.

**CITY OF BEAVER FALLS**

**SEWER SYSTEM TRANSACTION - REQUEST FOR BIDS ("RFB")**

**PRE-QUALIFIED BIDDERS ONLY**

**RFB Distributed: July 23, 2021**

**Proposals Due: August 20, 2021**

## 1. GENERAL INFORMATION FOR THE PROPOSER:

This Request for Bids ("RFB") is being provided to your team by the City of Beaver Falls, Beaver County (together "Beaver Falls" or the "Seller") to solicit a final, binding proposal (the "Proposal") to enter into the Asset Purchase Agreement (the "APA") for the sanitary sewer collection, conveyance, and treatment system (the "Sewer System").

The assets included in the Transaction are described in more detail in the APA. Except for removing relevant bracketed information and filling in blanks, and except as otherwise provided herein, no changes will be permitted to the APA prior to signing, without written consent from Beaver Falls.

All recipients of this RFB submitted responses to the Request for Qualifications for Sewer System Sale Exploration dated December 16, 2020 (the "RFQ") and were determined to be eligible for consideration in moving forward with the proposed transaction process ("Pre-Qualified Proposers"). The Pre-Qualified Proposers were subsequently provided with the opportunity to conduct additional due diligence on the sewer system assets included in the APA (the "System"), including (i) access to an online data room, a tour of the wastewater treatment plant, and (ii) meetings and/or telephone or video conferences with Beaver Falls representatives and advisors. In addition, Beaver Falls solicited feedback on drafts of the APA.

## 2. SYSTEM DESCRIPTION:

All assets owned by the Seller comprising the System are set forth in Section 2.01 of the APA.

## 3. INFORMATION REQUIRED FROM PROPOSERS AND SELECTION CRITERIA:

All Pre-Qualified Proposers eligible to respond to this RFB were deemed eligible to move forward based on their demonstrated technical and financial qualifications detailed in their response to the RFQ. All Pre-Qualified Proposers who submit a response to this RFB ("Proposers") must comply with the requirements set forth in this document for submitting a Proposal. Provided that the Proposal requirements are met, and the Proposer is found to remain qualified, responsible, and responsive, the award of the Agreement will be based what Beaver Falls deems to be the best overall bid considering the criteria set forth herein. In accordance with 62 Pa.C.S. §513(d), the contents of Proposals will not be publicly disclosed at the time of opening of the Proposals.

Each Proposal shall be in writing and formatted in accordance with the following outline:

**Section 1.0 Executive Summary**

Proposal Form 1: Transmittal Letter

Proposal Form 2: Non-Collusion Affidavit

**Section 2.0 Project Team and Technical Capability Information**

Proposal Form 3: Statement of Ownership - Proposer

Proposal Form 4: Operator Information

Proposal Form 5: Contract and Lobbyist Disclosure

**Section 3.0 Business Proposal**

Proposal Form 6A: Business Proposal – No Rate Freeze

Proposal Form 6B: Business Proposal – 2 Year Rate Freeze

4. SUBMISSION INSTRUCTIONS AND REQUIREMENTS:

One (1) original and two (2) hard copies of the Proposal shall be submitted, with the original copy of the Proposal clearly marked as the original. The set marked as original must contain the original signature forms and other original documents. ***All packages shall be sealed and clearly marked with the legend: "RESPONSE TO BEAVER FALLS SEWER SYSTEM RFB."*** In accordance with Section 8 of this RFB, the contents of the Proposal will not be made public until after the award of a contract. The Proposal shall be submitted in a sealed envelope or package addressed to:

PFM Financial Advisors LLC
c/o Ben Kapenstein
213 Market Street
Mail Room Third Floor
Harrisburg, PA 17101

**THE SEALED PROPOSAL MUST BE RECEIVED NO LATER THAN 2:00 P.M. EASTERN TIME ON AUGUST 20, 2021.**

To the extent there are any questions regarding delivery of the Proposal, please contact Ben Kapenstein at kapensteinb@pfm.com or 717-232-2723.

By submitting a Proposal, Proposers acknowledge and agree to the following conditions:

- All Proposals submitted in response to this RFB shall become the property of Beaver Falls. As such, after the award of a contract, or after the opening and rejection of all Proposals, Proposals submitted will become public records subject to public review under applicable law, subject to certain exceptions as described in this RFB.

- The selection of a Proposal by Beaver Falls shall not waive or limit any assumptions of risk, provision of indemnity, or other obligations of the Proposer under the APA as may be executed between the Proposer and Beaver Falls.

- Proposers and their representatives shall comply with the communications protocol set forth in Section 5 of this RFB with respect to all communications concerning this RFB.

- Proposals shall comply with all content requirements of this RFB. Failure to comply with such requirements may result in a Proposer being deemed non-responsive.

- The pre-qualification of Proposers to receive this RFB and provide a Proposal does not waive or abridge the right of Beaver Falls to find that any Proposer is not qualified or that the Proposal is non-responsive to the requirements of this RFB.

- **Capital Lease Agreement (JSU Agreement) - Proposers should assume that either the City is able to obtain the consent to assign the agreement from all parties without changing the contract end date of 12/31/2024 or that the Agreement is terminated by all parties. If consent to assign is obtained as opposed to termination of the contract, Section 7 (requiring the municipalities to maintain and repair the lines) and Section 8(c) (providing for extension of the agreement to accommodate JSU financing) will be deleted. Additionally, the City retains the option to challenge the validity of the Capital Lease Agreement in the appropriate venue.**

- **Proposers should ensure that the written and numerical Purchase Price/Consideration in Business Proposal 6A and/or 6B (options explained later) match. Should this not be the case, the binding Purchase Price/Consideration will be assumed to be the lower of the two Purchase Price/Consideration numbers.**

- **Bids must be submitted in the form and on the date required by this RFB. No further proposals, modifications or alternative offers will be considered pursuant to this RFB.**

- **Beaver Falls reserves the right to reject any and all bids and to determine not to proceed with a sale of the Sewer System at its sole discretion.**

- **Based on the outcome of regulatory determinations (if applicable) subsequent to the award of the winning bid hereunder, the Seller reserves the right to renegotiate**

**certain terms of the APA, including Purchase Price/Consideration, as it deems in its best interests and as are acceptable to the winning bidder.**

5. QUESTIONS AND REQUESTS FOR CLARIFICATION:

All questions and requests for clarification concerning this RFB shall be directed in writing (e-mail) to Ben Kapenstein, whose contact information is provided below.

Ben Kapenstein
PFM Financial Advisors LLC
kapensteinb@pfm.com

6. BIDDING OPTIONS

There are two bidding options, one on Proposal Form 6A and one on Proposal Form 6B. The first option, 6A, is to bid on the Sewer System assuming no rate freeze (Option 1 of Section 7.04(a) of the APA). The second option, 6B, is to bid on the Sewer System assuming a 2 year rate freeze (Option 2 of Section 7.04(a) of the APA). Bidders are welcome to bid on one or both options. Beaver Falls reserves the right to select whichever option it determines is in its best interests.

7. APPROVAL AND SIGNING:

Beaver Falls intends to select the Proposer that offers the best overall transaction, provided that the Proposer complies with all requirements set forth in this RFB for submitting a final Proposal and is found to remain qualified, responsible, and responsive. Execution of the APA by Beaver Falls will be subject to final approval and authorization by the Seller's Board (the "Board"). After selection of a Proposal and approval by the Board, the selected Proposer and Beaver Falls shall be required to execute the APA.

8. CONFIDENTIALITY AND DISCLOSURE TO THIRD PARTIES:

The existence and contents of this letter are subject to the confidentiality agreement that you previously executed. We ask you to remind all members of your team of your obligations under such confidentiality agreement and the indemnity obligation for any violation thereof.

Proposers should be aware that records of Beaver Falls are subject to the provisions of the Pennsylvania Right-to-Know Law, 65 P.S. §67.101 et seq. ("RTK Law"), and that with certain exceptions, such records are subject to public disclosure. Beaver Falls understands that in responding to this RFB, Proposers will be submitting information, including financial data that the parties desire to be kept confidential. It is Beaver Falls' position that this RFB is part of a competitive proposal transaction process, and that prior to the award of a contract or prior to the opening and rejection of all proposals, all such submissions are confidential and exempt from disclosure under the Section 708(b)(26) of the RTK Law, 65 P.S. §67.708(b)(26).

Proposers are advised, however, that following award of a contract or the opening and rejection of all Proposals, such submissions may be subject to public disclosure unless they are otherwise exempt from disclosure under another provision of the RTK Law. Records and information submitted by Prospective Proposers that constitute "trade secrets" or "confidential proprietary information" as defined in the RTK Law are exempt from

disclosure under Section 708(b)(11), 65 P.S. §67.708(b)(11). "Confidential proprietary information" includes commercial and financial information which is privileged or confidential to the submitting party and the disclosure of which would cause substantial harm to the competitive position of the person who submitted the information. Proposers are advised that if they believe any information being submitted in response to this Request for Bids constitutes or references trade secret or confidential propriety information, they should clearly so label any such information with a prominent label of either: "TRADE SECRET" or "CONFIDENTIAL PROPRIETARY INFORMATION." Any such claims may be subject to review pursuant to the procedures set forth in the RTK Law. If Beaver Falls, the Pennsylvania Office of Open Records or a court determines that such information does not qualify as a trade secret or confidential proprietary information, such information may be subject to public disclosure.

9. RIGHT TO REJECT BIDS AND SALE; MODIFICATION OF PRICE:

Beaver Falls reserves the right to reject any and all bids and to determine not to proceed with a sale of the Sewer System. In addition, based on the outcome of regulatory determinations (if applicable) subsequent to the award of the winning bid hereunder, the Seller reserves the right to renegotiate certain terms of the APA, including Purchase Price/Consideration, as it deems in its best interests and as are acceptable to the winning bidder.

10. BID CRITERIA

All bids shall be evaluated based on the following criteria: (1) Purchase Price; (2) Rate Freeze/Expected Rates (Indicative Bills); and (3) the ability to consummate the transaction and to comply with ongoing regulatory requirements.

# PROPOSAL FORMS

## Proposal Form 1 – City of Beaver Falls Sewer System RFB
## Transmittal Letter

*{to be prepared on Proposer's Letterhead}*

[Date], 2021

PFM Financial Advisors LLC
c/o Ben Kapenstein
213 Market Street
Mail Room Third Floor
Harrisburg, PA 17101

Re: Beaver Falls Sewer System Request for Bids

Dear Beaver Falls:

_____ (the "Proposer") hereby submits the attached Proposal in response to the City of Beaver Falls' Sewer System Request for Bids (the "RFB") issued by the City of Beaver Falls ("**Beaver Falls**") on July 23, 2021, as amended.

The undersigned Proposer hereby unconditionally and irrevocably offers to enter into the Asset Purchase Agreement (the "**APA**") for identified sewer facilities owned and operated by Beaver Falls. Capitalized terms not otherwise defined in this Proposal have the meanings set forth in the APA.

The Proposer, by its undersigned duly-authorized representative, hereby covenants, certifies, represents, and warrants, as follows in connection with this Proposal:

1. ***RFB and Addendum Acknowledgement.*** The Proposer acknowledges receipt of the RFB and the following addenda to the RFB:

| Addendum No. | Date |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

2. ***Due Authorization.*** The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer.

3. ***Completeness; Warranty as to Proposal Information.*** The Proposer has submitted all Proposal Forms and such Proposal Forms are a part of this Proposal. All information and statements contained in the Proposal are current, correct, and complete, and are made with full knowledge that will rely on such information and statements in determining which Proposals are responsive and responsible, and in ultimately selecting the Proposal deemed most advantageous to Beaver Falls and executing the respective APA.

4. ***Identity of Buyer***. The Buyer will be the Proposer, provided that the Proposer may, prior to the execution of the APA pursuant to paragraph 8 below, create a subsidiary to be the Buyer (the "Subsidiary"), in which event the Subsidiary shall carry out all of the obligations of the Buyer under the APA from and after such execution.

5. ***Final Agreements.*** The Proposer agrees to enter into the APA in each case in the form identified as "Binding Proposal, Execution Copy" as posted in the Virtual Data Room for this Transaction (except for filling in indicated blanks and completion of Schedules as provided therein).

6. ***Purchase Price/Consideration.*** The amount of the Purchase Price/Consideration that Proposer will pay (inclusive of the escrow funds as described in Section 6.05(e) of the APA) pursuant to Section 3.01 of the APA will be the total set forth in either Proposal Form 6A or 6B.

7. ***Proposal Effective Period.*** This Proposal and offer shall remain in effect and irrevocable until 5:00 p.m. Eastern Daylight Savings Time on December 31, 2021, unless extended to 5:00 p.m. Eastern Daylight Savings Time on January 31, 2022, by Beaver Falls or unless further extended by mutual consent of both Beaver Falls and the Proposer (the "Termination Time"). In the event that the Proposal submission date is delayed, the Termination Time will be extended for the same such period. If Beaver Falls does not give written notice to the Proposer that Beaver Falls is prepared to enter into the APA on or prior to the Termination Time, this offer, and the terms of this Proposal shall terminate at the Termination Time.

8. ***Agreement Execution.*** If at any time prior to the Termination Time, Beaver Falls gives written notice to the Proposer, at the address specified below, that they are prepared to enter into the APA with the Proposer, the Proposer will, within two Business Days of its receipt of such notice, execute and deliver the APA to Beaver Falls.

9. ***Debarment.*** Neither the Proposer, the Operator, nor any other member of Proposer's project team is currently suspended or debarred from doing business with any governmental entity.

10. ***Contract Disclosures.*** Except as disclosed in Proposal Form 5, neither Proposer nor any member of Proposer's team has entered into any arrangement with any person or entity involving a finder's fee, fee splitting, firm affiliation, or relationship with any broker-dealer, payments to consultants, lobbyists, or commissioned representatives or other contractual arrangements that could present a real or perceived conflict of interest.

11. ***No Litigation.*** There is no action, suit or proceeding, at law or in equity, before any court or similar governmental body, against the Proposer, wherein an unfavorable decision,

ruling or finding would have a materially adverse effect on the ability of the Proposer to perform its obligations under the APA contemplated hereby, or which, in any way, would have a materially adverse effect on the validity or enforceability of the obligations proposed to be undertaken by the Proposer, or any APA or instrument entered into by the Proposer in connection with the Transaction contemplated hereby.

12. ***Certain Representations.*** The Proposer represents and warrants that (1) Proposer has full power and authority to make this offer and submit this Proposal; (2) Proposer, or the Subsidiary, will have full power and authority to execute and deliver the APA pursuant to the terms hereof; (3) such actions do not and will not violate the terms of any of the Proposer's or the Subsidiary's organizational documents or any agreement binding upon it or the terms of any Applicable Law; (4) no further consent to this offer or Proposal or to the execution of the APA pursuant to the terms hereof is required to be obtained from any other Person or Governmental Authority; and (5) this offer and Proposal constitute, and the APA, if executed pursuant to the terms hereof, will constitute duly authorized, valid and legally binding obligations of the Proposer, or the Subsidiary, enforceable in accordance with their respective terms, except as may be limited by bankruptcy, reorganization, insolvency, moratorium, fraudulent conveyance or transfers, or other laws affecting creditor's rights generally, and subject to general principles of equity (regardless of whether in law or in equity).

13. ***Material Changes.*** The Proposer has disclosed as an attachment to this Proposal all material changes from the information provided in the Proposer's RFQ Response.

14. ***Principal Contact.*** The principal contact person who will serve as the interface between the Governmental Party and the Proposer for all communications is:

NAME: _____

TITLE: _____

ADDRESS: _____

_____

PHONE: _____

FAX: _____

EMAIL: _____

**Submitted by:**

Name of Proposer: _____

Name of Designated Signatory _____

Signature _____

Title: _____

## Proposal Form 2- City of Beaver Falls Sewer System RFB
## Non-Collusion Affidavit

STATE OF _____ )

COUNTY OF _____ )

I, [INSERT DESIGNATED SIGNATORY NAME], a resident of _____MUNICIPALITY OR OTHER JURISDICTION], in the State/Commonwealth of [INSERT STATE], of full age, being duly sworn according to law, on my oath depose and say that:

(1) I am the [INSERT TITLE] of [INSERT PROPOSER NAME], organized under the laws of the State/Commonwealth of [INSERT STATE NAME], the Proposer making the Proposal in response to the City of Beaver Falls Sewer System Request for Bids issued by the City of Beaver Falls on July 23, 2021, as amended, and that I executed said Proposal with full authority to do so;

(2) The pricing and other information set forth in this Proposal have been arrived at independently without collusion, fraud, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such pricing information with any other Proposer or anyone employed by or representing Beaver Falls;

(3) Unless otherwise required by law, the pricing information which has been quoted in this Proposal has not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer, directly or indirectly, to any other Proposer or to any competitor prior to execution of the APA; and

(4) No attempt has been made or will be made by the Proposer to induce any other person or entity to submit or not to submit a Proposal for the purpose of restricting competition.

I, hereby affirm under the penalties of perjury that the foregoing statements are true.

_____
Name of Proposer

_____
Name of Designated Signatory

_____
Signature

_____
Title

(Notary Public)

State/Commonwealth of ____

County of _____

On this _____ day of _____, 2021, before me appeared [DESIGNATED SIGNATORY], who is [INSERT TITLE] of [INSERT PROPOSER], a [INSERT STATE AND ENTITY TYPE], personally known to me to be the person described in and who executed this Non-Collusion Statement and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

_____

Notary Public in and for the State/Commonwealth of

(seal)

_____

(Name printed)

Residing at _____

Commission Number _____

## Proposal Form 3 – City of Beaver Falls Sewer System RFB
## Statement of Ownership – Proposer

***Name of Proposer:***

***Business Address:***

***Legal Form of Proposer:***

***State of Incorporation or Organization:***

***If not organized in Pennsylvania, is Proposer authorized to do business in Pennsylvania?*** [ ] Yes [ ] No

***List Names and Titles of All Principal Officers and Directors:***

***Significant Equity Owners of the Proposer:***

List the names, business addresses and percentage ownership interests of all Persons (individuals or entities) who own, directly or indirectly, 10% or more of the capital stock, units, partnership or membership interests, or other equity interests or securities of the Proposer (including options, warrants and other rights to acquire such equity interests) (the "Significant Equity Owners"). If none, please state "NONE." If one or more such Significant Equity Owner(s) of Proposer is an entity, then list the names and addresses of all Significant Equity Owners of such entity; if none, please state "None." This disclosure shall be continued until names and addresses of every Significant Equity Owner exceeding the ten percent ownership criteria of each entity listed has been identified. Additional pages may be attached.

| Name | Address | % Interest |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

## Proposal Form 4- City of Beaver Falls Sewer System RFB
## Operator Information

If the Proposer is not the Operator, the Proposer must clearly identify the entity or entities that will serve as the Operator under the APA. For the proposed Operator, please provide the following information.

1. **Name & Address of Proposed Operator**:

2. **Operator's Primary Representative**:

3. **Operator Experience (if not previously provided in response to the RFQ)**:

4. **Operator's References (if not previously provided in response to the RFQ)**:

5. **Material Change:** Any change in condition (financial or otherwise), development, occurrence or circumstance that could be materially adverse to the Operator that has arisen after the date of the RFQ, and which would have been responsive to the RFQ if such change, development, occurrence or circumstance had arisen prior to the Proposer's response to the RFQ.

## Proposal Form 5 – City of Beaver Falls Sewer System RFB
## Contract and Lobbyist Disclosure

Proposer hereby certifies that except as listed below, neither Proposer nor any member of Proposer's team has entered into any arrangement with any person or entity involving a finder's fee, fee splitting, firm affiliation or relationship with any broker-dealer, payments to consultants, lobbyists, or commissioned representatives or other contractual arrangements that could present a real or perceived conflict of interest. (If there are no such arrangements, please write NONE)

| ***Name of Person or Entity*** | ***Disclosure and Description of Arrangement*** |
|---|---|
| | |
| | |
| | |
| | |
| | |

Name of Proposer

Name of Designated Signatory

Signature

Title

On this Proposal Form 6A, please provide your Purchase Price/Consideration assuming no rate freeze were to be imposed by Beaver Falls (Option 1 of Section 7.04(a) of the APA).

| **Beaver Falls - Anticipated Sewer Rates at Closing** *(Shown with anticipated 3% Increase on 1/1/2022)* | | |
|---|---|---|
| | **Inside City** | **Outside City** |
| Quarterly Service Charge (Includes 3,000 gallons/quarter) | $41.14 | N/A |
| Usage Charge per 1,000 Gal | $8.21 | $4.41 |

The amount of the Purchase Price/Consideration that Proposer offers to pay pursuant to Section 3.01 of the APA is:

US$ _____ [*in numbers*], _____ [*in words*] United States Dollars.

*Proposers should ensure that the written and numerical Purchase Price/Consideration in this Proposal exactly match. Should this not be the case, the binding Purchase Price/Consideration will be assumed to be the lower of the two Purchase Price/Consideration numbers.*

Please provide nonbinding indicative rates that relate to the Purchase Price/Consideration above. For the purposes of transparency, and to aid in comparing bids, please feel free to add any clarifying remarks in the area provided below. **AT A MINIMUM**, please specify, 1) the amount of subsidization, if any, you are assuming, via Act 11; 2) whether the rates provided below include any DSIC surcharge.

Please note, completion of the indicative rate section below is required for your bid to be deemed as "compliant".

Indicative residential monthly bills for the next 10 years assuming 4,000 gallons of usage/month:

2022: _____ 2023: _____ 2024: _____ 2025: _____
2026: _____ 2027: _____ 2028: _____
2029: _____ 2030: _____ 2031: _____

Description of rates outlined above:

_____

_____
Name of Proposer

_____
Name of Designated Signatory

_____
Signature

On this Proposal Form 6B, please provide your Purchase Price/Consideration assuming a rate freeze through December 31, 2024, were to be imposed by Beaver Falls (Option 2 of Section 7.04(a) of the APA).

| **Beaver Falls - Anticipated Sewer Rates at Closing** *(Shown with anticipated 3% Increase on 1/1/2022)* | | |
|---|---|---|
| | **Inside City** | **Outside City** |
| Quarterly Service Charge (Includes 3,000 gallons/quarter) | $41.14 | N/A |
| Usage Charge per 1,000 Gal | $8.21 | $4.41 |

The amount of the Purchase Price/Consideration that Proposer offers to pay pursuant to Section 3.01 of the APA is:

US$ _____ [*in numbers*], _____ [*in words*] United States Dollars.

*Proposers should ensure that the written and numerical Purchase Price/Consideration in this Proposal exactly match. Should this not be the case, the binding Purchase Price/Consideration will be assumed to be the lower of the two Purchase Price/Consideration numbers.*

Please provide nonbinding indicative rates that relate to the Purchase Price/Consideration above. For the purposes of transparency, and to aid in comparing bids, please feel free to add any clarifying remarks in the area provided below. **AT A MINIMUM**, please specify, 1) the amount of subsidization, if any, you are assuming, via Act 11; 2) whether the rates provided below include any DSIC surcharge (rates submitted under this Proposal Form 6B should not include a DSIC surcharge).

Please note, completion of the indicative rate section below is required for your bid to be deemed as "compliant". In addition, please note that the Rate Freeze period may allow for the inclusion of fees and charges of a one-time nature (late payments, shut-off etc.), but may not include any DSIC surcharge.

Indicative residential monthly bills for the next 10 years assuming 4,000 gallons of usage/month:

2022: _____ 2023: _____ 2024: _____ 2025: _____
2026: _____ 2027: _____ 2028: _____
2029: _____ 2030: _____ 2031: _____

Description of rates outlined above:

_____

_____
Name of Proposer

_____
Name of Designated Signatory

_____
Signature

# CITY OF BEAVER FALLS
# MEMO – ASBESTOS REMOVAL
# July 19, 2021

This Memo is to notify potential bidders on the sale of the City of Beaver wastewater assets that the City plans to remove the asbestos pipe insulation cited in the document titled “BeaverFalls_Asbestos” in the “Memos” folder posted in the data room prior to the closing of the sale. The City is in the process of engaging the appropriate professionals to safely remove the material.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Costs/Benefits**

13. Please provide a copy of the proposal and exhibits of the Buyer for the purchase of Seller's system.

Response: Please see the attachment to SDR-13.

August 26, 2021

PFM Financial Advisors LLC
c/o Ben Kapenstein
213 Market Street
Mail Room Third Floor
Harrisburg, PA 17101

Re: Beaver Falls Sewer System Request for Bids

Dear Beaver Falls:

**Aqua Pennsylvania Wastewater, Inc.** (the "Proposer") hereby submits the attached Proposal in response to the City of Beaver Falls Sewer System Request for Bids (the "RFB") issued by the City of Beaver Falls ("**Beaver Falls**") on July 23, 2021, as amended.

The undersigned Proposer hereby unconditionally and irrevocably offers to enter into the Asset Purchase Agreement (the "**APA**") for identified sewer facilities owned and operated by Beaver Falls. Capitalized terms not otherwise defined in this Proposal have the meanings set forth in the APA.

The Proposer, by its undersigned duly-authorized representative, hereby covenants, certifies, represents, and warrants, as follows in connection with this Proposal:

1. ***RFB and Addendum Acknowledgement.*** The Proposer acknowledges receipt of the RFB and the following addenda to the RFB:

| Addendum No. | Date |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

2. ***Due Authorization.*** The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer.

3. ***Completeness; Warranty as to Proposal Information.*** The Proposer has submitted all Proposal Forms and such Proposal Forms are a part of this Proposal. All information and statements contained in the Proposal are current, correct and complete, and are made with full knowledge that Beaver Falls will rely on such information and statements in determining which Proposals are responsive and responsible, and in ultimately selecting the Proposal deemed most advantageous to Beaver Falls and executing the Agreement.

4. ***Identity of Buyer***. The Buyer will be the Proposer, provided that the Proposer may, prior to the execution of the Agreement pursuant to paragraph 8 below, create a subsidiary to be the Buyer (the "Subsidiary"), in which event the Subsidiary shall carry out all of the obligations of the Buyer under the Agreement from and after such execution.

5. ***Final Agreements.*** The Proposer agrees to enter into the Agreement in each case in the form identified as "Binding Proposal, Execution Copy" as posted in the Virtual Data Room for this Transaction (except for filling in indicated blanks and completion of Schedules as provided therein).

6. ***Purchase Price/Consideration.*** The amount of the Purchase Price/Consideration that Proposer will pay (inclusive of the escrow funds as described in Section 6.05(e) of the APA) pursuant to Section 3.01 of the APA will be the total set forth in Proposal Form 6A or 6B.

7. ***Proposal Effective Period.*** This Proposal and offer shall remain in effect and irrevocable until 5:00 p.m. Eastern Daylight Savings Time on December 31, 2021, unless extended to 5:00 p.m. Eastern Daylight Savings Time on January 31, 2022 by Beaver Falls or unless further extended by mutual consent of both Beaver Falls and the Proposer (the "Termination Time"). In the event that the Proposal submission date is delayed, the Termination Time will be extended for the same such period. If Beaver Falls does not give written notice to the Proposer that Beaver Falls is prepared to enter into the APA on or prior to the Termination Time, this offer and the terms of this Proposal shall terminate at the Termination Time.

8. ***Agreement Execution.*** If at any time prior to the Termination Time, Beaver Falls gives written notice to the Proposer, at the address specified below, that they are prepared to enter into the APA with the Proposer, the Proposer will, within two Business Days of its receipt of such notice, execute and deliver the APA to Beaver Falls.

9. ***Debarment.*** Neither the Proposer, the Operator, nor any other member of Proposer's project team is currently suspended or debarred from doing business with any governmental entity.

10. ***Contract Disclosures.*** Except as disclosed in Proposal Form 5, neither Proposer nor any member of Proposer's team has entered into any arrangement with any person or entity involving a finder's fee, fee splitting, firm affiliation or relationship with any broker- dealer, payments to consultants, lobbyists, or commissioned representatives or other contractual arrangements that could present a real or perceived conflict of interest.

11. ***No Litigation.*** There is no action, suit or proceeding, at law or in equity, before any court or similar governmental body, against the Proposer, wherein an unfavorable decision,

ruling or finding would have a materially adverse effect on the ability of the Proposer to perform its obligations under the APA contemplated hereby, or which, in any way, would have a materially adverse effect on the validity or enforceability of the obligations proposed to be undertaken by the Proposer, or any agreement APA or instrument entered into by the Proposer in connection with the Transaction contemplated hereby.

12. ***Certain Representations.*** The Proposer represents and warrants that (1) Proposer has full power and authority to make this offer and submit this Proposal; (2) Proposer, or the Subsidiary, will have full power and authority to execute and deliver the APA pursuant to the terms hereof; (3) such actions do not and will not violate the terms of any of the Proposer's or the Subsidiary's organizational documents or any agreement binding upon it or the terms of any Applicable Law; (4) no further consent to this offer or Proposal or to the execution of the APA pursuant to the terms hereof is required to be obtained from any other Person or Governmental Authority; and (5) this offer and Proposal constitute, and the Agreement, if executed pursuant to the terms hereof, will constitute duly authorized, valid and legally binding obligations of the Proposer, or the Subsidiary, enforceable in accordance with their respective terms, except as may be limited by bankruptcy, reorganization, insolvency, moratorium, fraudulent conveyance or transfers, or other laws affecting creditor's rights generally, and subject to general principles of equity (regardless of whether in law or in equity).

13. ***Material Changes.*** The Proposer has disclosed as an attachment to this Proposal all material changes from the information provided in the Proposer's RFQ Response.

14. ***Principal Contact.*** The principal contact person who will serve as the interface between the Governmental Party and the Proposer for all communications is:

NAME: **Thomas F Rafferty**

TITLE: **Director, Business Development**

ADDRESS: **762 W. Lancaster Ave. Bryn Mawr, PA 19010**

PHONE: **(O): 610-645-1064 (M): 215-205-0800**

FAX: **610.645.1061**

EMAIL: **tfrafferty@aquaamerica.com**

**Submitted by:**

Name of Proposer

**Aqua Pennsylvania Wastewater, Inc.**

Name of Designated Signatory

**Marc A. Lucca**

Signature



Title

**President**

## Proposal Form 2- City of Beaver Falls Sewer System RFB
## Non-Collusion Affidavit

STATE OF _____ PENNSYLVANIA)

COUNTY OF _____ MONTGOMERY)

I, Marc A. Lucca, a resident of Lower Merion Township, in the State of Pennsylvania, of full age, being duly sworn according to law, on my oath depose and say that:

(1) I am the President of Aqua Pennsylvania Wastewater Inc., organized under the laws of the state of Pennsylvania, the Proposer making the Proposal in response to the City of Beaver Falls Sewer System Request for Bids issued by the City of Beaver Falls on July 23, 2021, as amended, and that I executed said Proposal with full authority to do so;

(2) The pricing information set forth in this Proposal have been arrived at independently without collusion, fraud, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such pricing information with any other Proposer or anyone employed by or representing Beaver Falls;

(3) Unless otherwise required by law, the pricing information which has been quoted in this Proposal has not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer, directly or indirectly, to any other Proposer or to any competitor prior to execution of the AP; and

(4) No attempt has been made or will be made by the Proposer to induce any other person or entity to submit or not to submit a Proposal for the purpose of restricting competition.

I, hereby affirm under the penalties of perjury that the foregoing statements are true.

**Aqua Pennsylvania Wastewater Inc.**
Name of Proposer

**Marc A. Lucca**
Name of Designated Signatory


Signature

**President**
Title

(Notary Public)

State/Commonwealth of Pennsylvania

County of Montgomery

On this 26 day of August, 2021, before me appeared **Marc A. Lucca**, who is President of Aqua Pennsylvania Wastewater Inc., a Pennsylvania Corporation, personally known to me to be the person described in and who executed this Non-Collusion Statement and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

Heather S. D. Harrisson
Notary Public in and for the State/Commonwealth of
Pennsylvania

(seal)

Heather S. D. Harrisson
(Name printed)

Residing at 762 W. Lancaster Ave, Bryn Mawr, PA 19010

Commission Number 1213370

Commonwealth of Pennsylvania - Notary Seal
Heather S. D. Harrisson, Notary Public
Montgomery County
My commission expires February 3, 2025
Commission number 1213370
Member, Pennsylvania Association of Notaries

## Proposal Form 3- City of Beaver Falls Sewer System RFB
## Statement of Ownership – Proposer

***Name of Proposer:*** Aqua Pennsylvania Wastewater, Inc.

***Business Address:*** 762 W. Lancaster Avenue, Bryn Mawr, PA 19010

***Legal Form of Proposer:*** Corporation

***State of Incorporation or Organization:*** Pennsylvania

***If not organized in Pennsylvania, is Proposer authorized to do business in Pennsylvania?*** [ ] Yes [ ] No

***List Names and Titles of All Principal Officers and Directors:***

| | |
|---|---|
| Christopher H. Franklin | Chief Executive Officer (Officer & Director) |
| Daniel J. Schuller | EVP, Chief Financial Officer (Officer & Director) |
| Richard S. Fox | EVP, Chief Operating Officer (Officer & Director) |
| Matthew R. Rhodes | EVP, Strategy and Corporate Development (Officer & Director) |
| Christopher P. Luning | SVP, General Counsel and Secretary (Officer & Director) |
| Marc A. Lucca | President (Officer & Director) |
| Stan Szczygiel | Vice President and Treasurer |

***Significant Equity Owners of the Proposer:***

List the names, business addresses and percentage ownership interests of all Persons (individuals or entities) who own, directly or indirectly, 10% or more of the capital stock, units, partnership or membership interests, or other equity interests or securities of the Proposer (including options, warrants and other rights to acquire such equity interests) (the "Significant Equity Owners"). If none, please state "NONE." If one or more such Significant Equity Owner(s) of Proposer is an entity, then list the names and addresses of all Significant Equity Owners of such entity; if none, please state "None." This disclosure shall be continued until names and addresses of every Significant Equity Owners exceeding the ten percent ownership criteria of each entity listed has been identified. Additional pages may be attached.

| *Name* | *Address* | *Interest %* |
|---|---|---|
| Aqua Pennsylvania, Inc. | 762 W. Lancaster Ave., Bryn Mawr, PA 19010 | 100% |
| | | |
| | | |
| | | |

## Proposal Form 4- City of Beaver Falls Sewer System RFB
## Operator Information

If the Proposer is not the Operator, the Proposer must clearly identify the entity or entities that will serve as the Operator under the APA. For the proposed Operator, please provide the following information.

1. **Name & Address of Proposed Operator**:

   PROPOSER IS THE OPERATOR

2. **Operator's Primary Representative**:

   TODD DUERR & ZACH MARTIN

3. **Operator Experience (if not previously provided in response to the RFQ)**:

   SEE RFQ

4. **Operator's References (if not previously provided in response to the RFQ)**:

   SEE RFQ

5. **Material Change:** Any change in condition (financial or otherwise), development, occurrence or circumstance that could be materially adverse to the Operator that has arisen after the date of the RFQ and which would have been responsive to the RFQ if such change, development, occurrence or circumstance had arisen prior to the Proposer's response to the RFQ.

## Proposal Form 5- City of Beaver Falls Sewer System RFB
## Contract and Lobbyist Disclosure

Proposer hereby certifies that except as listed below, neither Proposer nor any member of Proposer's team has entered into any arrangement with any person or entity involving a finder's fee, fee splitting, firm affiliation or relationship with any broker-dealer, payments to consultants, lobbyists, or commissioned representatives or other contractual arrangements that could present a real or perceived conflict of interest. (If there are no such arrangements, please write NONE)

| *Name of Person or Entity* | *Disclosure and Description of Arrangement* |
|---|---|
| None | |
| | |
| | |
| | |
| | |

**Aqua Pennsylvania Wastewater, Inc.**
Name of Proposer

**Marc A. Lucca**
Name of Designated Signatory

Signature

**President**
Title

## Proposal Form 6A (No Rate Freeze) – City of Beaver Falls Sewer System RFB Business Proposal

On this Proposal Form 6A, please provide your Purchase Price/Consideration assuming no rate freeze were to be imposed by Beaver Falls (Option 1 of Section 7.04(a) of the APA).

| Beaver Falls - Anticipated Sewer Rates at Closing *(Shown with anticipated 3% Increase on 1/1/2022)* | | |
|---|---|---|
| | Inside City | Outside City |
| Quarterly Service Charge (Includes 3,000 gallons/quarter) | $41.14 | N/A |
| Usage Charge per 1,000 Gal | $8.21 | $4.41 |

The amount of the Purchase Price/Consideration that Proposer offers to pay pursuant to Section 3.01 of the APA is:

US **$41,250,000**, (**Forty-one million, two-hundred and fifty thousand** in United States Dollars)

**ADDITIONAL CONSIDERATION WITH BID**:

Upon signing of the APA, Aqua will make a **$1,000,000** refundable deposit (to be credited against the bid price) to the City of Beaver Falls

After filing of the PUC Application and upon recognized status of "Full-Acceptance" by the PUC, Aqua will make an additional refundable deposit (to be credited against the bid price) of **$1,000,000** to the City of Beaver Falls.

Please provide nonbinding indicative rates that relate to the Purchase Price/Consideration above. For the purposes of transparency, and to aid in comparing bids, please feel free to add any clarifying remarks in the area provided below. **AT A MINIMUM**, please specify, 1) the amount of subsidization, if any, you are assuming, via Act 11; 2) whether the rates provided below include any DSIC surcharge.

Please note, completion of the indicative rate section below is required for your bid to be deemed as "compliant".

Indicative residential monthly bills for the next 10 years assuming 4,000 gallons of usage/month:

| | | | | |
|---|---|---|---|---|
| 2022 **$38.49** | 2023 **$38.49** | 2024 **$38.49** | 2025 **$58.18** | 2026 **$58.18** |
| 2027 **$58.18** | 2028 **$59.32** | 2029 **$59.32** | 2030 **$59.32** | 2031 **$60.35** |

Description of rates outlined above:

***1. The Company assumes approximately 30% cost allocation, and a DSIC surcharge beginning no sooner than 2024. These projections are for illustrative purposes and reflect reasonable expectations of the Company based on current industry trends, however, are subject to changes and the approval of the PA Public Utility Commission.***

***2.If chosen as the winning bid and upon filing the PUC approval application, customers will be notified (by customer notice in the mail) of Potential Rate Impacts assuming zero cost allocation. Those rates are estimated and shown below. While the Company believes the Indicative Rates above are supportable by precedent and policy as far as PUC rate allocation experience, the Potential Rate Impacts below are required to be noticed for all applications for acquisition approvals.***

| | | | | |
|---|---|---|---|---|
| 2022 **$38.49** | 2023 **$38.49** | 2024 **$38.49** | 2025 **$83.12** | 2026 **$83.12** |
| 2027 **$83.12** | 2028 **$84.44** | 2029 **$84.44** | 2030 **$84.44** | 2031 **$85.92** |

***3.In addition, both the Indicative Rates and the Potential Rate Impacts assume that the Company will have the ability to uniformly increase rates among all customers, including the outside municipalities that contribute flows to the City. If rates to the outside municipalities cannot be uniformly increased, the impact to the City customers may be greater than those projections stated above.***

***4.The Company's choice of a "No-Rate Freeze" option avoids regulatory hurdles and potential challenges to Closing the sale due to "rate freeze" language. We believe a "No-rate freeze" option is more likely to close faster.***

***5.The Company's 10-year projection of rates for the costs associated with the acquisition of the Beaver Falls Wastewater system assume a base rate increase in 2025, potentially a 3-year hold on rates. This assumes an Asset Purchase Agreement is signed no later than October 31, 2021 and the regulatory process begins within a reasonable timeframe.***

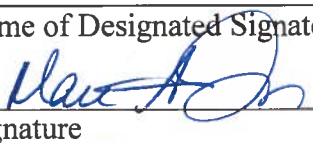
***6.Under the Company's ownership, and with approval of the PUC, low-income families of 4 will have the opportunity to participate in our Customer Assistance Program as proposed under our current rate application. It is important to note that this program will have to first be approved by the PUC for it to become available. However, we do have in existence today our Helping Hands program which is designed to assist low-income families. Additionally, once it is finally approved by the Federal and State governments, low income families will have the opportunity to apply for assistance under a new federal program for water and wastewater customers known as LIHWAP. (Low-Income Housing Water Assistance Program).***

**Aqua Pennsylvania Wastewater Inc.**

Name of Proposer

**Marc A. Lucca**

Name of Designated Signatory



Signature

PRESIDENT

Title

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Costs/Benefits**

14. Provide a copy of the Buyer's offer to purchase the Seller's system and the Seller's response to that offer.

Response: Please see the response to SDR-13 for the Company's response to the Request For Bids. Please see the attachment to SDR-14 for Beaver Falls' ordinance approving the sale of its system to the Company.

**ORDINANCE NO. 4049**

**AN ORDINANCE AUTHORIZING THE EXECUTION BY THE CITY OF BEAVER FALLS, COUNTY OF BEAVER (THE "CITY") OF AN ASSET PURCHASE AGREEMENT (THE "PURCHASE AGREEMENT") BETWEEN THE CITY AND THE PURCHASER (DEFINED HEREIN); AUTHORIZING THE ASSIGNMENT OF THE CITY'S RIGHTS AND OBLIGATIONS IN THE ASSIGNED AGREEMENTS (DEFINED HEREIN) TO THE PURCHASER; AUTHORIZING AND APPROVING ALL CONVEYANCE INSTRUMENTS (DEFINED HEREIN); AUTHORIZING COMMUNICATION OF INFORMATION AND COOPERATION WITH THE PURCHASER; AUTHORIZING ALL ACTIONS RELATING TO THE EXECUTION AND IMPLEMENTATION OF THE PURCHASE AGREEMENT AND THE ASSIGNMENT OF THE ASSIGNED AGREEMENTS AND OTHER DOCUMENTS NECESSARY TO EFFECTUATE THE FOREGOING; AUTHORIZING INCIDENTAL ACTION TO BE TAKEN BY SPECIFIED OFFICERS OF THE CITY; AND RESCINDING INCONSISTENT ORDINANCES AND RESOLUTIONS.**

**WHEREAS,** the City, a City of the Third Class of the Commonwealth of Pennsylvania, currently owns and operates a sanitary wastewater collection and treatment system (the "System") that provides sanitary wastewater service to various individual and wholesale customers in the City of Beaver Falls, Pennsylvania, and portions of Patterson Township, North Sewickley Township, West Mayfield Borough, White Township, Big Beaver Borough, Patterson Heights Borough, and Eastvale Borough, each in Beaver County, Pennsylvania (the "Service Area"); and

**WHEREAS**, the City previously decided to pursue the potential sale of all of the assets, properties and rights of the City (whether tangible, real, personal or mixed) which are exclusively held and used by it in connection with the System, as set forth in the Purchase Agreement (the "System Assets") through a competitive bidding process (the "Assets Sale"); and

**WHEREAS**, the City has heretofore issued a Request for Qualifications (the "RFQ") and a Request for Bids (the "RFB") to solicit bids from interested and qualified companies and entities to purchase the System; and

**WHEREAS**, the City received responses to the RFQ and, after the opportunity for due diligence and negotiation and preparation of the Purchase Agreement, issued the RFB and received bids from three interested entities ("Potential Bidders") that were found to be qualified; and

**WHEREAS,** the City, by enactment of the within Ordinance, selects Aqua Pennsylvania Wastewater, Inc. as the highest bidder (the "Purchaser"), determining that such selection is in the best interests of the City, as determined by the City Council based on the advice of PFM Financial Advisors, LLC, the City's Financial Advisor; and

**WHEREAS**, the Council determines that the Assets Sale is in the best interests of the City, such determination to be evidenced through the execution by the City of the Purchase Agreement, and the City will sell the System Assets to the Purchaser by entering into the Purchase Agreement with the Purchaser and proceeding to the closing of the sale of the System ("Closing"); and

**WHEREAS**, the City has previously entered into: (i) an Intermunicipal Service Agreement with Patterson Township dated as of April 28, 1977 (the "Patterson Agreement"), (ii) an Intermunicipal Service Agreement with Big Beaver Municipal Authority dated as of November, 1998 (the "Big Beaver Municipal Authority Agreement"), (iii) an Intermunicipal Service Agreement with North Sewickley Township Sewer Authority dated as of January 9, 2003 (the "North Sewickley Authority Agreement"), (iv) a purported Capital Lease with certain municipalities designated as the "Joint Sewer Users" dated as of April 8, 2014 (the "JSU Agreement"), and (v) an Agreement with the Borough of Eastvale dated May 1, 1983 (the "Eastvale Agreement", together with the Patterson Agreement, the Big Beaver Municipal Authority Agreement, the North Sewickley Authority Agreement, and the JSU Agreement, the "Assigned Municipal Agreements"); and

**WHEREAS**, the City has previously entered into: (i) an Agreement between the City of Beaver Falls and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO-CLC, on behalf of Local Union 9305-08, expiring December 31, 2021, as amended (the "9305-08 Agreement"); and (ii) an Agreement between the City of Beaver Falls and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO-CLC, on behalf of Local Union 9305-10, expiring December 31, 2021, as amended (the "9305-10 Agreement" and, together with the 9305-08 Agreement, the "Assigned Labor Agreements"; the Assigned Labor Agreements and the Assignment Municipal Agreements are together referred to herein as the "Assigned Agreements"); and

**WHEREAS**, pursuant to the Purchase Agreement, the City will assign the City's rights and obligations under the Assigned Agreements to the Purchaser and the Purchaser will assume the City's rights and obligations under the Assigned Agreements as necessary and appropriate and in accordance with the Purchase Agreement; and

**WHEREAS**, the City will transfer to the Purchaser at Closing the ownership of the System Assets through the execution and delivery of all necessary and required bills of sale, instruments of assignment, consents to transfer, deeds, and other agreements, documents, and instruments of conveyance (collectively, the "Conveyance Instruments"); and

**WHEREAS**, the City currently receives information as to water consumption by customers within the service area of the System from the Beaver Falls Municipal Authority and other municipalities to facilitate accurate billing (the "System Billing Information") and intends to pass on the System Billing Information and any and all rights of the City in connection therewith, to the Purchaser and cooperate with the Purchaser as is required for the continued operation of the System;

**NOW, THEREFORE,** the Council of the **CITY OF BEAVER FALLS**, hereby ordains as follows:

1. **Selection**

The Council determines that the Assets Sale is in the best interests of the City, such determination to be evidenced through the execution by the City of the Purchase Agreement, and the City will sell the System Assets to the Purchaser by entering into the Purchase Agreement with the Purchaser and proceed to Closing of the sale of the System.

2. **Approval of the Purchase Agreement**

The Council hereby authorizes and approves the execution, delivery, and performance of the Purchase Agreement substantially in the form attached hereto as Exhibit A. The Mayor and City Manager are hereby authorized and directed on behalf of the City to execute any and all papers and documents and to do and cause to be done any and all actions and things necessary or proper to execute the Purchase Agreement and to implement the Assets Sale.

3. **Assignment of Assigned Agreements**

The Council hereby authorizes and approves the assignment of the City's rights and obligations under the Assigned Agreements to the extent necessary and appropriate pursuant to the Purchase Agreement. The Mayor and City Manager are hereby authorized and directed on behalf of the City to execute any and all papers and documents and to do and cause to be done any and all actions and things necessary or proper to effectuate such assignment, provided that the terms and conditions of all such papers and documents are satisfactory to the City Solicitor and Special Counsel to the City.

4. **Approval of Deeds, Certificates, and Related Documents**

The Council hereby authorizes the execution and delivery by the Mayor and the City Manager of the Conveyance Instruments necessary and required to be executed and delivered under the Purchase Agreement, provided that the terms and conditions of such Conveyance Instruments are satisfactory to the City Solicitor and Special Counsel to the City.

5. **Disposition of Proceeds**

The proceeds of the sale shall be utilized at the discretion of the City Council in a manner consistent with the Pennsylvania Third Class City Code and subject to the advice of the City's Financial Adviser.

6. **Information and Cooperation**

The Council hereby authorizes the City, its agents and employees, to communicate the System Billing Information and any and all rights of the City in connection therewith and other information required under the Purchase Agreement or desirable in the sole discretion of the Mayor or City Manager to the Purchaser and cooperate with the Purchaser for the continued operation of the System and the use of the System Assets.

7. **General Authorization**

The Council hereby further authorizes the City, its agents and employees, to take any and all necessary actions required by the Third Class City Code and other applicable law, to cooperate with and assist Purchaser in its application to the Pennsylvania Public Utility Commission for approval of its purchase of the System and to take such actions and to execute such other documents and agreements as may be necessary to effectuate the sale of the System Assets as contemplated herein.

8. **Severability**

The provisions of this Ordinance are intended to be severable, and if any section, sentence, clause, part or provision hereof shall be held illegal, invalid or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, sentences, clauses, parts or provisions of this Ordinance. It is hereby declared to be the intent of the Council that this Ordinance would have been adopted even if such illegal, invalid or unconstitutional section, sentence, clause, part or provisions had not been included herein.

9. **Effective Date**

This Ordinance shall take effect and be in force from and after its enactment as required by the law.

10. **Repealer**

All other ordinances and resolutions or parts thereof as they are inconsistent with this Ordinance shall be deemed repealed at the time of closing of the Assets Sale with Purchaser.

**ORDAINED** and **ENACTED** at the public meeting of the Beaver Falls City Council held on September 28, 2021.

**CITY OF BEAVER FALLS**

By: _____
**George S. Quay III,** Mayor

Attest: _____
**Paula Durish,** City Clerk

# EXHIBIT A

## ASSET PURCHASE AGREEMENT

CITY OF BEAVER FALLS
RESOLUTION 1673

A RESOLUTION OF THE CITY OF BEAVER FALLS (THE "CITY"), COUNTY OF BEAVER AND COMMONWEALTH OF PENNSYLVANIA, RATIFYING THE ASSET PURCHASE AGREEMENT BETWEEN THE CITY OF BEAVER FALLS AND AQUA PENNSYLVANIA WASTEWATER, INC. (THE "PURCHASER"), PROVIDING FOR THE SALE OF THE CITY'S SANITARY WASTEWATER COLLECTION AND TREATMENT SYSTEM (THE "SYSTEM") TO THE PURCHASER.

WHEREAS, on September 28, 2021, the Council for the City of Beaver Falls adopted Ordinance No. 4049 approving and authorizing the execution of the Asset Purchase Agreement between the City and the Purchaser (the "APA");

WHEREAS, the City and the Purchaser executed the final version of the APA, effective as of October 20, 2021, such APA attached hereto as Exhibit A.

IT IS HEREBY RESOLVED by the City of Beaver Falls, a Home Rule Municipality under the laws of the Commonwealth of Pennsylvania as follows:

Section 1. Ratification of the Approval and Execution of the Asset Purchase Agreement. The approval and execution of the APA is hereby ratified, confirmed and approved and all actions taken by the Mayor and City Manager on behalf of the City in furtherance of or concerning the APA be, and they hereby are, ratified, confirmed and approved in all respects.

Section 2. Repeal of Inconsistent Resolutions. All prior resolutions, or parts thereof, inconsistent herewith are hereby repealed to the extent of such inconsistency.

Section 3. Effective Date. This Resolution shall take effect immediately.

ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 24th day of January, 2023.

ATTEST:

Paula J. Durish
City Clerk

CITY OF BEAVER FALLS:

Kenya Johns, Ph.D.
Mayor

**EXECUTION VERSION**

# ASSET PURCHASE AGREEMENT

**By and Between**

**City of Beaver Falls, Beaver County,**

**As Seller**

**and**

**Aqua Pennsylvania Wastewater, Inc.,**

**As Buyer**

**Dated as of October 20, 2021**

## TABLE OF CONTENTS


Page

**ARTICLE I.** DEFINITIONS ..... 1

**ARTICLE II.** TERMS OF PURCHASE AND ASSUMPTION OF LIABILITIES ..... 10

Section 2.01. Purchase and Sale of Acquired Assets ..... 10
Section 2.02. Excluded Assets ..... 11
Section 2.03. Sale Free of Liens ..... 12
Section 2.04. Assumption of Liabilities ..... 12
Section 2.05. Further Assurances ..... 13
Section 2.06. Certain Transfers; Assignment of Contracts ..... 13

**ARTICLE III.** PURCHASE PRICE ..... 15

Section 3.01. Purchase Price ..... 15
Section 3.02. Fair Consideration ..... 16
Section 3.03. Allocation Schedule ..... 16
Section 3.04. Transfer Taxes ..... 16

**ARTICLE IV.** REPRESENTATIONS AND WARRANTIES OF THE SELLER ..... 16

Section 4.01. Organization ..... 16
Section 4.02. Power and Authority ..... 16
Section 4.03. Enforceability ..... 17
Section 4.04. No Conflict or Violation ..... 17
Section 4.05. Consents and Approvals ..... 17
Section 4.06. Undisclosed Liabilities ..... 17
Section 4.07. Absence of Certain Changes or Events ..... 17
Section 4.08. Tax Matters ..... 17
Section 4.09. Real Property and Easements ..... 18
Section 4.10. Equipment and Machinery ..... 18
Section 4.11. Employee Benefit Plans ..... 18
Section 4.12. Seller's Personnel ..... 19
Section 4.13. Environmental Compliance ..... 20
Section 4.14. Authorizations and Permits ..... 21
Section 4.15. System Contracts ..... 22
Section 4.16. Compliance with Law; Litigation ..... 22
Section 4.17. Broker's and Finder's Fees ..... 22
Section 4.18. Title to the Acquired Assets; Sufficiency ..... 23
Section 4.19. Pending Development Plans ..... 23

**ARTICLE V.** REPRESENTATIONS AND WARRANTIES OF BUYER ..... 24

Section 5.01. Organization ..... 24
Section 5.02. Authorization and Validity of Agreement ..... 24

Section 5.03. No Conflict or Violation ..... 24
Section 5.04. Consents and Approvals ..... 24
Section 5.05. Broker's and Finder's Fees ..... 24
Section 5.06. Financial Wherewithal ..... 25
Section 5.07. Sufficient Funds ..... 25
Section 5.08. Independent Decision ..... 25
Section 5.09. Scheduled Matters ..... 25
Section 5.10. Independent Investigation ..... 25
Section 5.11. Litigation ..... 26

**ARTICLE VI.** TITLE TO REAL ESTATE; EASEMENTS ..... 26

Section 6.01. Evidence of Title ..... 26
Section 6.02. Objections to Title ..... 26
Section 6.03. Title Expenses ..... 28
Section 6.04. UCC Search; Releases ..... 28
Section 6.05. Easements. ..... 28

**ARTICLE VII.** OTHER AGREEMENTS ..... 30

Section 7.01. Taxes ..... 30
Section 7.02. Cooperation on Tax Matters ..... 30
Section 7.03. Personnel Matters ..... 30
Section 7.04. Initial and Future Rates ..... 33
Section 7.05. Buyer Taxpayer ..... 33
Section 7.06. PaPUC Approval ..... 33
Section 7.07. Remedies for Breach of Article VII Agreements ..... 34
Section 7.08. Operation and Maintenance of MS4 and Stormwater Systems ..... 34
Section 7.09. Pending Development Plans ..... 34
Section 7.10. Act 537 Plan ..... 35
Section 7.11. Utility Valuation Experts and Engineer Assessment ..... 36
Section 7.12. Compliance and Operational Reports ..... 36
Section 7.13. Implementation and Enforcement of Municipal Code ..... 36
Section 7.14. Covenant Survival ..... 36

**ARTICLE VIII.** INDEMNIFICATION ..... 36

Section 8.01. Survival ..... 36
Section 8.02. Indemnification by the Seller ..... 37
Section 8.03. Indemnification by Buyer ..... 37
Section 8.04. Indemnification Procedure ..... 38
Section 8.05. Limitations on Indemnification Obligations ..... 40
Section 8.06. Knowledge of Breach ..... 41

**ARTICLE IX.** PRE-CLOSING COVENANTS OF THE SELLER ..... 41

Section 9.01. Operation of the System ..... 41
Section 9.02. Cooperation ..... 42

Section 9.03. Supplements and Updates ..... 42
Section 9.04. Governmental Approvals ..... 42

**ARTICLE X.** PRE-CLOSING COVENANTS OF BUYER ..... 43

Section 10.01. Actions Before the Closing Date ..... 43
Section 10.02. Governmental Approvals ..... 43
Section 10.03. Cooperation ..... 43
Section 10.04. Supplements and Updates ..... 43

**ARTICLE XI.** CONDITIONS PRECEDENT TO OBLIGATIONS OF THE SELLER ..... 44

Section 11.01. Consents and Approvals ..... 44
Section 11.02. Representations and Warranties of Buyer ..... 44
Section 11.03. PaPUC Approval ..... 44
Section 11.04. No Injunctions ..... 44
Section 11.05. Performance of the Obligations of Buyer ..... 44
Section 11.06. Deliveries by Buyer ..... 45
Section 11.07. No Material Adverse Effect ..... 45

**ARTICLE XII.** CONDITIONS PRECEDENT TO OBLIGATIONS OF BUYER ..... 45

Section 12.01. Consents and Approvals ..... 45
Section 12.02. Representations and Warranties of Seller ..... 45
Section 12.03. PaPUC Approval ..... 45
Section 12.04. No Injunctions ..... 46
Section 12.05. No Material Adverse Effect ..... 46
Section 12.06. Consent Order. ..... 46
Section 12.07. Deliveries by Seller ..... 46
Section 12.08. Performance of the Obligations of Seller ..... 46

**ARTICLE XIII.** CLOSING ..... 46

Section 13.01. Closing Date ..... 46
Section 13.02. Deliveries by the Seller ..... 47
Section 13.03. Deliveries by Buyer ..... 48

**ARTICLE XIV.** TERMINATION ..... 48

Section 14.01. Events of Termination ..... 48
Section 14.02. Effect of Termination ..... 49

**ARTICLE XV.** MISCELLANEOUS ..... 49

Section 15.01. Confidentiality ..... 49
Section 15.02. Public Announcements ..... 50
Section 15.03. Notices ..... 50
Section 15.04. Headings ..... 51

Section 15.05. Severability ..... 51
Section 15.06. Entire Agreement ..... 51
Section 15.07. Amendments; Waivers ..... 51
Section 15.08. Parties in Interest; Third Party Beneficiary ..... 52
Section 15.09. Successors and Assigns ..... 52
Section 15.10. Governing Law; Jurisdiction ..... 52
Section 15.11. Specific Performance ..... 52
Section 15.12. Counterparts; Electronic Mail; Facsimile Execution ..... 53

Exhibits

Exhibit A Bill of Sale
Exhibit B Assignment and Assumption Agreement
Exhibit C Escrow Agreement
Exhibit D Form of Special Counsel Opinion

Schedules

Schedule 2.01(b) Acquired Assets
Schedule 2.02(e) Pre-Closing EDU Payments
Schedule 2.02(h) Excluded Assets
Schedule 3.03 Allocation Schedule
Schedule 4.05 Consents and Approvals
Schedule 4.06 Seller Liabilities
Schedule 4.07 Events Having a Material Adverse Effect
Schedule 4.08 Unpaid Taxes and Tax Claims
Schedule 4.09 Real Property and Easements; Liens
Schedule 4.10 Equipment and Machinery; Associated Liens
Schedule 4.11(a) Plans and Benefit Obligations
Schedule 4.11(b) Multiemployer Plans
Schedule 4.11(c) Benefit Obligations of Terminated and Retired Personnel
Schedule 4.11(e) Severance Agreements
Schedule 4.12(a) Collective Bargaining Agreements
Schedule 4.12(b) Personnel Disputes
Schedule 4.12(c) Labor Disruptions
Schedule 4.12(d) Personnel Payments
Schedule 4.13 Environmental Compliance
Schedule 4.14 Authorizations and Permits
Schedule 4.15 Assigned Contracts
Schedule 4.16 Litigation Involving Seller
Schedule 4.18(a) Title to Acquired Assets
Schedule 4.18(b) Sufficiency

Schedule 4.19 Pending Development Plans
Schedule 5.04 Consents and Approvals
Schedule 5.11 Litigation Involving Buyer
Schedule 6.05(e) Missing Easements
Schedule 7.03(a) Personnel
Schedule 7.04 Rates

## ASSET PURCHASE AGREEMENT

THIS ASSET PURCHASE AGREEMENT (this "Agreement"), dated as of October 20, 2021 (the "Effective Date"), is made and entered into by and between the City of Beaver Falls, Beaver County, a municipality and a city of the Third Class of the Commonwealth of Pennsylvania duly organized and existing under the Constitution and laws of said Commonwealth, (the "Seller"), and Aqua Pennsylvania Wastewater, Inc., (the "Buyer"), a Pennsylvania corporation.

### WITNESSETH:

**WHEREAS**, the Seller owns that certain sanitary wastewater collection and treatment system (the "System") that provides sanitary wastewater service to various individual and wholesale customers in the City of Beaver Falls, Pennsylvania and portions of Patterson Township, North Sewickley Township, West Mayfield Borough, White Township, Big Beaver Borough, Patterson Heights Borough, and Eastvale Borough, each in Beaver County, Pennsylvania (the "Service Area"); and

**WHEREAS**, Buyer is a regulated public utility that furnishes water and wastewater service to the public in various counties throughout Pennsylvania; and

**WHEREAS**, Buyer, in reliance upon the representations, warranties and covenants of the Seller herein, desires to purchase and acquire from the Seller, and the Seller, in reliance upon the representations, warranties and covenants of Buyer herein, desires to sell, transfer and convey to Buyer all of the assets of the System (other than the Excluded Assets), and in connection therewith, Buyer has agreed to assume certain ongoing obligations and liabilities of the Seller related to such acquired assets, all on the terms and conditions set forth in this Agreement.

**NOW, THEREFORE,** in consideration of the foregoing and of the mutual representations, warranties, covenants, and agreements contained in this Agreement, the receipt and sufficiency of which are acknowledged, intending to be legally bound, the Parties agree as follows:

### ARTICLE I.

### DEFINITIONS

In addition to the capitalized terms defined elsewhere in this Agreement, the following terms, as used in this Agreement (unless otherwise specified herein), have the meanings set forth in this Article I:

"**Acquired Assets**" has the meaning specified in Section 2.01.

"**Act 537**" has the meaning specified in Section 7.10.

"**Act 537 Plan**" has the meaning specified in Section 7.10.

"**Affiliate**" means, when used to indicate a relationship with a specified Person, a Person that, directly or indirectly, through one or more intermediaries has a 10% or more voting or economic interest in such specified Person or controls, is controlled by or is under common control with (which include, with respect to a managed fund or trust, the right to direct or cause the direction of the management and policies of such managed fund or trust as manager, advisor, supervisor, sponsor or trustee pursuant to relevant contractual arrangements) such specified Person, and a Person is deemed to be controlled by another Person if controlled in any manner whatsoever that results in control in fact by that other Person (or that other Person and any Person or Persons with whom that other Person is acting jointly or in concert), whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise (and for purposes of this definition, a managed fund or trust is deemed to be an Affiliate of the Person managing, supervising, sponsoring or advising such fund or trust and a limited partner in a managed fund or trust is deemed to be an Affiliate of such fund or trust and of the Person managing, supervising, sponsoring or advising such fund or trust).

"**Agreement**" has the meaning specified in the preamble to this Agreement (and includes all Schedules and Exhibits referred to herein), as amended, modified and supplemented from time to time in accordance with the terms hereof.

"**Allocation Schedule**" has the meaning specified in Section 3.03.

"**Assigned Contracts**" has the meaning specified in Section 4.15.

"**Assignment and Assumption Agreement**" has the meaning specified in Section 13.02(c).

"**Assumed Liabilities**" has the meaning specified in Section 2.04(a).

"**Authorizations and Permits**" mean all licenses, permits, franchises, authorizations, certificates, registrations, consents, orders, adjudications, variances, waivers and approvals currently in effect issued or granted by Governmental Authorities, including without limitation, environmental permits, operating permits and approvals that are held by the Seller that primarily relate directly or indirectly to the operation of the System, including those set forth on Schedule 4.14.

"**Business Day**" means any day that is neither a Saturday, a Sunday nor a day observed as a holiday by either the Commonwealth of Pennsylvania or the United States government.

"**Buyer**" has the meaning specified in the preamble of this Agreement.

"**Buyer Fundamental Representations**" has the meaning specified in Section 8.01.

"**Buyer Indemnified Persons**" has the meaning specified in Section 8.02.

"**CERCLA**" means the Comprehensive Environmental Response Compensation and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended.

"**Closing**" means the consummation of the sale and purchase of the Acquired Assets and assumption of the Assumed Liabilities, the release/waiver of liabilities and the other transactions contemplated by this Agreement, all in accordance with the terms and conditions of this Agreement and as provided for in Article XIII.

"**Closing Date**" has the meaning specified in Section 13.01.

"**Closing Effective Time**" has the meaning specified in Section 13.01.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Collective Bargaining Agreement**" means the existing collective bargaining agreements between the Seller and the Unions expiring December 31, 2021 and excludes any amendments or new collective bargaining agreements between the Seller and the Unions.

"**Confidential Information**" means any non-public information about Buyer, Seller or the System related to the transactions contemplated by this Agreement; except that such term does not include information which the receiving Party can demonstrate (a) is generally available to or known by the public other than as a result of improper disclosure by the receiving Party, (b) is obtained by the receiving Party from a source other than the disclosing Party, and that such source was not bound by a duty of confidentiality to the disclosing Party with respect to such information, or (c) is legally in the public domain.

"**Easements**" means all easements, rights of way, licenses, use agreements, occupancy agreements, leases and other agreements and appurtenances for and over the real property of third parties.

"**EDU**" means equivalent dwelling unit.

"**Effective Date**" has the meaning specified in the preamble.

"**Environment**" means soil, surface waters, ground waters, land, stream sediments, flora, fauna, surface or subsurface strata and ambient air.

"**Environmental Claims**" means all notices of investigations, warnings, notice letters, notices of violations, Liens, orders, claims, demands, suits or administrative or judicial actions for any injunctive relief, fines, penalties, third party claims, or other claims asserting violations of Environmental Requirements or responsibility for Environmental Liabilities.

"**Environmental Conditions**" means the Release of Hazardous Materials or the presence of Hazardous Materials on, in, under or within any property (including the presence in the Environment), other than the presence of Hazardous Materials in locations and at concentrations that are naturally occurring.

"**Environmental Liabilities**" means any legal obligation or liability arising under Environmental Requirements or related to or arising out of any Environmental Condition, including those consisting of or relating to any (a) duty imposed by, breach of or noncompliance with any Environmental Requirements; (b) environmental, health or safety matters or conditions

(including on-site or off-site contamination, occupational safety and health and regulation of Hazardous Materials); (c) Remedial Action undertaken by any Person; (d) bodily injury (including illness, disability and death, and regardless of when any such bodily injury occurred, was incurred or manifested itself), property damage (including trespass, nuisance, wrongful eviction and deprivation of the use of real or personal property), or other losses or damages incurred by any other Person (including any employee or former employee of such Person); (e) any injury to, destruction of, or loss of natural resources, or costs of any natural resource damage assessments; (f) exposure of any Person to any Hazardous Materials; and (g) the presence or Release of any Hazardous Materials.

"**Environmental Requirements**" mean all present Laws (including common law), regulations, legally binding or otherwise enforceable requirements and Authorizations and Permits relating to human health, pollution, or protection of the Environment (including ambient air, surface water, ground water, land surface or surface strata), including (i) those relating to emissions, discharges, Releases, or threatened Releases of Hazardous Materials, and (ii) those relating to the identification, generation, manufacture, processing, distribution, use, treatment, storage, disposal, release, recovery, transport or other handling of Hazardous Materials. Without limiting the foregoing, the term "**Environmental Requirements**" includes (1) CERCLA; the Superfund Amendments and Reauthorization Act, Public Law 99-499, 100 Stat. 1613; the Emergency Planning and Community Right to Know Act, 42 U.S.C. Sections 11001-11050; the Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901-6992k ("RCRA"); the Safe Drinking Water Act, 42 U.S.C. Sections 300f to 300j-26; the Toxic Substances Control Act, 15 U.S.C. Sections 2601-2692; the Hazardous Materials Transportation Act, 49 U.S.C. Sections 5101-5127; the Federal Water Pollution Control Act, 33 U.S.C. Sections 1251-1387; the Oil Pollution Act of 1990, 33 U.S.C. Sections 2701--2761; the Clean Air Act, 42 U.S.C. Sections 7401-7671q; the Atomic Energy Act of 1954, as amended, 42 U.S.C. Sections 2011 et seq.; the Low Level Radioactive Waste Policy Act, as amended, 42 U.S.C. Section 2021b et seq.; the Occupational Safety and Health Act, 29 U.S.C. Sections 651-678, and the regulations promulgated pursuant to the above-listed federal statutes, and (2) counterpart Laws and regulations promulgated or issued by any state or local Governmental Authority, specifically including the Pennsylvania Storage Tank and Spill Prevention Act of 1989 (35 Pa. C.S.A. § 6021.101 *et. seq.*).

"**EPA**" means the United States Environmental Protection Agency, or a successor Governmental Authority with substantially similar power and authority thereto.

"**Equipment and Machinery**" means (i) all the equipment, tangible personal property, machinery, office furniture and equipment, fixtures, tooling, spare maintenance or replacement parts, environmental testing equipment, and vehicles owned or leased by the Seller (including all leases of such property), which are primarily used in the operation of the System, (ii) any rights of the Seller to warranties applicable to the foregoing (to the extent assignable), and licenses received from manufacturers and Seller of any such item, and (iii) any related claims, credits, and rights of recovery with respect thereto. Notwithstanding the foregoing, "Equipment and Machinery" shall not include any Excluded Assets.

"**Excluded Assets**" has the meaning specified in Section 2.02.

"**Excluded Liability**" or "**Excluded Liabilities**" means all liabilities other than Assumed Liabilities.

"**Files and Records**" means all files and records of the Seller primarily relating to the System and the Acquired Assets, whether in hard copy, digital, magnetic or other format including customer and supplier records, customer lists (both current and prospective), personnel and human resources records, records of sales calls, manuals, books, files, records, engineering data, procedures, systems, instructions, drawings, blueprints, plans, designs, specifications, equipment lists, parts lists, equipment maintenance records, equipment warranty information, plant plans, specifications, geographical information systems data, and drawings, sales and advertising material, computer software, and records relating to the System, and whether stored on-site or off-site.

"**Final Order**" means a Governmental Approval by a Governmental Authority as to which (a) no request for stay of the action is pending, no such stay is in effect and if any time period is permitted by statute or regulation for filing any request for such stay, such time period has passed, (b) no petition for rehearing, re-argument, reconsideration, clarification, rescission, amendment, or supersedeas of the action is pending and the time for filing any such petition has passed, (c) such Governmental Authority does not have action under consideration on its own motion and (d) no appeal to a court or administrative tribunal or a request for stay by a court or administrative tribunal of the Government Authority's action is pending or in effect and the deadline for filing any such appeal or request for stay has passed.

"**Governmental Approval**" means any consent, approval, authorization, notice, filing, registration, submission, reporting, order, adjudication or similar item of, to or with any Governmental Authority.

"**Governmental Authority**" or "**Governmental Authorities**" means any court, department, commission, board, bureau, municipality, municipal authority (established pursuant to the Pennsylvania Municipal Authorities Act of the Commonwealth of Pennsylvania), agency or instrumentality of the United States, any state, county, city or political subdivision thereof, or any foreign governmental body, including without limitation, the PaPUC, the EPA, PaDEP, and the Municipal Council.

"**Hazardous Materials**" means any solid, liquid, gas, odor, heat, sound, vibration, radiation or other substance or emission which is a contaminant, pollutant, dangerous substance, toxic substance, hazardous waste, residual waste, solid waste, hazardous material or hazardous substance which is or becomes regulated by applicable Environmental Requirements or which is classified as hazardous or toxic under applicable Environmental Requirements (including gasoline, diesel fuel or other petroleum hydrocarbons, polychlorinated biphenyls, asbestos and urea formaldehyde foam insulation).

"**Indemnified Party**" means any Buyer Indemnified Persons or Seller Indemnified Persons, as applicable, entitled to indemnification pursuant to Article VIII.

"**Indemnifying Party**" means a Party which is obligated to indemnify the Buyer Indemnified Persons or the Seller Indemnified Persons, as applicable, pursuant to Article VIII.

"**Knowledge**" when used to qualify or limit a Party's representations or warranties means the knowledge of such Party's Representatives who are engaged in a material way in performing the functions of such Party with respect to which the representations or warranties are made, after conducting reasonable investigation and inquiry with respect to the subject matter of the representation.

"**Law**" means any applicable law, statute, regulation, ordinance, rule, order, judicial, administrative and regulatory decree, judgment, adjudication, consent decree, settlement agreement or governmental requirement enacted, promulgated, entered into, agreed or imposed by any Governmental Authority, as may be in effect at the relevant time or times in the context in which the term is used.

"**Liability Cap**" has the meaning specified in Section 8.05(c).

"**Lien**" means any lien in a fixed and ascertainable monetary sum, or any pledge, mortgage, deed of trust or security interest securing a fixed and ascertainable monetary sum, or any charge or claim in a fixed and ascertainable monetary sum. In addition, in connection with Real Property, any item otherwise falling within the definition of a "Lien" must be either (i) filed of record; or (ii) an item of which Seller has knowledge.

"**Loss**" means any and all losses, liabilities, obligations, damages, penalties, interest, Taxes, claims, actions, demands, causes of action, judgments, reasonable attorneys', consultants' and other professional fees, and all other reasonable costs and expenses sustained or incurred in investigating, preparing or defending or otherwise incident to any such claim, action, demand, cause of action or judgment or the enforcement of a Party's rights under Article VIII; except that "**Losses**" do not include punitive, incidental, consequential, special or indirect damages, including loss of future revenue or income, loss of business reputation or opportunity relating to the breach or alleged breach of this Agreement, or diminution of value or any damages based on any type of multiple, except in the case of fraud or to the extent actually awarded to a Governmental Authority or other third party in respect of a Third Party Claim.

"**Material Adverse Effect,**" means a material adverse effect on the business, financial condition or results of operations of the System; except that no effect arising out of or in connection with or resulting from any of the following will be deemed, either alone or in combination, to constitute or contribute to a Material Adverse Effect: (i) general economic conditions or changes therein; (ii) financial, banking, currency or capital markets fluctuations or conditions (either in the United States or any international market and including changes in interest rates); (iii) conditions affecting the real estate, financial services, construction, water utility or sewer utility industries generally; (iv) any existing event, circumstance, condition or occurrence of which the Buyer has actual knowledge as of the Effective Date; (v) any action, omission, change, effect, circumstance or condition contemplated by this Agreement or attributable to the execution, performance or announcement of this Agreement or the transactions contemplated by this Agreement; and (vi) negligence, intentional misconduct or bad faith of the Buyer or its Representatives.

"**Missing Easements**" means, as of any particular date, each Easement that is for or used in connection with the operation of the System or to provide continuous and unimpeded rights of

way for the Acquired Assets (including access thereto) that either (a) has not been obtained by the Seller and is for or used in connection with the operation of the System or (b) if such Easement has been obtained by the Seller, such Easement is unrecorded or such Easement is not sufficient to operate the System as currently conducted.

"**Municipal Council**" has the meaning set forth in the recitals to this Agreement.

"**Non-Union Personnel**" means Personnel who are not members of the Unions.

"**Outside Date**" means the date that is 365 days after the date the application to the PaPUC is accepted as complete by the PaPUC.

"**PaDEP**" means the Pennsylvania Department of Environmental Protection, or any successor Governmental Authority with substantially similar powers thereto.

"**PaPUC**" means the Pennsylvania Public Utility Commission, or any successor Governmental Authority with substantially similar powers thereto.

"**Party**" means Buyer or the Seller and the term "Parties" means collectively Buyer and the Seller.

"**PCB Equipment**" means PCB equipment as defined in 40 C.F.R. Part 761.

"**Pending Development Plan**" means any project for the development of real property which is the subject of a subdivision or land development plan that has been submitted to the Seller for approval, or for which the Seller already has granted approval but which has yet to be constructed, pursuant to the Pennsylvania Municipal Planning Code as of the Effective Date (and as updated before the Closing Date), as provided in Schedule 4.19.

"**Permitted Liens**" means (a) Liens for Taxes not yet due and payable or being contested in good faith by appropriate procedures; (b) easements, rights of way, zoning ordinances and other similar encumbrances affecting Real Property and Easements as set forth on Schedule 4.09; (c) other than with respect to Real Property and Easements owned by Seller, Liens arising under original purchase price conditional sales contracts and equipment leases with third parties entered into in the ordinary course of business; (d) other imperfections of title or Liens, if any, that have not had, and would not have, caused a Material Adverse Effect; and (e) any encumbrances, Liens, or other exceptions to title insurance coverage set forth in the Title Commitment not identified, but permitted to be identified, in the Objection Notice in accordance with the procedures and deadlines prescribed in Sections 6.02(a) and 6.05(b).

"**Person**" means any individual (including, the heirs, beneficiaries, executors, legal representatives or administrators thereof), corporation, partnership, joint venture, trust, limited liability company, limited partnership, joint stock company, unincorporated association or other entity or a Governmental Authority.

"**Personnel**" means the employees of the Seller who are primarily employed in connection with the System or are necessary to operate the System and includes Union Personnel and Non-Union Personnel.

"**Purchase Price**" has the meaning specified in Section 3.01.

"**Real Property**" has the meaning specified in Section 4.09.

"**Regulated Asbestos Containing Material**" means regulated asbestos containing material as defined by 40 C.F.R. § 61.141.

"**Release**" means any actual or threatened spilling, leaking, pumping, pouring, injecting, emptying, discharging, emitting, escaping, leaching, dumping, disposal, or release or migration of Hazardous Materials into the Environment, including the abandonment or discarding of barrels, containers and other receptacles containing any Hazardous Materials.

"**Remedial Action**" means any and all actions to (a) investigate, clean up, remediate, remove, treat, contain or in any other way address any Hazardous Materials in the Environment, (b) prevent the Release or threat of Release or minimize the further Release of any Hazardous Materials so it does not migrate or endanger public health or welfare or the indoor or outdoor Environment, and (c) perform pre-remedial studies and investigations and post-remedial monitoring, maintenance and care. The term "**Remedial Action**" includes any action which constitutes (i) a "removal", "remedial action" or "response" as defined by Section 101 of CERCLA, 42 U.S.C. §§ 9601(23), (24), and (25); (ii) a "corrective action" as defined in RCRA, 42 U.S.C. § 6901 et seq.; or (iii) a "response" or "interim response" as defined in the Pennsylvania Hazardous Sites Cleanup Act, 35 P.S. §6020.103.

"**Representative**" means, with respect to any Party, any director (including, in the case of the Seller, any member of the Municipal Council), officer, employee, official, lender mortgagee, financier, provider of any financial instrument (or any agent or trustee acting on their behalf), partner, member, owner, agent, lawyer, accountant, auditor, professional advisor, consultant, engineer, contractor, other Person for whom such Person is at law responsible or other representative of such Person and any professional advisor, consultant or engineer designated by such Person as its "Representative."

"**Schedules**" means the disclosure schedules delivered by Seller and Buyer, respectively, concurrently with the execution and delivery of this Agreement, and as may be supplemented and updated pursuant to Sections 9.03 and 10.04. Any disclosure set forth on any particular Schedule are deemed disclosure in reference to all Schedules comprising the Schedules to which such disclosure is reasonably apparent.

"**Seller**" has the meaning specified in the preamble of this Agreement.

"**Seller Fundamental Representations**" has the meaning specified in Section 8.01.

"**Seller Indemnified Persons**" has the meaning specified in Section 8.03.

"**Seller's Benefit Obligations**" means all material obligations, arrangements, or practices, whether or not legally enforceable, to provide benefits, other than salary or wages to present or former directors, employees or agents, (other than obligations, arrangements and practices that are Seller's Plans), that are owed, adopted or followed by the Seller. Seller's Benefit Obligations also include consulting agreements under which the compensation paid does

not depend upon the amount of service rendered, sabbatical policies, severance payment policies and fringe benefits within the meaning of Code §132.

"**Seller's Plans**" means each voluntary employees' beneficiary association under Section 501(c)(9) of the Code whose members include any Personnel and any employee benefit plans or any other retirement, pension, profit sharing, stock option, stock bonus, deferred compensation (including any "nonqualified deferred compensation plan" within the meaning of Section 409A of the Code), severance, sick leave or other material plan or arrangement providing benefits to current or former Personnel, in each case, if either currently in effect or terminated within the last six (6) years, to which the Seller is a plan sponsor or to which the Seller otherwise contributes or has contributed within the last six (6) years, or in which the Seller otherwise participates or has participated within the last six (6) years.

"**Seller DEP Permits**" means the National Pollutant Discharge Elimination System Permit No. PA0026883 and Water Quality Management Permit No. 0472402 (Part 2), each issued by PaDEP to Seller with respect to the System, including any revisions or amendments thereto.

"**Service Area**" has the meaning specified in the recitals to this Agreement.

"**Supplies**" means all lubricants, spare parts, fuel, chemicals, raw materials, and other supplies and inventory as related to the Acquired Assets, and all rights to warranties received from suppliers with respect to the foregoing, and related claims, credits, and rights of recovery with respect thereto.

"**System**" has the meaning specified in the recitals to this Agreement and includes the Acquired Assets and excludes the Excluded Assets.

"**System Improvements**" has the meaning specified in Section 7.10(a).

"**Taxes**" means any federal, state, local or foreign income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, customs duties, permit fees, capital stock, franchise, profits, withholding, social security, unemployment, disability, real property, personal property, parking, sales, use, transfer, registration, value added, alternative or add-on minimum, estimated or other tax, levy, impost, stamp tax, duty, fee, withholding or similar imposition of any kind payable, levied, collected, withheld or assessed at any time, including any interest, penalty or addition thereto, whether disputed or not.

"**Threshold Amount**" has the meaning specified in Section 8.05(a).

"**Title Commitment**" has the meaning specified in Section 6.01.

"**Title Company**" has the meaning specified in Section 6.01.

"**Title Policy**" has the meaning specified in Section 2.03.

"**Transferred Personnel**" has the meaning specified in Section 7.03(a).

"**UCC Search**" has the meaning specified in Section 6.04.

"**Unions**" means, together, United Steelworkers 9305, Districts 8 and 10.

"**Union Personnel**" means Personnel who are members of the Unions.

"**Unscheduled Real Property**" has the meaning specified in Section 6.06.

"**Utility Valuation Expert**" means an expert that has applied and has been approved by the PaPUC and is currently, at the time of this Agreement, on the list of approved appraisers maintained by the PaPUC.

## ARTICLE II.

## TERMS OF PURCHASE AND ASSUMPTION OF LIABILITIES

Section 2.01. **Purchase and Sale of Acquired Assets**

Subject to the terms and conditions set forth in this Agreement, at Closing, Buyer shall purchase from the Seller and the Seller shall sell, transfer, assign and deliver to Buyer, free and clear of all Liens except for Permitted Liens, all of Seller's right, title and interest in and to all assets, facilities, business, goodwill, properties and rights of the Seller of every kind and description, whether tangible or intangible, real, personal or mixed, wherever situated, in each case used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of the operation or conduct of the System (whether or not any such assets have any value for accounting purposes or are carried or reflected on the books or financial records of the Seller), including any of the foregoing in which Seller is entitled to acquire such rights, but in all cases other than the Excluded Assets (the foregoing collectively referred to as the "Acquired Assets"), including:

(a) all real property and appurtenant interests necessary for the operation of the System, including without limitation (i) good and marketable fee simple title to the Real Property set forth on Schedule 4.09 hereof, and (ii) all Easements currently used or necessary to operate the System, including without limitation those set forth on Schedule 4.09;

(b) all sanitary wastewater related treatment and conveyance facilities, including but not limited to the Seller's (i) assets set forth on Schedule 2.01(b), (ii) sewage treatment plant located in the Service Area, and (iii) all collection system mains (whether gravity or force mains), laterals (from the collection system main to the edge-of-road or curb-line when the main is located within a public right-of-way or the edge of an easement where the main is located within private property), generators, manholes, pump stations, and other related appurtenances and any billing and collections related assets necessary to own and operate the System;

(c) all contracts, licenses and leases set forth on Schedule 4.15 to which the Seller is a party, including without limitation, all construction contracts, surety bonds, operation and maintenance agreements, management agreements, reserved capacity agreements, architect agreements and consultant agreements, and agreements relating to vehicles and other items of personal property (the "Assigned Contracts");

(d) all Supplies;

(e) all personal property and fixed assets, including all Equipment and Machinery, auxiliary equipment and plant equipment;

(f) all prepaid expenses and security deposits;

(g) all Files and Records;

(h) all Authorizations and Permits of or held by the Seller (to the extent transferrable to Buyer under applicable Law), including all Authorizations and Permits which are environmental permits, the Seller DEP Permits, other operating permits and those items set forth on Schedule 4.14 hereto; and

(i) all goodwill of the System.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY REGARDING THE FUTURE PROFITABILITY OR FUTURE EARNINGS PERFORMANCE OF THE ACQUIRED ASSETS OR THE SYSTEM OR ANY FUTURE RATEMAKING THAT MAY BE ALLOWED BY THE PAPUC FOR ANY OF THE ACQUIRED ASSETS. NOTWITHSTANDING THE FOREGOING, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE VALID UNTIL THE TIME OF CLOSING.

Section 2.02. **Excluded Assets**

Notwithstanding anything in the Agreement to the contrary, the Acquired Assets do not include the following (the "Excluded Assets"):

(a) all contracts, licenses and leases that are not Assigned Contracts;

(b) the seals, organizational documents, minute books, Tax returns, books of account or other records having to do with the organization of Seller and all employee-related or employee benefit-related files or records;

(c) cash (including any cash resulting from the payment to the Seller for EDUs received on or before the Closing Date as listed in Schedule 2.02(e)) and cash equivalents, including accounts receivable on or before the Closing Date and existing financial security guaranteeing installation of public improvements (including wastewater facilities);

(d) all insurance policies of Seller and all rights to applicable claims and proceeds thereunder;

(e) all Seller's Plans and trusts or other assets attributable thereto;

(f) other than to the extent relating to any Assumed Liability, all rights to any action, suit or claim of any nature available to or being pursued by Seller, whether arising by way of counterclaim or otherwise;

(g) all assets, properties and rights used by Seller other than those which primarily relate to the operations of the System;

(h) the assets, properties and rights specifically set forth on Schedule 2.02(h);

(i) the rights which accrue or will accrue to Seller under this Agreement and any related agreement, exhibit or schedule;

(j) all municipal separate storm sewer system assets and stormwater assets of the Seller (and any related NPDES permits); and

(k) any and all connecting facilities originating from Seller's terminus point of the collection facilities at the main or edge of road to and throughout the customer's property, including grinder pumps, if any.

Section 2.03. **Sale Free of Liens**

After Buyer fulfills its obligations pursuant to Section 3.01(b), on the Closing Date, the Acquired Assets will be free and clear of all Liens other than Permitted Liens. The Seller shall convey such Acquired Assets by appropriate special warranty or other deed (subject to Section 6.02(c)), bills of sale, endorsements, assignments and other instruments of transfer or conveyance described in the Agreement, or by transfer documents satisfactory in form and substance reasonably acceptable to Buyer and Seller and their counsel in their reasonable discretion. Buyer shall use commercially reasonable efforts to cause the Title Company at or prior to Closing to insure the Real Property, at the Title Company's filed rates, as a good and marketable title, free and clear of all Liens and exceptions to title insurance coverage, except for the Permitted Liens, pursuant to an owner's policy of title insurance on the American Land Title Association's ("ALTA") Owner's Form 2006, subject to the terms of Section 6.02 below (the "Title Policy").

Section 2.04. **Assumption of Liabilities**

(a) On the terms and subject to the conditions set forth in this Agreement and excluding the Excluded Liabilities, Buyer shall assume and agrees to pay, perform and discharge when due any and all liabilities and obligations of the Seller to the extent (1) arising under the Seller DEP Permits (arising from, related to, or based on events or circumstances occurring on or after the Closing Date), (2) arising under the Collective Bargaining Agreement or an amended and restated collective bargaining agreement (to the extent arising from, related to or based on events or circumstances occurring on or after the Closing Date and subject to the exclusions provided for in Section 7.03(h) of this Agreement), and (3) arising out of or relating to the System or the Acquired Assets on or after the Closing, including, without limitation, the following:

(i) all liabilities and obligations under the Assigned Contracts, including any liabilities arising under any Corrective Action Plan, and Authorizations and Permits, in

each case to the extent resulting from events that occur or conditions that arise on or after the Closing;

(ii) any litigation initiated against Seller related to the System or the Acquired Assets to the extent resulting from events that occur, or conditions that arise, on or after the Closing;

(iii) all liabilities and obligations for Taxes relating to the System, its operation, the Acquired Assets and the Assumed Liabilities attributable to the period beginning on the Closing Date; and

(iv) all other liabilities and obligations to the extent arising out of or relating to Buyer's ownership or operation of the System and the Acquired Assets on or after the Closing (all of the aforementioned liabilities in this Section 2.04(a) are referred to as the "Assumed Liabilities").

(b) Buyer shall not assume or be liable to pay any liabilities or obligations relating to the Excluded Liabilities or any other liabilities or obligations that are not Assumed Liabilities.

Section 2.05. **Further Assurances** At any time and from time to time after the Closing Date, the Seller shall, upon the request of Buyer, and Buyer shall, upon the request of the Seller, at the cost of requesting Party, promptly execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate, (a) the sale, conveyance, transfer, assignment and delivery hereunder of the Acquired Assets to Buyer, (b) the assumption by Buyer of any of the Assumed Liabilities, (c) performance by the Parties of any of their other respective obligations under this Agreement, (d) the vesting in Buyer of all right, title and interest in the Acquired Assets and the System as provided herein, and (e) any other matters reasonably requested by a Party to carry out the provisions, purposes and intent of this Agreement.

Section 2.06. **Certain Transfers; Assignment of Contracts**

(a) Notwithstanding anything to the contrary in this Agreement, and subject to the provisions of this Section 2.06(a) and Section 2.06(b), to the extent that the sale, transfer, assignment, conveyance and delivery, or attempted sale, transfer, assignment, conveyance and delivery, to Buyer of any Assigned Contract or other Acquired Asset would result in a violation of applicable Law, or would require the consent, authorization, approval or waiver of any Person (other than the Parties hereto), including any Governmental Authority, and such consent, authorization, approval or waiver has not been obtained before the Closing, this Agreement shall not constitute a sale, transfer, assignment, conveyance and delivery, or an attempted sale, transfer, assignment, conveyance and delivery, thereof (any such Acquired Asset, a "Nonassignable Asset"). Following the Closing, the Seller and the Buyer shall use commercially reasonable efforts (at the cost and expense of the Party that is responsible for compliance with such Law or obtaining such consent, authorization, approval or waiver), and shall cooperate with each other, to obtain any such required consent, authorization, approval or

waiver, or any release, substitution, novation or amendment required to sell, transfer, assign, convey and deliver any such Nonassignable Asset to Buyer; except that in no event will Buyer be required to pay any consideration therefor. Once such consent, authorization, approval, waiver, release, substitution or amendment is obtained, the Seller shall sell, transfer, assign, convey and deliver to Buyer the relevant Acquired Asset to which such consent, authorization, approval, waiver, release, substitution or amendment relates for no additional consideration. Any applicable sales, transfer and other similar Taxes in connection with such sale, transfer, assignment, conveyance and delivery shall be paid one-half by Buyer and one-half by the Seller.

(b) Until such time as a Nonassignable Asset is transferred to Buyer pursuant to this Article II, Buyer and Seller shall cooperate in any commercially reasonable and economically feasible arrangements (such as subleasing, sublicensing or subcontracting) to provide to the Parties the economic and, to the extent permitted under applicable Law, operational equivalent of the transfer of such Nonassignable Asset to Buyer at the Closing and the performance by Buyer of its obligations with respect thereto, and so long as the Seller transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that constitutes a Nonassignable Asset, as agent or subcontractor for the Seller, pay, perform and discharge the liabilities and obligations of the Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would constitute Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, the Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by the Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which the Seller is a party which is not set forth on Schedule 4.15 as an Assigned Contract as of the Effective Date, and Buyer reasonably determines such contract is necessary to the operation of the System, Buyer shall give notice of such determination to the Seller and the Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 setting forth such contract, and such contract will thereafter constitute and be deemed an Assigned Contract for all purposes hereunder.

(d) If, during the twelve (12) month period following the Closing Date, Buyer identifies any contract to which the Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary to the operation of the System, the Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract will be deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE

Section 3.01. **Purchase Price**

The purchase price for the Acquired Assets is Forty-One Million, Two Hundred and Fifty Thousand Dollars ($41,250,000.00) (the "Purchase Price") which shall be paid as follows:

(a) Deposits

(i) Buyer shall pay One Million Dollars ($1,000,000) to Seller as a deposit on account of the Purchase Price (the "First Deposit") upon the third business day following the execution by Buyer and Seller of this Agreement; and

(ii) Buyer shall pay One Million Dollars ($1,000,000) to Seller as a deposit on account of the Purchase Price (the "Second Deposit" and, together with the First Deposit, the "Deposits") upon the third business day following the Buyer's receipt of notice from the PaPUC that the application to the PaPUC for the transaction contemplated by this Agreement has been conditionally accepted.

(iii) In the event that this Agreement is terminated for any reason, the Deposits shall be refundable to the Buyer within ninety days following the effective date of termination per Section 14.01, provided, however, if the Agreement is terminated by Seller pursuant to Section 14.01(c), then Seller shall be permitted to offset against Seller's obligation to refund the Deposits any damages recoverable by Seller per the terms of this Agreement.

(iv) Subject to subparagraph (iii) above, Seller shall be free to use the Deposits upon receipt as it determines in the Seller's sole discretion.

(v) The obligation to refund the Deposits hereunder shall be a general obligation of Seller and shall not be subject to the Threshold Amount or the Liability Cap set forth in Article VIII hereof.

(b) Subject to any adjustment in Purchase Price resulting from the proration procedures specified in Section 3.01(c) and the Missing Easement Escrow requirements in Section 6.05(e), Buyer shall pay to the Seller at Closing by wire transfer of immediately available funds the balance of the Purchase Price (taking into account the Deposits) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date.

(c) Final Billing: The Buyer is entitled to all customer billings with respect to sanitary wastewater services for the period on or after the Closing Effective Time, and the Seller is entitled to all such billings before the Closing Effective Time. The Parties shall cooperate to calculate an agreed upon proration of billing amounts and to credit the Purchase Price for the appropriate Party on the Closing Date, or through another agreed upon method to ensure billing amounts are provided to the appropriate Party.

Section 3.02. **Fair Consideration**

The Parties acknowledge and agree that the consideration provided for in this Article III represents fair consideration and reasonable equivalent value for the sale and transfer of the Acquired Assets and the transactions, covenants and agreements set forth in this Agreement, which consideration was agreed upon as the result of arm's-length good faith negotiations between the Parties and their respective Representatives.

Section 3.03. **Allocation Schedule**

The Purchase Price (which for purposes of this Section 3.03 shall include any liabilities required to be treated as part of the Purchase Price for federal income tax purposes), as may be adjusted pursuant to this Section 3.03, shall be allocated among the Acquired Assets in accordance with the allocation reflected in a schedule prepared by Buyer and attached hereto as Schedule 3.03.

Section 3.04. **Transfer Taxes**

Any and all deed stamps or transfer Taxes which may be due the Commonwealth of Pennsylvania or any political subdivision in connection with the sale, transfer, assignment, conveyance and delivery hereunder of the Acquired Assets to Buyer (collectively, "Transfer Taxes"), will be paid fifty percent (50%) by Buyer and fifty percent (50%) by Seller. The terms hereof shall survive Closing. For the purpose of calculating Transfer Taxes, Seller and Buyer agree that the amount specified in Schedule 3.03 as provided by the Buyer shall be allocated to real property assets.

## ARTICLE IV.

## REPRESENTATIONS AND WARRANTIES OF THE SELLER

The Seller makes only the specified representations and warranties which are set forth in this Article IV.

As a material inducement to Buyer to enter into this Agreement and to consummate the transactions contemplated by this Agreement, the Seller represents and warrants, as of the Effective Date (except to the extent any of the following representations and warranties specifically apply to or relate to another date, in which event such representations and warranties shall be true and correct as of such other date), as follows:

Section 4.01. **Organization**

The Seller is a municipality and a city of the Third Class of the Commonwealth of Pennsylvania duly organized and existing under the Pennsylvania Third Class City Code.

Section 4.02. **Power and Authority**

The Seller (i) duly adopted the authorizing ordinance or resolutions authorizing the transactions contemplated in this Agreement, which remains in full force and effect, (ii) duly authorized and approved the execution and delivery of this Agreement and (iii) duly authorized and approved

the performance by the Seller of its obligations contained in this Agreement. The Seller has all requisite power and authority to own, lease and operate the Acquired Assets and the System and has the power and authority to enter into this Agreement and to do all acts and things and execute and deliver all other documents as are required hereunder to be done, observed or performed by it in accordance with the terms hereof.

Section 4.03. **Enforceability**

This Agreement has been duly authorized, executed and delivered by the Seller and constitutes a valid and legally binding obligation of the Seller, enforceable against the Seller in accordance with the terms hereof, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and to general principles of equity.

Section 4.04. **No Conflict or Violation**

The execution and delivery of this Agreement by the Seller, the consummation of the transactions contemplated by this Agreement and the performance by the Seller of the terms, conditions and provisions hereof has not and will not contravene or violate or result in a breach of (with or without the giving of notice or lapse of time, or both) or acceleration of any obligations of the Seller under (i) any applicable Law or (ii) any agreement, instrument or document to which the Seller is a party or by which it is bound.

Section 4.05. **Consents and Approvals**

Schedule 4.05 sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration to or filing or registration with any Governmental Authority required in connection with the execution and delivery of this Agreement by the Seller or the performance by the Seller of its obligations hereunder.

Section 4.06. **Undisclosed Liabilities**

Except as set forth on Schedule 4.06, there are no liabilities or obligations of Seller, either accrued, absolute, contingent or otherwise, relating to the Assets other than liabilities incurred in the ordinary course that could not reasonably be expected to have a Material Adverse Effect.

Section 4.07. **Absence of Certain Changes or Events**

Except as set forth on Schedule 4.07, since December 31, 2019, there has not been any transaction or occurrence that has resulted or is reasonably likely to result in a Material Adverse Effect and the Seller, has operated and maintained the System since December 31, 2019 in the ordinary course.

Section 4.08. **Tax Matters**

Except as set forth on Schedule 4.08, that (i) the Seller has timely paid all Taxes that may have been or may be due and payable by the Seller on or before the Closing Date, arising from the ownership or operation of the Acquired Assets or the System on or before the Closing Date; (ii) no Taxing authority has asserted any claim against the Seller for the assessment of any additional

Tax liability or initiated any action or proceeding which could result in such an assertion; and (iii) the Seller has (x) made all withholding of Taxes required to be made under all applicable Laws and regulations, including without limitation, withholding with respect to compensation paid to employees, and the amounts withheld have been properly paid over to the appropriate Taxing authorities and (y) did not defer the withholding, deposit, and payment of any employee payroll taxes related to Personnel in 2020 pursuant to IRS Notice 2020-65, 2020-38 I.R.B. 567, or the Presidential Memorandum to the Secretary of the Treasury dated August 8, 2020; and (iv) Seller has at all times been exempt from U.S. federal income Tax and from income Taxes imposed by the Commonwealth of Pennsylvania (and its political subdivisions) and by other states (and their respective political subdivisions) and income and revenue produced by or with respect to the System and the Acquired Assets has at all times been excluded from gross income by virtue of the provisions of Section 115(1) of the Code.. This section does not apply to any Tax matter related to an employee benefit plan or compensation arrangement that is addressed separately in Section 4.11.

Section 4.09. **Real Property and Easements**

Schedule 4.09 sets forth all of Seller's fee interests in and to real property ("Real Property") Seller owns and uses in the operation of the System and separately sets forth the Easements. The Seller does not lease (as lessee) any real property that is used in the operation of the System. There are no pending condemnation proceedings relating to any of the Real Property or Easements nor has Seller actually received any written threats of any condemnation proceedings and, to the Knowledge of Seller, no such proceedings are threatened. The Seller has not received any written notices of any violations of any Law from any Governmental Authority with respect to the Real Property or the Easements which has not been cured in all material respects and, to Seller's Knowledge, no such violations of Law exist. With respect to the Real Property (i) there are no leases, options, rights of reversions or other rights of use or rights to acquire the Real Property held by third parties, (ii) Seller is in sole possession of the Real Property, and (iii) to Seller's Knowledge there are no encroachments either way across the boundary of the Real Property, nor any dispute with adjacent property owners over the location of boundaries or potential claims adverse to title.

Section 4.10. **Equipment and Machinery**

Schedule 4.10 sets forth all Equipment and Machinery included in the Acquired Assets. Except as set forth on Schedule 4.10, the Seller has good title, free and clear of all Liens (other than the Permitted Liens and Liens which are released on or before Closing) to the Equipment and Machinery owned by Seller.

Section 4.11. **Employee Benefit Plans**

(a) Schedule 4.11(a) contains a true and complete list of all Seller's Plans and Seller's Benefit Obligations, including amounts owed to current or past employees for severance, unpaid and unused vacation pay or sick leave, or similar obligations. All such Seller's Plans and Seller's Benefit Obligations are in full force and effect and are in material compliance both as to form and operation, with applicable provisions of Employee Retirement Income Security Act of 1974, as amended or the Code, and any other applicable Laws, and with any applicable collective

bargaining agreement. To Seller's Knowledge, no event has occurred which has resulted in the imposition of any liability on the Seller under the Code or other applicable Law with respect to any Seller's Plans or Seller's Benefit Obligations and there is no unfunded pension liability owed or owing to any Person pursuant to Seller's Plans that is required to be assumed by Buyer;

(b) Except as set forth on Schedule 4.11(b), the Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any "multiemployer plan" within the meaning of Section 414(f) of the Code, and has no liability of any nature, whether known or unknown, fixed or contingent, with respect to any such multiemployer plan;

(c) Except as set forth on Schedule 4.11(c), Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any medical, health, life or other welfare plan or benefits for present or future terminated or retired Personnel or their spouses or dependents, other than as required by COBRA, or any comparable state law, and has no liability of any nature, whether known or unknown, fixed or contingent, with respect to any such post-termination welfare benefits;

(d) The Seller is and has been in compliance in all material respects with the requirements of COBRA and is not subject to any excise Tax under Code Section 4980B for the current or any prior taxable year; and

(e) Except as set forth on Schedule 4.11(e), the Seller has not entered into any severance or similar arrangement with respect to any present or former Personnel that will result in any obligation (absolute or contingent) of Buyer to make any payment to any present or former Personnel following termination of employment, including the termination of employment effected by the transactions contemplated by this Agreement. The consummation of the transactions contemplated by this Agreement will not trigger any severance or other obligation of the Seller for which Buyer shall have any liability.

Section 4.12. **Seller's Personnel**

(a) Schedule 4.12(a) sets forth all collective bargaining agreements and contractual relationships with Personnel relating to the System to which the Seller is a party, including the identification of the parties thereto and the expiration dates. Other than the collective bargaining agreements and relationships set forth on Schedule 4.12(a), there are no commitments, contracts, agreements, arrangements or understandings (whether written or oral, formal or informal) of the Seller with respect to the Unions or the Union Personnel, and the collective bargaining agreements set forth on Schedule 4.12(a) constitute the entire agreement between the Seller and the other parties thereto, with respect to the subject matter thereof.

(b) Except as set forth on Schedule 4.12(b), there are no labor disputes, grievances, arbitration proceedings or litigation pending, or to Seller's Knowledge threatened, between Seller and the Personnel.

(c) Except as set forth in Schedule 4.12(c), there is no strike, slowdown, work stoppage, lockout, refusal to work over time or other labor disruption or dispute affecting Seller or the Personnel underway or, to Seller's Knowledge, threatened or anticipated with respect to Seller or the Personnel, and no such labor disruption has occurred in the past two (2) years.

(d) Except as set forth on Schedule 4.12(d), the Seller shall timely pay, or cause to be timely paid, the Personnel as required under its policies and/or by applicable Law for accrued but unused and unpaid vacation, sick leave and other accrued benefits as of the Closing Date.

(e) The Seller has not, in the past five (5) years, effectuated:

(i) a "plant closing" (as defined in the Worker Adjustment and Retraining Notification Act ("WARN Act")) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the System; or

(ii) a "mass layoff" (as defined in the WARN Act) affecting any site of employment or facility of the System; nor has the System been affected by any transaction or engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state or local Law.

None of the Personnel has suffered an "employment loss" (as defined in the WARN Act) during the previous six months.

Section 4.13. **Environmental Compliance**

Except as set forth on Schedule 4.13 or that otherwise could not be expected to have a Material Adverse Effect:

(a) To the Seller's Knowledge, the System as currently operated by the Seller and all operations and activities conducted by the Seller with respect to the System are in compliance in all material respects with all applicable Environmental Requirements.

(b) To the Seller's Knowledge, the Seller has generated, used, handled, treated, stored and disposed of all Hazardous Materials in (i) compliance in all material respects with all applicable Environmental Requirements and (ii) a manner that has not given, and could not reasonably be anticipated to give, rise to Environmental Liabilities.

(c) Except as has been disclosed to Buyer on Schedule 4.13, the Seller has not received notice of any Environmental Claims related to the System that have not been fully and finally resolved, and to the Knowledge of Seller no claims of Environmental Liabilities have been threatened allegedly arising from or relating to the System that have not been fully and finally resolved.

(d) To Seller's Knowledge, Hazardous Materials are not present in, at or on the System or the Acquired Assets and there has been no Release of Hazardous Materials at, on or from any part of the System or the Acquired Assets, in each case in a manner that violates any Environmental Requirements or has resulted in, or could reasonably be anticipated to give rise to, Environmental Liabilities which has not been appropriately resolved pursuant to applicable Environmental Requirements.

(e) No Lien or activity use limitation or institutional control has been recorded affecting any Acquired Assets by any Governmental Authority due to either the presence of any Hazardous Material on or off the Acquired Assets or a violation of any Environmental Requirement except as has been disclosed by Seller to Buyer.

(f) Except as has been disclosed to Buyer on Schedule 4.13, Seller is not aware of any underground storage tanks on or at any of the Acquired Assets. To the Seller's Knowledge, any underground storage tanks previously located at the Acquired Assets have been removed or otherwise closed, plugged and abandoned in compliance with applicable Environmental Requirements in effect at the time of such closure.

(g) Seller is not aware of any PCB Equipment on or at any of the Acquired Assets. To the Seller's knowledge, any PCB Equipment that previously existed at the Acquired Assets has been flushed of polychlorinated byphenyls or has been removed and properly disposed of in accordance with applicable Environmental Requirements in effect at the time of such disposal, and any remaining PCB Equipment is labeled to the extent required under applicable Environmental Requirements and being managed in compliance with applicable Environmental Requirements.

(h) Except as has been disclosed to Buyer on Schedule 4.13, Seller is not aware of any Regulated Asbestos Containing Material in or on the Acquired Assets in an aggregate amount that would reasonably be expected to result in an Environmental Liability; and to the Seller's knowledge, any Regulated Asbestos Containing Material is being managed in compliance with all applicable Environmental Requirements.

(i) The Seller has delivered to Buyer (1) all environmental site assessments pertaining to the System it is aware of within the previous five years, (2) all compliance audits or compliance assurance reviews prepared within the previous five (5) years relating to compliance with Environmental Requirements by the System, and (3) all documents pertaining to, any known and unresolved Environmental Liabilities incurred in relation to the System, to the extent possessed by or under the reasonable control of the Seller.

(j) Seller has disclosed the Phase 1 Environmental Site Assessment of the Beaver Falls Wastewater Treatment Plan, City of Beaver Falls, Pennsylvania, delivered in July 2021 (the "Phase 1 Report") to the Buyer. Information in the Phase 1 Report shall not be deemed to impute Knowledge to the Seller for purposes of the representations in Section 4.13 hereof, and Seller shall undertake no obligation to commission or provide to the Buyer a Phase II environmental site assessment.

Section 4.14. **Authorizations and Permits**

Schedule 4.14 sets forth the Authorizations and Permits of the Seller. The Seller has made true and complete copies of all Authorizations and Permits available to Buyer. Except as set forth on Schedule 4.14, the Seller is in compliance in all material respects with all terms, conditions and requirements of all Authorizations and Permits, except in each case where such violation or failure, individually or in the aggregate, would not have a Material Adverse Effect, and no proceeding is pending or, to the Knowledge of the Seller threatened relating to the revocation or

limitation of any of the Authorizations or Permits, other than those limitations which do not individually or in the aggregate have a Material Adverse Effect.

Section 4.15. **System Contracts**

(a) Schedule 4.15 sets forth a complete and accurate list of all the Assigned Contracts.

(b) The Seller has made available to Buyer true and complete copies of all the foregoing Assigned Contracts.

(c) All of the Assigned Contracts set forth on Schedule 4.15 are in full force and effect. Seller has not, nor to the Knowledge of the Seller has any other party thereto, breached any material provision of or defaulted under the material terms of, nor does any condition exist which, with notice or lapse of time, or both, would cause the Seller, or to the Knowledge of Seller, any other party, to be in default under any Assigned Contract.

Section 4.16. **Compliance with Law; Litigation**

(a) The Seller has operated and is operating the System in compliance, in all material respects, with all applicable Laws, Authorizations and Permits and is not in breach of any applicable Law, Authorization or Permit that would have a Material Adverse Effect on the operations of the System or on the Buyer. There are no Authorizations or Permits from any Governmental Authority necessary for the operation of the System as currently being operated except for those Authorizations and Permits listed in Schedule 4.14.

(b) Except as set forth on Schedule 4.16 (as updated pursuant to Section 9.03 hereof), there are no facts, circumstances, conditions or occurrences regarding the System that could reasonably be expected to give rise to any environmental claims or governmental enforcement actions that could reasonably be expected to have a Material Adverse Effect, and there are no past, pending or threatened environmental claims or governmental enforcement actions against the Seller that individually or in the aggregate could reasonably be expected to have a Material Adverse Effect.

(c) Except as set forth on Schedule 4.16, there is no action, suit or proceeding, at law or in equity, or before or by any Governmental Authority, pending or, to the Knowledge of the Seller, threatened against the Seller before or at the Closing Effective Time, which will have a Material Adverse Effect. There is no action, suit or proceeding, at Law or in equity, or before or by any Governmental Authority, pending nor, to the Knowledge of the Seller, threatened against the Seller which could materially affect the validity or enforceability of this Agreement.

Section 4.17. **Broker's and Finder's Fees**

No broker, finder, or Person is entitled to any commission or finder's fee by reason of any agreement or action of Seller in connection with this Agreement or the transactions contemplated by this Agreement. Seller has employed PFM Financial Advisors LLC, as municipal advisor to provide transaction structuring advice and to provide Seller with municipal advice relating to the

sale of the System. Seller is solely responsible to pay all fees owed to PFM Financial Advisors LLC in connection with the transactions contemplated by this Agreement.

Section 4.18. **Title to the Acquired Assets; Sufficiency**

(a) Except as set forth on Schedule 4.18(a), the Seller has good and marketable title to, valid leasehold interest in or valid licenses to use, all of the Acquired Assets, free and clear of all Liens, other than Permitted Liens and Liens which will be fully and unconditionally released at or before Closing. The use of the Acquired Assets is not subject to any Liens, other than Permitted Liens, and such use does not encroach on the property or the rights of any Person.

(b) Except as set forth on Schedule 4.18(b), the Acquired Assets are sufficient for, and constitute all the assets, properties, business, goodwill and rights of every kind and description, and services required for, the continued conduct and operation of the System by Buyer in substantially the same manner as currently conducted and operated by Seller. Except for the Excluded Assets and except as set forth on Schedule 4.18(b), (i) the Acquired Assets, taken as a whole, comprise all the assets, properties, business, goodwill and rights of every kind and description used or held for use in, or useful or necessary to the operation of the System as currently operated by Seller, and (ii) there are no assets, properties, business, goodwill, rights or services used in the conduct or operation of the System that are owned by any Person other than Seller that will not be licensed or leased to Buyer under valid, current license arrangements or leases. None of the Excluded Assets are material to the System.

Section 4.19. **Pending Development Plans**

Schedule 4.19 sets forth a full and complete list of all Pending Development Plans for which Seller has received notice as of the Effective Date. Each Pending Development Plan, if consummated, could result in additional customers and reduction of available treatment capacity. Schedule **Error! Reference source not found.** also identifies all agreements with third parties with respect to current or pending extensions of the System or any other sanitary sewer system that is connected to the System together with any financial security held by Seller with respect to such extensions. Seller provides no assurances whatsoever that any development or expansion of the Service Area associated with any Pending Development Plan will actually be undertaken or completed. The Parties expect that Schedule 4.19 will change from time to time between the Effective Date and Closing, and the Seller shall provide updates to Schedule 4.19 upon the occurrence of any significant change, decision or development and shall further deliver such updates pursuant to Section 9.03.

Section 4.20. **Customer Service Laterals and Grinder Pumps**

The Seller does not own, or have any responsibility for: any grinder pumps; connecting facilities located in the area originating from the Seller's terminus point of the collection facilities at the edge-of-road or curb-line or curb stop when the facilities are located with a public right-of-way or the edge of an easement where the collection facilities are located within private property to and throughout the customer's property; or any and all piping and fixtures internal to each individual customer structure (whether residential, commercial, industrial or other customer classes/types).

## ARTICLE V.

## REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer makes only the representations and warranties that are set forth in this Article V.

As a material inducement to the Seller to enter into this Agreement and to consummate the transactions contemplated hereby, Buyer represents and warrants to the Seller, as of the Effective Date (except to the extent any of the following representations and warranties specifically apply or relate to another date, in which event such representations and warranties shall be true and correct as of such other date), as follows:

Section 5.01. **Organization**

The Buyer is duly organized, validly existing and in good standing under the laws of the state of its organization.

Section 5.02. **Authorization and Validity of Agreement**

The Buyer has the power and authority to enter into this Agreement and to do all acts and things and execute and deliver all other documents as are required hereunder to be done, observed or performed by it in accordance with the terms hereof. This Agreement has been duly authorized, executed and delivered by the Buyer and constitutes a valid and legally binding obligation of the Buyer, enforceable against it in accordance with the terms hereof, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and to general principles of equity.

Section 5.03. **No Conflict or Violation**

The execution and delivery of this Agreement by the Buyer, the consummation of the transactions contemplated by this Agreement and the performance by the Buyer of the terms, conditions and provisions hereof has not and will not contravene or violate or result in a breach of (with or without the giving of notice or lapse of time, or both) or acceleration of any material obligations of the Buyer under (i) any applicable Law, (ii) any material agreement, instrument or document to which the Buyer is a party or by which it is bound or (iii) the articles, bylaws or governing documents of the Buyer.

Section 5.04. **Consents and Approvals**

Schedule 5.04, sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration to or filing or registration with any Governmental Authority required in connection with the execution and delivery of this Agreement by Buyer or the performance by Buyer of its obligations hereunder.

Section 5.05. **Broker's and Finder's Fees**

No broker, finder or third party is entitled to any commission or finder's fee in connection with this Agreement or the transactions contemplated by this Agreement.

Section 5.06. **Financial Wherewithal**

Upon Closing, and after giving effect to the consummation of the transactions contemplated by this Agreement and the incurrence of any indebtedness in connection therewith, Buyer shall have the financial ability and will have sufficient working capital for its needs and anticipated needs to operate the System as a certificated public utility system regulated by the PaPUC authorized, among things, to provide wastewater utility services to retail residential, commercial and industrial customers in the System.

Section 5.07. **Sufficient Funds**

Buyer shall have sufficient funds available at Closing to consummate the transactions contemplated by this Agreement, to pay the Purchase Price in accordance with Article III and expenses related to the transactions contemplated by this Agreement, and on and after Closing, to generally provide ownership, operation and capital for the operations and capital needs of the System following the Closing, and assuring that the customers of the System will receive safe, adequate and reliable wastewater service equal to or better than such customers would have received without the transactions contemplated by this Agreement and at all times consistent with the provisions of the Pennsylvania Public Utility Code, 66 Pa. C. S. § 101 *et seq,* and applicable Law.

Section 5.08. **Independent Decision**

Except as expressly set forth in this Agreement, or any of the related agreements, Buyer acknowledges that (a) Seller has not made any representation or warranty, express or implied, as to the accuracy or completeness of the System or information provided to Buyer, and (b) the Seller does not have or is not subject to any liability to Buyer or any other Person resulting from the distribution to Buyer, or Buyer use of, any information regarding the System or Acquired Assets that has been furnished or made available to Buyer and its Representatives. Buyer acknowledges that other than as expressly set forth in this Agreement or any related agreement, Seller expressly disclaims any warranty of income potential, operating expenses or costs of operation of any Acquired Assets or the System.

Section 5.09. **Scheduled Matters**

Buyer acknowledges that: (a) the inclusion of any matter on any Schedule is not an admission by Seller that such listed matter is material or that such listed matter has or could have a material adverse effect or constitutes a material liability with respect to the Acquired Assets; (b) matters reflected in the Schedules are not necessarily limited to matters required by this Agreement to be reflected in such Schedules; and (c) such additional matters are set forth for informational purposes only and do not necessarily include other matters of a similar nature.

Section 5.10. **Independent Investigation**

Buyer acknowledges that it has conducted an independent investigation of the financial condition, assets, liabilities, properties and projected capital needs and operations of the System in making its determination as to the propriety of the transaction contemplated by this Agreement and, in entering into this Agreement and related agreements, has relied solely on the results of its

investigation and on the representations and warranties of the Seller expressly contained in Article IV of this Agreement.

Section 5.11. **Litigation**

The Buyer is not in breach of any applicable Law that could have a material adverse effect on the operations of the System or the Buyer. Neither the Buyer nor any Affiliate of the Buyer is listed on any of the following lists maintained by the Office of Foreign Assets Control of the United States Department of the Treasury, the Bureau of Industry and Security of the United States Department of Commerce or their successors, or on any other list of Persons with which the Seller may not do business under applicable Law: the Specially Designated Nationals List, the Denied Persons List, the Unverified List, the Entity List and the Debarred List. Except as set forth on Schedule 5.11, there is no action, suit or proceeding, at law or in equity, or before or by any Governmental Authority, pending nor, to the Knowledge of the Buyer, threatened against the Buyer before or at the Closing Effective Time, which will have a material adverse effect on (i) the transactions contemplated by this Agreement or (ii) the validity or enforceability of this Agreement.

## ARTICLE VI.

## TITLE TO REAL ESTATE; EASEMENTS

Section 6.01. **Evidence of Title**

Subject to Section 6.06, with respect to all Real Property, Buyer shall obtain, at its sole cost and expense, a commitment for an owner's policy of title insurance on the American Land Title Association's ("ALTA") Owner's Form 2006 (the "Title Commitment"), issued by a title insurance company selected by Buyer and licensed to insure title to real property by the Commonwealth of Pennsylvania (the "Title Company"), having an effective date after the Effective Date. Following the Effective Date, Buyer shall order the Title Commitment from the Title Company and shall provide Seller evidence of the same. Notwithstanding anything to the contrary in Section 6.02(a) below, Buyer shall not be entitled to send an Objection Notice with respect to any parcel of Real Property and the Title Commitment for the same if, within thirty (30) Business Days after the Effective Date, Buyer has not ordered the Title Commitment from the Title Company for such parcel of Real Property and provided Seller with evidence of the same.

Section 6.02. **Objections to Title**

(a) Notice of Objections. Within forty-five (45) days of Buyer's receipt from the Title Company of a Title Commitment for any of the parcels of Real Property, Buyer shall deliver to Seller a true, correct and complete copy of the Title Commitment for each parcel of Real Property and true, correct, complete and legible copies of any and all exception documents listed in the same, along with Buyer's written notice to Seller of any of the exceptions to title set forth on Schedule B of such Title Commitment to which Buyer objects (such written notice of Buyer being referred to as the "Objection Notice"). Notwithstanding the foregoing, Buyer shall not be entitled to object to exceptions to title which: (a) are Permitted Liens, (b) pertain to the

Buyer or any reasonable and customary requirements, conditions or obligations of the Buyer, (c) are matters of record and set forth in the Title Commitment that do not, either individually or in the aggregate with other matters of record, in Buyer's reasonable opinion, materially and adversely restrict or prevent the use of the Real Property in the operation of the System, or (d) are standard Title Company exceptions (such as the "survey" exception) (such exceptions objected to in the Objection Notice, provided the same are not as described in (a) through and including (d) aforesaid, being referred to as the "Title Objection Items"). The Buyer shall include a true, correct and complete copy of the Title Commitment in the Objection Notice and true, correct, complete and legible copies of any and all exception documents listed in the same in the Objection Notice. If Buyer provides the Seller with an Objection Notice, the Seller shall use commercially reasonable efforts to have all of the Title Objection Items cured, satisfied or released of record, or insured over, by the Title Company (individually, "Cure" and collectively, "Cured") before or as of the Closing. At or before the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that Seller has Cured all such Title Objection Items. In the event that Seller is unable to Cure any Title Objection Item per this Section 6.02(a), Seller shall indemnify Buyer for such inability per the terms of Article VIII hereof, provided that Seller's indemnification obligation arising under this Section 6.02(a) shall not be subject to the Threshold Amount nor the Liability Cap set forth in Section 8.05. For avoidance of doubt, Buyer acknowledges that no item listed in clauses (a) through and including (d) above, may be objected to by Buyer as a Title Objection Item.

(b) Liens. Without limiting the Seller's obligations pursuant to Section 6.02(a) above, before or as of the Closing, the Seller shall, at the Seller's cost and expense, Cure any Lien encumbering the Real Property which can be Cured by the payment of money (other than Permitted Liens).

(c) Title Endorsements/Survey. Buyer shall pay for any endorsements required by the Buyer or any mortgagee of the Buyer to Buyer's Title Policy. If any survey is required by Buyer or its mortgagee, either as a condition to any such endorsement or otherwise, the Buyer shall obtain it at its sole cost and expense. If Buyer obtains a survey of any or all of the Real Property and desires the deed to contain the legal description based on such survey, if the same is not identical to the legal description contained in Seller's deed of record, Seller is not obligated to include the same in the deed to Buyer unless the survey is certified to Seller and such description is included in the deed on a "quitclaim" basis only and without warranty of title.

(d) License at Closing. Seller shall provide Buyer with a license agreement granting Buyer a license in all of Seller's rights to access such Real Property in order to allow Buyer to operate and maintain in the System until such time as Buyer is provided title to such Real Property as provided for in this Agreement. For the avoidance of doubt, Seller shall provide such title as soon as reasonably practicable in accordance with Section 6.01.

(e) Insurable Claims. To the extent any Claim for Losses under Article VIII constitutes an Insurable Claim (as defined below), Buyer shall assert the Insurable Claim and use its commercially reasonable efforts to obtain recovery for such Insurable Claim against the Title Company (which shall include commencing litigation and diligently prosecuting such Insurable Claim to judgment) before pursuing a Claim for Losses under Article VIII. If at any time following a non-favorable judgment that substantially denies the relief sought by Buyer from the

Title Company in connection with the Insurable Claim (each a "Non-Favorable Judgment"), Buyer may, following such Non-Favorable Judgment, to pursue the Seller with a Claim for Losses under Article VIII (any such Claim against the Seller following an attempted Insurable Claim against the Title Company being a "Residual Title Claim"). Notwithstanding anything to the contrary in Article VIII, Buyer may assert a Claim for Losses based upon a Residual Title Claim for a sixty (60) day period after the Non-Favorable Judgment. For purposes of this Section 6.02(d), an "Insurable Claim" means a Claim that: (i) arises out of Buyer's discovery of a title defect or encumbrance with respect to any of the Real Property following the Closing that materially restricts or prevents the use of such Real Property in the operation of the System; and (ii) constitutes a claim against the Title Company under Buyer's Title Policy. Buyer acknowledges that any and all Claims which Buyer could otherwise bring as a breach of a covenant of title under the special warranty deed to the Real Property shall be included within the Claim for Losses under Article VIII and is subject to the terms of this Section 6.02(e).

Section 6.03. **Title Expenses**

Irrespective of whether the transactions described by this Agreement are consummated and Closing occurs, Buyer shall pay all costs and expenses of obtaining the Title Commitment, Title Policy and any survey.

Section 6.04. **UCC Search; Releases**

Not later than ninety (90) days after the Effective Date, Buyer shall obtain at its sole cost and expense a Uniform Commercial Code search against Seller covering any of the personal property or fixtures included among the Acquired Assets from the Office of the Secretary of the Commonwealth of Pennsylvania and the Recorder of Deeds of Beaver County, Pennsylvania (the "UCC Search"). On or before the Closing Date, Seller shall at its sole cost and expense obtain releases of any and all security interests in any of the Acquired Assets which are not Permitted Liens. The Seller shall provide the form of the releases of such security interests to Buyer on or before the Closing Date.

Section 6.05. **Easements.**

(a) Promptly after the Effective Date and before the Closing, the Seller will, at its sole cost and expense, cause an abstractor selected by the Seller and reasonably acceptable to Buyer and the Title Company (the "Abstractor"), to perform a search of the public land records of Beaver County, based on the Seller's records and plans of the System (and such other sources of information as are reasonably related thereto), by searching the grantee index in the names of the Seller and such other searches as the Abstractor may reasonably make, to (i) identify and provide Buyer with title information on any and all recorded Easements (including information related to any Liens or encumbrances on Seller's title thereto), and (ii) together with the Seller, identify all Missing Easements. During the process, as the Abstractor provides written search results to the Seller (including updated versions of the Abstractor Search Result Chart), the Seller will promptly provide the same to Buyer for its review, and, without limiting the foregoing, the Seller shall, or shall cause the Abstractor to, provide Buyer with periodic updates (which shall occur no less frequently than bi-weekly) on the status of the activities set forth in the previous sentence.

(b) Notice of Objections. Within forty-five (45) days of Buyer's receipt from the Seller (or the Abstractor) of each piece of information specified in subsection (a) above, which shall be delivered to Buyer on a rolling basis as prepared by the Abstractor, Buyer shall deliver to Seller written notice identifying the encumbrances on the Easements that, in Buyer's reasonable opinion, could either individually or in the aggregate with other matters of record, materially and adversely restrict or prevent the use of the Easements in the operation of the System, (an "Easement Objection Notice"). Buyer shall not be permitted to include in its Easement Objection Notice any encumbrances that: (a) are Permitted Liens, (b) pertain to the Buyer or any reasonable and customary requirements, conditions or obligations of the Buyer, or (c) are matters of record and set forth in the Abstractor's search results that either individually or in the aggregate with other matters of record, do not, in Buyer's reasonable opinion, materially and adversely restrict or prevent the use of the Easements in the operation of the System (specifically including mortgages or other instruments securing indebtedness incurred by the owner of the land burdened by the Easement) (such exceptions objected to in the Objection Notice, the "Easement Objection Items." If Buyer provides the Seller with an Easement Objection Notice, the Seller shall use commercially reasonable efforts to have the Easement Objection Items Cured, prior to or as of the Closing. At or prior to the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that all objections identified in the Easement Objection Notice have been cured. In the event that Seller is unable to Cure any such objection Item per this Section 6.05(b), Seller shall indemnify Buyer for such inability per the terms of Article VIII hereof, provided that Seller's indemnification obligation arising under this Section 6.05(b) shall not be subject to the Threshold Amount. Seller acknowledges and agrees that (x) the forty-five (45) day period set forth in this Section 6.05(b) does not and shall not apply with respect to Buyer determining whether there are any Missing Easements, and (y) Buyer may notify Seller of any Missing Easement at any time up to and including the Closing Date.

(c) If during the process of Abstractor's review and investigation of the Beaver County land records, Seller determines, based on the Abstractor's investigation, that there is a Missing Easement, the Seller (at its cost and expense) shall take any and all actions (including the use of its power of condemnation) to obtain any such Missing Easements so that the same may be sold, assigned, transferred and conveyed to Buyer at the Closing pursuant to the terms and conditions of this Agreement. The Seller shall pay for all costs and expenses incurred in connection with obtaining each Missing Easement (including any consideration payable to the landowner in connection with condemnation, in lieu of condemnation or otherwise to obtain Missing Easements). If Seller has not obtained all Missing Easements by the date that is ninety (90) days after the date that Abstractor has completed his review of the County land records and delivered the last results of the same to Seller (the "Abstract Completion Date"), then the Seller (at its cost and expense) shall, as soon as reasonably practicable, commence and file in the Court of Common Pleas, Beaver County, a condemnation or eminent domain proceeding to obtain any and all such Missing Easements. For the purposes of clarity, upon obtaining each Missing Easement (including upon the final resolution of a condemnation proceeding), each Missing Easement that has been acquired or obtained by the Seller is considered an Easement. The Seller shall be responsible for the costs and expenses of all condemnation and eminent domain proceedings.

(d) License at Closing. Seller shall provide Buyer with a license agreement granting Buyer a license in all of Seller's rights to access all Missing Easements in order to allow Buyer to operate and maintain the System until such time as Buyer is provided title to such Missing Easements as provided for in this Agreement.

(e) Escrow at Closing for Missing Easements. For all of the Missing Easements listed on attached Schedule 6.05(e) as of the Closing Date, Seller will have additional time following the Closing Date to secure and assign and transfer the Missing Easements to Buyer. Seller shall diligently pursue and deliver the Missing Easements on or before the third (3rd) anniversary of the Closing Date, subject to any extension as permitted by Escrow Agreement, in the form attached as Exhibit C, that will require, among other things, the funding of an escrow account in the amount of Two Thousand Dollars ($2,000) for each Missing Easements set forth on Schedule 6.05(e) as of the Closing Date to secure the Seller's obligations under this Agreement and the Escrow Agreement.

(f) Unscheduled Property

The Parties acknowledge that the Seller may own interests in or have the legal right to use or occupy the Real Property and/or Easements that are necessary or essential to the operation of the System and that are not set forth in Schedule 4.09 (the "Unscheduled Real Property"). If the Parties discover before or after the Closing Date, one or more parcels of Unscheduled Real Property, the discovering Party shall give written notice of such discovery to the non-discovering Party. In addition to its obligations in Section 2.03, Seller shall convey, assign or otherwise transfer any rights to each parcel of Unscheduled Real Property, with no adjustment to the Purchase Price, in such a manner as to provide Buyer with reasonable assurances that Buyer will have the right to use or occupy the Unscheduled Real Property as it was used by Seller as of the Effective Date.

## ARTICLE VII.

## OTHER AGREEMENTS

Section 7.01. **Taxes**

Except as provided in this Agreement, the Seller shall pay any and all Taxes, if any, arising out of the ownership of the Acquired Assets and out of the operation of the System before the Closing Date.

Section 7.02. **Cooperation on Tax Matters**

The Seller shall furnish or cause to be furnished to Buyer, as promptly as practicable, whether before or after the Closing Date, such information and assistance relating to the System as is reasonably necessary for the preparation and filing by Buyer of any filings relating to any Tax matters.

Section 7.03. **Personnel Matters**

(a) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, Buyer shall, or shall cause an Affiliate of Buyer to, offer employment effective on the Closing Date, to the Personnel set forth on Schedule 7.03(a) who are employed by the Seller in operating the System as of the Closing Date, subject to Buyer's existing standard hiring policies and procedures applicable to new employees, including but not limited to a criminal background check and drug screening, except with respect to benefits as otherwise provided in Section 7.03(c). The Personnel who accept such employment and commence employment on the Closing Date, are referred to in this Agreement as the "Transferred Personnel." Schedule 7.03(a) shall not be amended after the date this Agreement is executed without the prior written consent of Buyer. For purposes of clarity, nothing contained in this Section 7.03 shall be deemed to limit, restrict or prohibit Buyer from interviewing the applicable Personnel for informational purposes only in connection with the transfer of employment of the Personnel to Buyer as provided in this Section 7.03. Buyer may make the required offer of employment at such a time to permit Buyer to require such offerees' decision to accept or reject such offers up to three (3) months prior to the Closing Date.

(b) Transferred Personnel who are Non-Union Personnel shall be employees-at-will of Buyer. Buyer shall provide each of the Transferred Personnel who are Non-Union Personnel compensation and benefits which are substantially comparable (i) in the aggregate to Seller's compensation and benefits as of the Effective Date and (ii) the compensation and benefits then provided to similarly situated employees of Buyer. Nothing in this Agreement requires Buyer to provide any particular form or type of employee benefit program, plan or policy to any Transferred Personnel who are Non-Union Personnel as a result of the transaction contemplated by this Agreement.

(c) Subject to the obligations of Seller under the Collective Bargaining Agreement and Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, with respect to any employee benefit plan maintained by Buyer or an Affiliate of Buyer for the benefit of any Transferred Personnel, effective as of the Closing Date, Buyer shall, or shall cause its Affiliate to, recognize all previous service of the Transferred Personnel with Seller, as if such service were with Buyer for the purposes of determining eligibility and vesting for benefits. Notwithstanding the foregoing, to the extent Buyer sponsors a defined benefit pension plan or post-retirement medical benefits, Transferred Personnel shall not receive vesting credit under such plan with respect to service performed for Seller to the extent that any such Transferred Personnel are fully vested in a defined benefit pension plan or post-retirement medical benefits to which Seller contributes.

(d) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, effective as of the Closing, the Transferred Personnel's employment with Seller shall end and the Transferred Personnel shall cease active participation in the Seller's Plans. Seller shall remain liable for all eligible claims for benefits under the Seller's Plans that are incurred by the Transferred Personnel before the Closing Date. Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, Seller shall remain liable to make any contributions to Seller's Plans related to, and/or to fund any retirement benefits

accrued by, the Transferred Personnel prior to Closing. Seller shall remain liable for all pay, expenses, wages, Taxes and all other obligations and Liabilities of any nature whatsoever relating to (i) the period prior to the Closing Date with respect to any Personnel that become Transferred Personnel and (ii) relating to all periods before or after the Closing Date with respect to any current or former Personnel who do not become Transferred Personnel.

(e) This Section 7.03 shall be binding and inure solely for the benefit of each of the Parties to this Agreement, and nothing in this Section 7.03, express or implied, shall confer upon any other Person any rights or remedies of any nature whatsoever under or because of this Section 7.03. This Section 7.03 shall not create any right in any Transferred Personnel or any other Person to any continued employment with Buyer or any of its Affiliates or compensation or benefits of any nature or kind whatsoever, and shall not be deemed to restrict Buyer in the exercise of its independent business judgment in establishing or modifying any of the terms or conditions of the employment of the Transferred Personnel. Nothing contained in this Section 7.03 shall constitute an amendment of, or an undertaking to amend, any employee benefit plan, program or arrangement maintained by Buyer or its Affiliates or is intended to prevent Buyer or its Affiliates from amending or terminating any such employee benefit plan, program or arrangement in accordance with its terms.

(f) Notwithstanding anything in this Agreement to the contrary, it is expressly understood that Buyer will not acquire any asset, or assume any liability or obligation in connection with the transactions contemplated by this Agreement relating to any of the Seller's Benefit Plans or Seller's Benefit Obligations. Seller shall be solely responsible for any liability, funding obligation, claim or expense arising from the Seller's Plans and Seller's Benefit Obligations, both before, and after, the Closing Date, except as provided in Section 7.03(c).

(g) At a reasonable time prior to the Closing Date, Seller shall transfer copies of all records pertaining to the employment of the Transferred Personnel to Buyer including, but not limited to, all personnel and human resources Files and Records.

(h) Effective as of and conditioned upon Closing and to the greatest extent permissible by law:

(1) Buyer shall recognize the Union as the exclusive bargaining representative for Union Personnel in their current bargaining unit if the Buyer's employees performing the bargaining unit work previously performed by Union Personnel constitute at least a majority of Union Personnel in the applicable bargaining unit and the related bargaining unit contains more than one (1) employee;

(2) To the extent the Union is recognized pursuant to Section 7.03(h)(1) herein, Buyer shall collectively bargain in good faith with the Union to establish a new collective bargaining agreement(s). Except as outlined in Section 7.03(h)(3) herein, if initial terms and conditions of employment cannot be agreed to by the Buyer and the Union, Buyer will adopt Seller's Collective Bargaining Agreement(s)(as defined in Article I herein) for employees in the applicable bargaining unit as of and conditioned upon Closing.

(3) Buyer is not obligated, however, and will not provide medical insurance, paid time off or pension benefits as provided for in the Collective Bargaining Agreements, but instead will provide Union Personnel with the medical insurance, paid time off and retirement benefits it provides to similarly situated employees. The Buyer also shall not be bound by the employee Residency requirement provisions of the Collective Bargaining Agreements, specifically, Article XXII of the Local 9305-08 agreement, and Article XXI of the Local 9305-10 agreement and any provision of the Collective Bargaining Agreement(s) with which it legally cannot comply. Seller makes no representations, and Buyer is solely responsible for determining, that these terms meet Buyer's obligations under applicable labor law.

Effective upon the Closing Date, Municipal Council shall no longer participate in the grievance procedures, as provided for by the Collective Bargaining Agreements. Furthermore, upon the Closing Date, neither Municipal Council nor any other administrative body of Seller shall have any further involvement in the operations of the System, wherever such involvement may be provided for by the Collective Bargaining Agreements.

Section 7.04. **Initial and Future Rates**

(a) Rates. After Closing, Buyer shall implement the Seller's sanitary wastewater rates then in effect at Closing, as set forth on Schedule 7.04, and inclusive of any PaPUC permitted or required surcharges or pass-through costs ("Base Rates"), as Buyer's effective sanitary wastewater rates, provided that the rates reflected on Schedule 7.04 (at Closing) shall not be lower than those in effect on the date of the Effective Date. Buyer shall apply, at and after Closing, its then-existing miscellaneous fees and charges, rules and regulations for wastewater service as set forth in Buyer's tariff within Seller's Service Area, or, if Buyer does not have a tariff previously approved by the PaPUC, miscellaneous fee and charges, rules and regulations as proposed by Buyer and approved by the PaPUC.

(b) PaPUC Approval. The Buyer shall include the rate provisions of Sections 7.04(a) in its requested PaPUC Governmental Approval.

(c) Billing. The Buyer shall bill customers on a monthly basis.

Section 7.05. **Buyer Taxpayer**

From and after the Closing Date, Buyer acknowledges that, upon conveyance of the Acquired Assets to Buyer, the Buyer will be subject to, among other Taxes, real estate Taxes, which Buyer shall pay when due.

Section 7.06. **PaPUC Approval**

(a) Promptly after the Effective Date, Buyer shall timely initiate and faithfully prosecute the necessary proceedings to obtain from the PaPUC (i) the issuance of certificates of public convenience to Buyer to provide wastewater services in the Service Area, (ii) the approval of the acquisition of the System by Buyer under terms and conditions that are reasonably

acceptable to Seller and Buyer, and (iii) the approval of any inter-municipal agreements. Seller shall cooperate with and assist Buyer in proceedings before the PaPUC.

(b) The Parties agree that the procedures for determining fair market value of the System and Acquired Assets outlined in subsection (a) of Section 1329 of Title 66 of the Pennsylvania Consolidated Statutes ("Section 1329") shall be utilized and filed with the PaPUC as contemplated by Section 1329.

(c) The fees and expenses related to engaging the licensed engineer for such Section 1329 determination shall be paid fifty percent (50%) by Buyer and fifty percent (50%) by the Seller.

(d) To the extent requested by Buyer, Seller shall participate in any proceedings before the PaPUC as an intervenor and active party, provided that the Seller shall bear the fees and expenses directly related to such intervention, including legal expenses. Seller may be represented by the counsel of its choice in any such proceedings.

(e) Buyer, in Buyer's first base rate proceeding with respect to the System following the Closing, shall propose the use of statutory and regulatory mechanisms available to benefit the Buyer's acquired customers for ratemaking purposes.

Section 7.07. **Remedies for Breach of Article VII Agreements**

If Buyer breaches any of the covenants and agreements set forth in this Article VII, in addition to all other rights and remedies available at law or in equity, including specific performance and/or injunctive relief, Seller may commence proceedings before the PaPUC seeking enforcement of such covenants and agreements.

Section 7.08. **Operation and Maintenance of MS4 and Stormwater Systems**

The Seller, and/or its successor or designee-in-interest, shall remain at all times responsible for the operation and maintenance of its MS4 system and stormwater system assets. This provision shall not preclude Seller from transferring its MS4 system and stormwater system assets to another governmental entity, municipal authority or other qualified purchaser at a future time.

Section 7.09. **Pending Development Plans**

(a) Buyer and the Seller acknowledge that from the time of the Effective Date, the Seller shall continue to administer, and perform its duties and responsibilities with respect to the Pending Development Plans set forth on Schedule 4.19. For the avoidance of doubt, after the Closing Date, the Seller shall not seek to collect any EDU or tapping-related fees.

(b) Following the Effective Date, Seller shall not enter into any contract with a third party that contemplates the construction of new sanitary wastewater facilities, including, without limitation, pumping stations, force mains, manholes, or pipelines for service to future customers related to Pending Development Plans (collectively, "New System Assets") without providing a draft of such contracts to Buyer for its review and approval as to the design and specifications before execution by the parties to such contracts. Buyer shall have thirty (30) Business Days to

review and approve such contracts, and Buyer's failure to object in writing to any terms of such contracts within such thirty (30) Business Day review period is deemed an approval of the same by Buyer.

Section 7.10. **Act 537 Plan**

(a) Buyer acknowledges that Seller has previously committed to an official plan, commonly known as an Act 537 Plan (the "Act 537 Plan") under the Pennsylvania Sewage Facilities Act ("Act 537"), which has been made available to Buyer. Buyer understands that the Act 537 Plan contains obligations and commitments, as more fully set forth in the Act 537 Plan to complete certain improvements and upgrades to the System (the "System Improvements"). Buyer shall accept and complete all of the System Improvements as Seller agreed to complete under the existing Act 537 Plan. Prior to agreeing to further obligations pursuant to future amendments to the Act 537 Plan that could reasonably be deemed to affect Buyer, Buyer and Seller shall negotiate in good faith to resolve any objections Buyer may raise in connection with such proposed amendment(s).

(b) Buyer acknowledges Seller has jurisdiction over sewage facilities planning and sewer service through the Act 537 Plan and its Act 537 planning program, zoning, subdivision and land development ordinances and comprehensive land use planning policies. Buyer and Seller shall cooperate with respect to current and future sewage facilities planning and sewer service consistent with the provisions of this Section 7.10.

(c) Subject to PaPUC approval of the Service Area as provided in Section 7.06, Buyer shall maintain and, if necessary, extend sewer lines and provide sewage collection and treatment services to properties within the Service Area in a manner consistent with the Plan and the Buyer's Tariff. Seller will confer with Buyer concerning any revision to the Plan that would affect the provision of sewage collection and treatment services within the Service Area. Seller shall not propose or adopt any revision to the Act 537 Plan that would reduce the Service Area or divert wastewater flows generated from properties located within the Service Area from being served by the System without the written approval of Buyer.

(d) Buyer will not request, pursue, or implement expansions of the System beyond the current Service Area (that would trigger an Act 537 Plan revision) without the prior written approval of Seller and the PaDEP. Seller shall promptly notify and confer with Buyer, and consider Buyer's comments, concerning any proposed Act 537 Plan revision (including any sewage facilities planning module) that would involve the provision of sewage collection and treatment services by the System to area or properties outside of the Service Area. With respect to any such potential Plan revision, Seller and Buyer shall cooperate in evaluating alternatives for provision of sewage services to such areas consistent with the requirements of 25 Pa Code Ch. 71, including consideration of the technical feasibility, economic feasibility and cost effectiveness, consistency with the objectives and policies of plans and requirements of 25 Pa. Code Ch. 71.21(a)(5), consistency with municipal land use plans and ordinances, subdivision ordinances and other ordinances and plans for controlling land use and development, technically and administratively able to be implemented, and other factors required under Act 537 or under Buyer's Tariff.

(e) If Seller and Buyer each determine that the provision of sewage collection and treatment services by the System to certain areas or properties outside of the Service Area is technically feasible, economically feasible and cost effective, and meets all of the requirements set forth in Act 537 and 25 Pa. Code Ch. 71, the Seller shall revise the Act 537 Plan to include such identified areas and properties in the Service Area. If Seller revises the Act 537 Plan pursuant to this subsection and such amendment is approved by PaDEP, (i) Buyer shall request that the modified Service Area be approved by PaPUC; and (ii) subject to PaPUC approval of the inclusion of such modified Service Area, Buyer shall extend sewer lines and provide sewage collection services to properties within such expanded Service Area in a manner consistent with the Act 537 Plan and Buyer's Tariff.

Section 7.11. **Utility Valuation Experts and Engineering Assessment**

Buyer and Seller shall each be responsible for the costs associated with their respective Utility Valuation Expert for the preparation and completion of their respective Utility Valuation Expert's appraisal report and any additional work by their respective Utility Valuation Expert necessary to assist in the processing and prosecution of the application to the PaPUC in regard to this transaction under Section 1329.

Section 7.12. **Compliance and Operational Reports**

After the Effective Date and through the Closing Date, Seller shall provide Buyer with a monthly report to the person designated by Buyer, disclosing any and all material compliance or operational deficiencies that occurred during the previous month. During the same period, Seller shall also provide Buyer with copies of all reports filed with PaDEP regarding the System, including any discharge monitoring reports, associated supplemental reports, and WETT reports, when available.

Section 7.13. **Implementation and Enforcement of Municipal Code**

Following the Closing Date, Seller shall continue to implement and enforce the relevant provisions of the Municipal Code of the City of Beaver Falls, as amended.

Section 7.14. **Covenant Survival**

The covenants set forth in this Article survive Closing.

## ARTICLE VIII.

## INDEMNIFICATION

Section 8.01. **Survival**

All representations and warranties contained in this Agreement shall survive until twelve (12) months following the Closing Date, except that (a) the representations and warranties of the Seller specified in Section 4.01 (Organization), Section 4.02 (Power and Authority), Section 4.03 (Enforceability), Section 4.10 (Equipment and Machinery), Section 4.17 (Brokers' and Finders' Fees), and Section 4.18(a) (Title to Acquired Assets) (collectively, the "Seller Fundamental

Representations") shall survive the Closing indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof), (b) the representations and warranties of Seller specified in Section 4.13 (Environmental Compliance) shall survive the Closing until the expiration of the applicable statute of limitations (giving effect to any waiver, mitigation or extension thereof), and (c) the representations and warranties of Buyer specified in Section 5.01 (Organization), Section 5.02 (Authorization and Validity of Agreement), and Section 5.05 (Brokers' and Finders' Fees) (collectively, the "Buyer Fundamental Representations") shall survive the Closing indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof). The covenants and agreements of the Parties contained herein shall survive the Closing indefinitely or for the shorter period explicitly specified therein, except that for such covenants and agreements that survive for such shorter period, breaches thereof shall survive indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof). Notwithstanding the preceding sentences, (x) any breach of representation, warranty, covenant or agreement in respect of which indemnity may be sought under this Agreement shall survive the time at which it would otherwise terminate pursuant to the preceding sentences, if notice of the inaccuracy or breach thereof giving rise to such right of indemnity shall have been given to the party against whom such indemnity may be sought before such time, and (y) nothing contained in this Section 8.01 shall limit in any way any rights a Party may have to bring claims grounded in fraud, intentional misrepresentation or willful misconduct, which rights shall survive the Closing indefinitely.

Section 8.02. **Indemnification by the Seller**

To the maximum extent permitted by applicable Law and subject to the terms and conditions of this Article VIII, the Seller shall indemnify, defend and hold harmless, Buyer and its successors and Affiliates and their respective employees, officers, directors, trustees and agents (the "Buyer Indemnified Persons"), from and against any and all claims for Losses arising from or relating to: (a) any breach of, material misrepresentation as to, or any material inaccuracy in, any of the representations and warranties of the Seller contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by the Seller before the Closing pursuant to this Agreement (without regard to any materiality, Material Adverse Effect or related qualifications in the relevant representation or warranty (except where such provision requires disclosure of lists of items of a material nature or above a certain threshold)); (b) any breach or material nonfulfillment of any of the covenants or agreements of the Seller contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by the Seller before the Closing pursuant to this Agreement; (c) any Excluded Liability or Excluded Asset or (d) the ownership, use, operation or control of the Acquired Assets or the System prior to the Closing or any incident, occurrence, condition or claim arising prior to Closing and relating to the ownership, use, operation or control of the Acquired Assets or the System prior to Closing.

Section 8.03. **Indemnification by Buyer**

To the maximum extent permitted by applicable Law and subject to the terms and conditions of this Article VIII, Buyer shall defend, indemnify and hold harmless the Seller and its successors and Affiliates and each of their respective employees, officers, directors and agents (the "Seller

Indemnified Persons") from and against any and all claims for Losses arising from or relating to: (a) any breach of, misrepresentation as to, or any material inaccuracy in, any of the representations and warranties of Buyer contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by Buyer pursuant to this Agreement; (b) any material breach of any of the covenants or agreements of Buyer contained in this Agreement or in any exhibit, schedule certificate or other instrument or document furnished or to be furnished by the Buyer pursuant to this Agreement; (c) any Assumed Liability as and when payment and performance is due, including without limitation any liability related to any claims by any Governmental Authority; (d) for the avoidance of doubt, Buyer's actions involving Environmental Requirements, Hazardous Materials or environmental claims from and after the Closing Date; or (e) the ownership, operation or control of the Acquired Assets or the System from and after the Closing Date.

Section 8.04. **Indemnification Procedure**

(a) Third Party Claims. If any Indemnified Party receives notice of the assertion or commencement of any action, suit, claim or other legal proceeding made or brought by any Person who is not a party to this Agreement or an Affiliate of a party to this Agreement or a representative of the foregoing (a "Third Party Claim") against such Indemnified Party with respect to which the Indemnifying Party may be obligated to provide indemnification under this Agreement, the Indemnified Party shall give the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses because of such failure. Such notice by the Indemnified Party shall describe the Third Party Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Loss that has been or may be sustained by the Indemnified Party. The Indemnifying Party may participate in, or by giving written notice to the Indemnified Party (and subject to the other requirements herein) to assume the defense of any Third Party Claim at the Indemnifying Party's expense and by the Indemnifying Party's own counsel (which counsel is reasonably acceptable to the Indemnified Party), so long as (i) the Indemnifying Party notifies the Indemnified Party, within ten (10) Business Days after the Indemnified Party has given notice of the Third Party Claim to the Indemnifying Party (or by such earlier date as may be necessary under applicable procedural rules in order to file a timely appearance and response) that the Indemnifying Party is assuming the defense of such Third Party Claim, provided, that if the Indemnifying Party assumes control of such defense it must first agree and acknowledge in such notice that the Indemnifying Party is fully responsible (with no reservation of any rights other than the right to be subrogated to the rights of the Indemnified Party) for all Losses relating to such Third Party Claim, (ii) the Indemnifying Party conducts the defense of the Third Party Claim actively and diligently and at its own cost and expense, and (iii) the Third Party Claim (A) does not involve injunctive relief, specific performance or other similar equitable relief, any claim in respect of Taxes, any Governmental Authority, any criminal allegations, or any potential damage to the goodwill, reputation or overriding commercial interests of Buyer or its Affiliates, (B) is not one in which the Indemnifying Party is also a party and joint representation would be inappropriate or there may be legal defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying Party, or (C) does not involve a claim which, upon petition by the Indemnified Party, the appropriate court rules that the Indemnifying Party failed or is

failing to vigorously prosecute or defend. The Indemnified Party shall reasonably cooperate in good faith in such defense. If the Indemnifying Party assumes the defense of any Third Party Claim, subject to Section 8.04(b), it shall have the right to take such action as it deems necessary to avoid, dispute, defend, appeal or make counterclaims pertaining to any such Third Party Claim in the name and on behalf of the Indemnified Party. The Indemnified Party may, at its own cost and expense, to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party's right to control the defense thereof. If the Indemnifying Party elects not to compromise or defend such Third Party Claim or fails to promptly notify the Indemnified Party in writing of its election to defend as provided in this Agreement, the Indemnified Party may, subject to Section 8.04(b), pay, compromise, defend such Third Party Claim and seek indemnification for any and all Losses based upon, arising from or relating to such Third Party Claim. The Seller and Buyer shall reasonably and in good faith cooperate with one another in all reasonable respects in connection with the defense of any Third Party Claim, including making available records relating to such Third Party Claim and furnishing, without expense (other than reimbursement of actual out-of-pocket expenses) to the defending party, management employees of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim.

(b) Settlement of Third Party Claims. Notwithstanding any other provision of this Agreement, the Indemnifying Party shall not enter into settlement of any Third Party Claim without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld or delayed), except as provided in this Section 8.04(b). If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation on the part of the Indemnified Party and provides, in customary form, for the unconditional release of each Indemnified Party from all liabilities and obligations in connection with such Third Party Claim and the Indemnifying Party desires to accept and agree to such offer, the Indemnifying Party shall give prompt written notice to that effect to the Indemnified Party. If the Indemnified Party fails to consent to such firm offer within fifteen (15) days after its receipt of such notice, the Indemnified Party may continue to contest or defend such Third Party Claim and in such event, the maximum liability of the Indemnifying Party as to such Third Party Claim shall not exceed the amount of such settlement offer. If the Indemnified Party fails to consent to such firm offer and also fails to assume defense of such Third Party Claim, the Indemnifying Party may settle the Third Party Claim upon the terms set forth in such firm offer to settle such Third Party Claim. If the Indemnified Party has assumed the defense pursuant to Section 8.04(a), it shall not agree to any settlement without the written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

(c) Direct Claims. Any claim by an Indemnified Party with respect to any Loss which does not arise or result from a Third Party Claim (a "Direct Claim") shall be asserted by the Indemnified Party giving the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses because of such failure. Such notice by the Indemnified Party shall describe the Direct Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Losses that have been or may be sustained by the Indemnified Party. The Indemnifying Party shall have thirty (30) days after its receipt of such notice to respond in writing to such Direct Claim. During the thirty (30) day period, the

Indemnified Party shall reasonably cooperate and assist the Indemnifying Party in determining the validity and amount of such Direct Claim. If the Indemnifying Party does not so respond within such thirty (30) day period, by delivery of written notice disputing the basis or amount of the Direct Claim, the Indemnifying Party is deemed to have rejected such claim, in which case the Indemnified Party is free to pursue such remedies as may be available to the Indemnified Party on the terms and subject to the provisions of this Agreement. If the Indemnifying Party has timely disputed its indemnity obligation for any Losses with respect to such Direct Claim, the Parties shall proceed in good faith to negotiate a resolution of such dispute and, if not resolved through negotiations, such dispute may be resolved by litigation in an appropriate court of jurisdiction determined pursuant to this Agreement.

Section 8.05. **Limitations on Indemnification Obligations**

(a) Subject to the other limitations contained in this Section 8.05, neither Buyer nor the other Buyer Indemnified Persons is entitled to indemnification pursuant to Section 8.02(a) (other than for an intentional breach of any agreement or covenant contained in this Agreement) unless the aggregate amount of Losses incurred by Buyer and the other Buyer Indemnified Persons under this Agreement exceeds One Percent (1.0%) of the Purchase Price (the "Threshold Amount"), in which case Seller shall then be liable for Losses in excess of the Threshold Amount; except that the foregoing limitations contained in this Section 8.05(a) shall not apply to any claims for indemnification (i) based on fraud, intentional misrepresentation or willful misconduct, (ii) based on any inaccuracy in, misrepresentation as to or breach of any of the Seller Fundamental Representations or any of the representations and warranties set forth in Section 4.13, or (iii) pursuant to Sections 8.02 (c) or (d).

(b) Subject to the other limitations contained in this Section 8.05 neither Seller nor the other Seller Indemnified Persons is entitled to indemnification pursuant to Section 8.03(a) (other than for an intentional breach of any agreement or covenant contained in this Agreement) unless the aggregate amount of Losses incurred by Seller and the other Seller Indemnified Persons under this Agreement exceeds the Threshold Amount, in which case Buyer shall then be liable for Losses in excess of the Threshold Amount; except that the foregoing limitations contained in this Section 8.05(a) shall not apply to any claims for indemnification based on fraud, intentional misrepresentation or willful misconduct or pursuant to Sections 8.03(c)(d) and (e).

(c) Except in the case of fraud, intentional misrepresentation or willful misconduct (for which all applicable legal and equitable remedies will be available to Buyer and the other Buyer Indemnified Persons subject to a cap of the Purchase Price), Buyer and the other Buyer Indemnified Persons shall only be entitled to assert claims under Section 8.02(a) (other than claims with respect to breaches of any of the Seller Fundamental Representations, which shall not be subject to the Liability Cap (as such term is hereinafter defined), but shall be capped at the Purchase Price)) up to the aggregate amount of 7.5% of Purchase Price (the "Liability Cap"), which shall represent the sole and exclusive remedy of Buyer and the other Buyer Indemnified Parties for any such claims under Section 8.02(a).

(d) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Loss is limited to the amount of any liability or damage that remains after

deducting therefrom any insurance proceeds actually received and any indemnity, contribution or other similar payment received or reasonably expected to be received by the Indemnified Party in respect of any such claim. The Indemnified Party shall use its commercially reasonable efforts to recover under insurance policies or indemnity, contribution or other similar agreements for any Losses before seeking indemnification under this Agreement.

(e) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Loss will be reduced by an amount equal to any Tax benefit realized or reasonably expected to be realized as a result of such Loss by the Indemnified Party.

(f) Each Indemnified Party shall take, and cause its Affiliates to take, all reasonable steps to mitigate any Loss upon becoming aware of any event or circumstance that would be reasonably expected to, or does, give rise thereto, including incurring costs only to the minimum extent necessary to remedy the breach that gives rise to such Loss.

(g) Subject to the provisions of Sections 3.01, 7.07, 15.11 and any other provisions for equitable relief and/or specific performance, the Parties acknowledge and agree that their sole and exclusive remedy with respect to any and all claims for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement, shall be pursuant to the indemnification provisions set forth in this Article VIII. In furtherance of the foregoing, each Party waives, to the fullest extent permitted under Law, any and all rights, claims and causes of action for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement it may have against the other Party hereto and their Affiliates and each of their respective representatives arising under or based upon any Law, except pursuant to the indemnification provisions set forth in this Article VIII. Nothing in this Section 8.05(g) limits any Parties' right to seek and obtain any equitable relief and/or specific performance to which any Party is entitled pursuant to this Agreement.

Section 8.06. **Knowledge of Breach**

The Seller will not be liable under this Article VIII for any Losses based upon or arising out of any inaccuracy in or breach of any of the representations or warranties of Seller contained in this Agreement if Buyer had actual knowledge of such inaccuracy or breach before the Closing Date. Buyer will not be liable under this Article VIII for any Losses based upon or arising out of any inaccuracy in or breach of any of the representations or warranties of Buyer contained in this Agreement if Seller had actual knowledge of such inaccuracy or breach before the Closing Date.

## ARTICLE IX.

## PRE-CLOSING COVENANTS OF THE SELLER

Section 9.01. **Operation of the System**

Except as otherwise expressly permitted by this Agreement, as required by applicable Law or with the prior written consent of Buyer (which consent shall not be unreasonably withheld, delayed or conditioned), from the Effective Date until the Closing, the Seller shall (i) operate and manage the System only in the ordinary course of business in accordance with past practices and

procedures, (ii) comply in all material respects with all applicable Laws and Authorizations and Permits, and (iii) use commercially reasonable efforts to maintain and preserve intact the business and assets of the System and preserve the rights, franchises, goodwill and relationships of the Seller and the System and their customers, lenders, suppliers, regulators and others having business relationships with the Seller and the System including, but not limited to, the land development agreements in existence as of the Effective Date which such agreements shall not be materially amended without notice to and the consent of Buyer, which consent shall not be unreasonably withheld or delayed.

Section 9.02. **Cooperation**

The Seller shall reasonably cooperate with Buyer and its employees, attorneys, accountants and other agents and, generally, act in reasonably good faith to timely carry out the purposes of this Agreement and the consummation of the transactions contemplated by this Agreement.

Section 9.03. **Supplements and Updates**

The Seller shall promptly deliver to Buyer any supplemental information updating the information in the representations and warranties set forth in Article IV of this Agreement so that such representations and warranties as supplemented by such information will be true and correct as of the Closing Date (or such other date as provided in such representations and warranties) as if then made. Within at least ten (10) Business Days of having Knowledge of the same, but in no event later than (3) Business Days before the Closing Date, the Seller shall advise Buyer of any facts which would constitute a breach of a representation or warranty as of the date made or a default in a covenant contained in this Agreement. Subject to Section 8.06, no supplemental information or facts provided by Seller pursuant to this Section 9.03 shall be deemed to have cured any breach of any representation or warranty contained in this Agreement, including for purpose of the indemnification rights contained in this Agreement. For the avoidance of doubt, no such supplemental information or facts provided pursuant to this Section 9.03 shall be deemed to alter any Schedules without the prior written consent of Buyer (such consent not to be unreasonably withheld, conditioned or delayed).

Section 9.04. **Governmental Approvals**

Promptly after the execution of this Agreement, or as required by Law, except as provided in Section 7.06 or otherwise expressly provided herein, the Seller shall file all applications, reports, and requests for consent that are required to be filed by Seller with any Governmental Authority, as provided on Schedule 4.05. The Seller shall also promptly provide all information that any Governmental Authority may require in connection with any such application or report. The Seller shall use commercially reasonable efforts to obtain all required material consents, waivers, authorizations or approvals of any Governmental Authority, including all those listed on Schedule 4.05, or of any other Person in connection with the transactions contemplated by this Agreement. All such consents, waivers, authorizations, or approvals of any Governmental Authority necessary to consummate the transactions contemplated by this Agreement shall be in form and content reasonably satisfactory to Buyer and the Seller before Closing and must be final and non-appealable. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

## ARTICLE X.

## PRE-CLOSING COVENANTS OF BUYER

Section 10.01. **Actions Before the Closing Date**

Buyer shall not take any action that will cause it to be in breach of any representation, warranty, covenant or agreement contained in this Agreement or cause it to be unable to perform in any material respect its obligations hereunder, and Buyer shall use commercially reasonable efforts (subject to any conditions set forth in this Agreement) to perform and satisfy all conditions to Closing to be performed or satisfied by Buyer under this Agreement, including action necessary to obtain all consents and approvals of third parties required to be obtained by Buyer to effect the transactions contemplated by this Agreement.

Section 10.02. **Governmental Approvals**

Promptly after the execution of this Agreement, or as required by Law, except as otherwise expressly provided herein, Buyer shall file all applications and reports which are required to be filed by Buyer with any Governmental Authority as provided on Schedule 5.04. Buyer shall also promptly provide all information that any Governmental Authority may reasonably require in connection with any such application or report. Buyer shall use commercially reasonable efforts to obtain all consents, waivers, authorizations or approvals of any Governmental Authority, or of any other Person of any kind in connection with the transactions contemplated by this Agreement.

Section 10.03. **Cooperation**

Buyer shall reasonably cooperate with the Seller and their employees, attorneys, accountants and other agents and, generally, do such other acts and things in good faith as may be reasonable to timely carry out the purposes of this Agreement and the consummation of the transactions contemplated in accordance with the provisions of this Agreement.

Section 10.04. **Supplements and Updates**

Buyer shall promptly deliver to the Seller any supplemental information updating the information in the representations and warranties set forth in Article V of this Agreement so that such representations and warranties as supplemented by such information will be true and correct as of the Closing Date (or such other date as provided in such representations and warranties) as if then made. Within ten (10) Business Days of having Knowledge of the same, and at least three (3) Business Days before the Closing Date, Buyer shall advise the Seller of any facts which would constitute a breach of a representation or warranty as of the date made or a default in a covenant contained herein.

## ARTICLE XI.

## CONDITIONS PRECEDENT TO OBLIGATIONS OF THE SELLER

The obligation of the Seller to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by the Seller in its sole discretion:

Section 11.01. **Consents and Approvals**

Receipt of all required consent, waiver, authorization or approval of any Governmental Authority, or of any other Person and any other approvals necessary to consummate the transactions contemplated by this Agreement set forth on Schedule 5.04, including without limitation all required EPA and PaDEP approvals, and all such Authorizations and Permits and Governmental Approvals must be final (and not subject to any appeal and any applicable appeal period having expired). Seller shall obtain the consent of any Governmental Authority as required by the PaPUC.

Section 11.02. **Representations and Warranties of Buyer**

The representations and warranties made by Buyer in Article V which are (a) not qualified by materiality shall be true and correct in all material respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all material respects as of such specified date) and (b) qualified by materiality shall be true and correct in all respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all respects as of such specified date), and the Seller shall have received a certificate to the effect of the foregoing from a duly authorized officer of Buyer dated as of the Closing Date.

Section 11.03. **PaPUC Approval**

PaPUC must have issued a Final Order approving the acquisition of the System under terms and conditions that are reasonably acceptable to the Seller and the Buyer. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

Section 11.04. **No Injunctions**

Neither the Seller nor the Buyer shall be subject to any injunction, preliminary restraining order or other similar decree of a court of competent jurisdiction prohibiting the consummation of the transactions contemplated by this Agreement.

Section 11.05. **Performance of the Obligations of Buyer**

Buyer shall have performed in all material respects all obligations required under this Agreement to be performed by Buyer on or before the Closing Date, and the Seller shall have received a certificate to that effect from Buyer dated the Closing Date.

Section 11.06. **Deliveries by Buyer**

Buyer shall have made delivery to the Seller of the documents and items specified in Section 13.03 herein.

Section 11.07. **No Material Adverse Effect**

There shall not have occurred any event or condition which gives rise to a Material Adverse Effect with respect to the Acquired Assets or the System.

## ARTICLE XII.

## CONDITIONS PRECEDENT TO OBLIGATIONS OF BUYER

The obligation of Buyer to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by Buyer in its sole discretion:

Section 12.01. **Consents and Approvals**

(a) Receipt of all required material, non-governmental third party consents and any other approvals necessary or advisable to consummate the transactions contemplated by this Agreement set forth on Schedule 4.05 and all consents, waivers, authorizations and approvals of any Governmental Authority required pursuant to Section 5.04, including without limitation all required EPA and PaDEP approvals/renewals and all such Authorizations and Permits and Governmental Approvals must be final (and not subject to any appeal and any applicable appeal period having expired);

(b) The discharge of any outstanding debt of Seller which has resulted in any lien or other encumbrance on the System; and

(c) Seller shall have taken all actions to acquire title to the System and the Acquired Assets required to permit Seller to convey the System and the Acquired Assets to Buyer as required under this Agreement.

Section 12.02. **Representations and Warranties of Seller**

The representations and warranties made by the Seller in Article IV of this Agreement (disregarding all "materiality" and "Material Adverse Effect" or similar qualifications contained therein) shall be true and correct on and as of the Closing Date (except for representations and warranties expressly stated to relate to a specific date, in which case each such representation and warranty shall be true and correct as of such earlier date), with only such exceptions as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and the Buyer shall have received a certificate to that effect from the Seller dated as of the Closing Date.

Section 12.03. **PaPUC Approval**

PaPUC must have issued a Final Order approving the acquisition of the System under terms and conditions that are reasonably acceptable to the Seller and the Buyer. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

Section 12.04. **No Injunctions**

Neither the Seller nor the Buyer are subject to any injunction, preliminary restraining order or other similar decree of a court of competent jurisdiction prohibiting the consummation of the transactions contemplated by this Agreement.

Section 12.05. **No Material Adverse Effect**

There shall not have occurred any event or condition which gives rise to a Material Adverse Effect with respect to the Acquired Assets or the System.

Section 12.06. **Consent Order.**

If Buyer determines that a Consent Order and Agreement ("CO&A") with the PaDEP or any other regulatory agency is necessary in order to address compliance issues with respect to the System, Buyer may engage in the negotiation and entry into a CO&A between the Buyer and PaDEP in a form and substance and on terms and conditions reasonably satisfactory to Buyer. Buyer shall be responsible for all costs, expenses and efforts related to securing the CO&A with the PaDEP.

Section 12.07. **Deliveries by Seller**

Seller shall have made delivery to Buyer of the documents and items specified in Section 13.02 herein.

Section 12.08. **Performance of the Obligations of Seller**

Seller shall have performed in all material respects all obligations required under this Agreement to be performed by Seller on or before the Closing Date, and Buyer shall have received a certificate to that effect from Seller dated the Closing Date.

## ARTICLE XIII.

## CLOSING

Section 13.01. **Closing Date**

The Closing shall take place at a place in Pennsylvania that is mutually agreed upon by the Parties, at 10:00 a.m. eastern standard time on the earliest agreed upon date or within twenty (20) Business Days after the date upon which all the conditions precedent to Closing described in this Agreement have been fulfilled or waived and Buyer and the Seller receive the last of the required

consents, waivers, authorizations and approvals from the Governmental Authorities, in each case, for the transactions contemplated by this Agreement, or at such other place and time, by such other method, or on such other date, as may be mutually agreed to by the Parties (the "Closing Date"). For purposes of prorating revenues and expenses, the Closing will be deemed to be effective at 12:01 a.m., City of Beaver Falls, Beaver County, Pennsylvania time, on the Closing Date (the "Closing Effective Time"). For all other purposes, specifically including the Parties' indemnity obligations set forth in Article VIII, the Closing will be effective upon the receipt by the Seller of the Purchase Price.

Section 13.02. **Deliveries by the Seller**

At the Closing, the Seller, shall have delivered or cause to be delivered to Buyer executed copies of the following agreements, documents and other items:

(a) A Bill of Sale transferring all of the Acquired Assets comprising personal property, in the form attached hereto as Exhibit A;

(b) Possession of the Acquired Assets, including without limitation, the Real Property, the Easements and an interest in the Missing Easements, including a license from Seller to Buyer;

(c) A duly executed counterpart to an Assignment and Assumption Agreement with respect to the Assumed Liabilities (the "Assignment and Assumption Agreement"), in the form attached hereto as Exhibit B;

(d) The consents to transfer all of the Assigned Contracts and Authorizations and Permits (including environmental Authorizations and Permits), to the extent required hereunder;

(e) One or more special warranty or other deeds in recordable form reasonably acceptable to Buyer transferring fee simple title of Real Property, and one or more assignments in recordable form reasonably acceptable to Buyer with respect to the Easements (exclusive of any Missing Easements);

(f) Copies or originals of all Files and Records, materials, documents and records in possession of the Seller relating to the Real Property or the Assigned Contracts;

(g) Certificate of the Seller pursuant to Section 12.02 of this Agreement;

(h) Certificate of the Seller pursuant to Section 12.07 of this Agreement;

(i) Any documents duly executed by Seller required by the Title Company to issue final owner's title policies in accordance with the procedures set forth in Article VI;

(j) An opinion of special counsel to the Seller in the form attached hereto as Exhibit D;

(k) A duly executed counterpart to the Escrow Agreement;

(l) All such other instruments of conveyance or other documents as shall, in the reasonable opinion of Buyer and its counsel, be necessary to transfer to Buyer the Acquired Assets in accordance with this Agreement or to carry out the terms of this Agreement, duly executed and acknowledged by Seller, if necessary, and in a recordable form;

(m) A certification of Seller's non-foreign status in accordance with U.S. Treasury Regulation § 1.1445-2(b)(2); and

(n) A form W-9 properly completed by the Seller.

Section 13.03. **Deliveries by Buyer**

At the Closing, Buyer shall have delivered or caused to be delivered to the Seller the following agreements, documents and other items:

(a) Payment in full of the Purchase Price;

(b) A duly executed counterpart to the Assignment and Assumption Agreement;

(c) Certificate of Buyer pursuant to Section 11.02 of this Agreement;

(d) Certificate of Buyer pursuant to Section 11.05 of this Agreement;

(e) Evidence of PaPUC approval as provided in Section 12.03;

(f) A duly executed counterpart to the Escrow Agreement; and

(g) All such other instruments of assumption as shall, in the reasonable opinion of Seller and its counsel, be necessary for Buyer to assume the Assumed Liabilities in accordance with this Agreement.

## ARTICLE XIV.

## TERMINATION

Section 14.01. **Events of Termination**

This Agreement may, by notice given in the manner provided in this Agreement, be terminated and abandoned at any time before completion of the Closing:

(a) By the consent of both of the Seller and the Buyer;

(b) By either of the Seller or the Buyer if:

(i) the Closing shall not have occurred on or before the Outside Date; except that the Buyer shall have the one-time right to extend the Outside Date for

up to ninety (90) days if, in the Buyer's sole discretion, any such amount of time up to ninety (90) days is necessary to obtain a required Governmental Approval; or

(ii) any Governmental Authority shall have issued an order, decree or ruling or taken any other action, in each case permanently restraining, enjoining or otherwise prohibiting the material transactions contemplated by this Agreement and such order, decree, ruling or other action will have become final and non-appealable; provided, however, that the Party seeking termination pursuant to this clause (b) of this Section 14.01 is not in breach in any material respect of any of its representations, warranties, covenants or agreements contained in this Agreement;

(c) By the Seller (if Seller is not then in material breach of any provision of this Agreement) in the event of a material breach of any covenant or agreement to be performed or complied with by the Buyer pursuant to the terms of this Agreement or of any representation or warranty of the Buyer contained in this Agreement, which breach (i) has continued without cure for a period of sixty (60) days following written notice thereof by the Seller to the Buyer or if such breach cannot be cured and (ii) would result in a condition to Closing set forth in Article XI of this Agreement not being satisfied (which condition has not been waived by the Seller in writing); or

(d) By the Buyer (if Buyer is not then in material breach of any provision of this Agreement) in the event of a material breach of any covenant or agreement to be performed or complied with by the Seller pursuant to the terms of this Agreement or of any representation or warranty of the Seller contained in this Agreement, which breach (i) has continued without cure for a period of sixty (60) days following written notice thereof by the Buyer to the Seller or if such breach cannot be cured and (ii) would result in a condition to Closing set forth in Article XII of this Agreement not being satisfied (which condition has not been waived by the Buyer in writing).

This Agreement may not be terminated after completion of the Closing.

Section 14.02. **Effect of Termination**

If this Agreement is terminated by the Seller or the Buyer pursuant to Section 14.01, written notice thereof will forthwith be given to the other and all further obligations of the Parties under this Agreement will terminate without further action by any Party and without liability or other obligation of any Party to any other Party hereunder; except that no Party will be released from liability hereunder if this Agreement is terminated and the transactions abandoned because of any willful breach of this Agreement.

## ARTICLE XV.

## MISCELLANEOUS

Section 15.01. **Confidentiality**

Except as and to the extent required by applicable Law (including but not limited to the Pennsylvania Right-To-Know Act at 65 Pa § 67.101) or pursuant to an order of a court of

competent jurisdiction and as required hereunder to obtain any and all required Governmental Approvals, no Party hereto shall, directly or indirectly, disclose or use (and no Party shall permit its representatives to disclose or use) any Confidential Information with respect to any other Party furnished, or to be furnished, by such other Party hereto or its shareholders, directors, officers, agents, or representatives to the other Party hereto or its employees, directors, officers, agents or representatives in connection herewith at any time or in any manner other than in connection with the completion of the transactions contemplated by this Agreement and related transactions.

Section 15.02. **Public Announcements** Subject to applicable Law or listing rules of an exchange on which Buyer's parent corporation's stock is listed, and except as otherwise set forth in this Agreement, the initial public announcement relating to the transactions contemplated herein will be mutually agreed upon and jointly made by the Parties. Subsequent public announcements by one Party are subject to review and approval by the other Parties before issuance, such approval not to be unreasonably withheld, conditioned or delayed.

Section 15.03. **Notices**

The Parties shall make all notices, other communications and approvals required or permitted by this Agreement in writing, stating specifically that they are being given pursuant to this Agreement and shall be addressed as follows:

in the case of the Seller:

Attention:

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010
Attention: City Manager

with a copy to:

Solicitor of Beaver Falls
Santicola, Steele & Fedeles, P.C.
722 Turnpike St.
Beaver, PA 15009
Attn: Shannon Steele

in the case of the Buyer:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attention: Marc A. Lucca, President
malucca@aquaamerica.com

With a copy to:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attention: Frances P. Orth, Vice President and Senior Managing Counsel
fporth@aquaamerica.com

or such other persons or addresses as a Party may from time to time designate by notice to the other Party. A notice, other communication or approval is deemed to have been sent and received (i) on the day it is delivered, or if such day is not a Business Day or if the notice is received after ordinary office hours (time of place of receipt), the notice, other communication or approval is deemed to have been sent and received on the next Business Day, or (ii) on the fourth Business Day after mailing if sent by United States registered or certified mail.

Section 15.04. **Headings**

The article, section and paragraph headings in this Agreement are for reference purposes only and have no affect the meaning or interpretation of this Agreement.

Section 15.05. **Severability**

If any term, provision, covenant or restriction contained in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions contained in this Agreement remain in full force and effect and in no way be affected, impaired or invalidated.

Section 15.06. **Entire Agreement**

This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof and supersedes all prior agreements, negotiations, discussions and understandings, written or oral, between the Parties. There are no representations, warranties, conditions or other agreements, whether direct or collateral, or express or implied, that form part of or affect this Agreement, or that induced any Party to enter into this Agreement or on which reliance is placed by any Party, except as specifically set forth in this Agreement. The Parties acknowledge and agree that (i) each has substantial business experience and is fully acquainted with the provisions of this Agreement, (ii) the provisions and language of this Agreement have been fully negotiated and (iii) no provision of this Agreement shall be construed in favor of any Party or against any Party because of such provision of this Agreement having been drafted on behalf of one Party rather than the other Party.

Section 15.07. **Amendments; Waivers**

This Agreement may be amended, changed or supplemented only by a written agreement signed by the Parties. Any waiver of, or consent to depart from, the requirements of any provision of this Agreement will be effective only if it is in writing and signed by the Party giving it, and only in the specific instance and for the specific purpose for which it has been given. No failure on the part of any Party to exercise, and no delay in exercising, any right under this Agreement will

operate as a waiver of such right. No single or partial exercise of any such right precludes any other or further exercise of such right or the exercise of any other right.

Section 15.08. **Parties in Interest; Third Party Beneficiary**

Except as provided in this Agreement, this Agreement is not intended to and shall not be construed to create upon any Person other than the Parties any rights or remedies hereunder.

Section 15.09. **Successors and Assigns**

Neither Party to this Agreement may assign any right or delegate any performance under this Agreement without the prior written consent of the other Party, and any purported assignment or purported delegation without prior written consent is void. This Agreement is binding upon, and inures to the benefit of, the Parties and their respective permitted successors and assigns.

Section 15.10. **Governing Law; Jurisdiction**

The laws of the Commonwealth of Pennsylvania (without giving effect to its conflicts of law principles) govern all matters arising and relating to this Agreement, including torts. The Parties irrevocably agree and consent to the jurisdiction of the United States District Court for the Western District of Pennsylvania and the Court of Common Pleas of Beaver County, Pennsylvania, for the adjudication of any matters arising under or in connection with this Agreement. Any action initiated in court shall be filed and litigated (including all discovery proceedings) exclusively in the United States District Court for the Western District of Pennsylvania and the Court of Common Pleas of Beaver County, Pennsylvania, and each Party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by mail to such Party's address set forth in this Agreement shall be effective service of process for any suit, action or other proceeding brought in any such court. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 15.11. **Specific Performance**

The Parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the Parties is entitled to specific performance of the terms hereof, in addition to any other remedy to which they are entitled at law or in equity.

Section 15.12. **Counterparts; Electronic Mail; Facsimile Execution**

This Agreement may be executed in any number of counterparts which, taken together, shall constitute one and the same agreement. This Agreement will be effective when it has been executed by each Party and delivered to both Parties. To evidence the fact that it has executed this Agreement, a Party may send a copy of its executed counterpart to the other Party by electronic mail or facsimile transmission. Such Party is deemed to have executed and delivered this Agreement on the date it sent such electronic mail or facsimile transmission. In such event, such Party shall forthwith deliver to the other Party an original counterpart of this Agreement executed by such Party.

[THIS SPACE INTENTIONALLY LEFT BLANK;

SIGNATURES NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized Representatives, this Agreement as of the Effective Date.

CITY OF BEAVER FALLS, BEAVER COUNTY

By: _____
Printed: George Quay III
Its: Mayor

**ATTEST**:

By: _____
Name: Charles R. Jones, Jr.
Its: City Manager

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____
Printed: _____
Its:

**ATTEST**:

By: _____
Name:
Its:

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized Representatives, this Agreement as of the Effective Date.

CITY OF BEAVER FALLS, BEAVER COUNTY

By: _____
Printed: George Quay III
Its: Mayor

**ATTEST**:

By: _____
Name: Charles R. Jones, Jr.
Its: City Manager

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____
Printed: MARC A. LUCCA
Its: PRESIDENT

**ATTEST**:

By: _____
Name: LANA MRAZ
Its: EXECUTIVE ASSISTANT

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

15. For each UVE in this case, please provide the following, if not already provided:

a. A list of valuations of utility property performed by the UVE;

b. A list of appraisals of utility property performed by the UVE

c. A list of all dockets in which the UVE submitted testimony to a public utility commission related to the appraisal of utility property; and

d. An electronic copy of or electronic link to testimony in which the UVE testified on public utility fair value acquisitions in the past two years.

Response:

a. Please see Mr. D'Ascendis' Curriculum Vitae attached as Appendix C to the ScottMadden Valuation Report.

b. Please see Mr. Dylan D'Ascendis' response to a., above.

c. Please see Mr. Dylan D'Ascendis' response to a., above.

d. In the past two years, Mr. D'Ascendis submitted testimony in the below dockets. Links to the dockets where Mr. D'Ascendis testified are below:

i. Borough of Shenandoah – A-2022-3034143
https://www.puc.pa.gov/docket/A-2022-3034143

ii. City of York – A-2021-3024681
https://www.puc.pa.gov/search/document-search/?DocketNumber=A-2021-3024681

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

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c. A list of all dockets in which the UVE submitted testimony to a public utility commission related to the appraisal of utility property; and

d. An electronic copy of or electronic link to testimony in which the UVE testified on public utility fair value acquisitions in the past two years.

Response:

a. Please see Mr. Walker's Curriculum Vitae attached as Appendix A to Mr. Walker's direct testimony, included as Exhibit Z to the Application (Aqua Statement No. 6). Starred items in Mr. Walker's Curriculum Vitae represent dockets where Mr. Walker presented testimony related to the appraisal of utility property.

b. Please see Mr. Walker's response to a. above.

c. Please see Mr. Walker's response to a. above.

d. In the past two years, Mr. Walker submitted testimony in the below dockets. Links to the dockets where Mr. Walker testified are below:

i. Borough of Royersford – A-2020-3019634
http://www.puc.state.pa.us/about_puc/consolidated_case_view.aspx?Docket=A-2020-3019634
ii. Valley Township – A-2020-3019859
http://www.puc.state.pa.us/about_puc/consolidated_case_view.aspx?Docket=A-2020-3019859
iii. Valley Township – A-2020-3020178
https://www.puc.pa.gov/docket/A-2020-3020178
iv. Upper Pottsgrove Township – A-2020-3021460
https://www.puc.pa.gov/docket/A-2020-3021460
v. Lower Makefield Township – A-2021-3024267
https://www.puc.pa.gov/docket/A-2021-3024267

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

vi. East Whiteland Township – A-2021-3026132
https://www.puc.pa.gov/docket/A-2021-3026132
vii. Willistown Township – A-2021-3027268
https://www.puc.pa.gov/docket/A-2021-3027268
viii. Borough of Shenandoah – A-20223034143
https://www.puc.pa.gov/docket/A-2022-3034143

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

16. Please explain each discount rate used in the appraisals, including explanations of the capital structure, cost of equity and cost of debt. State the basis for each input. Provide all sources, documentation, calculations and/or workpapers used in determining the inputs.

Response: Please see pages 5 and 6 of the ScottMadden Valuation Report. Detailed information supporting the discount rate can be found in Appendix H of the ScottMadden Valuation Report.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

16. Please explain each discount rate used in the appraisals, including explanations of the capital structure, cost of equity and cost of debt. State the basis for each input. Provide all sources, documentation, calculations and/or workpapers used in determining the inputs.

Response: Please see the direct testimony of Harold Walker III, included as Exhibit Z to the Application (Aqua Statement No. 6) at p. 19-22, Exhibit R to the Application (Gannett Appraisal), and CONFIDENTIAL Gannett electronic workpapers.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

17. Please explain whether the UVE used replacement cost or reproduction cost and why that methodology was chosen.

Response: ScottMadden used an original cost new ("OCN") method to calculate the trended original cost ("TOC") of the assets. The TOC was arrived at by using the Handy-Whitman Index which results in a current reproduction value. Please see the ScottMadden Valuation Report at pages 4 through 5 for an explanation of this methodology and why this method was chosen. The TOC study can be found in Schedule 1 of the ScottMadden Valuation Report.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

17. Please explain whether the UVE used replacement cost or reproduction cost and why that methodology was chosen.

Response: Gannett Fleming used the original cost new ("OCN") to calculate the trended original cost ("TOC") measures, or the reproduction cost of the depreciable assets by multiplying the OCN by specific cost indices. Gannett Fleming converted reproduction cost new to replacement cost new ("RCN") after factoring in obsolescence. It used the TOC method because the mandated use of the Engineering Assessment's original cost essentially dictates the use of TOC over the reproduction cost or the replacement cost methods. Please see the direct testimony of Harold Walker III, included as Exhibit Z to the Application (Aqua Statement No. 6) at p. 17-18 for an explanation of why this method was chosen.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

18. Please provide a copy of the source for the purchase price and number of customers for each comparable acquisition used in the appraisals.

Response: Please see Appendix F to the ScottMadden Valuation Report for the source documents supporting the purchase price and number of customers used in ScottMadden's Market Approach

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

18. Please provide a copy of the source for the purchase price and number of customers for each comparable acquisition used in the appraisals.

Response: Please see pages 9 to 76 of Exhibit 22 (workpapers) from Exhibit R to the Application (Gannett Appraisal) for the source for the purchase price and number of customers for each comparable acquisition used in the Gannett Appraisal.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

19. Have Buyer's and Seller's UVE corresponded with regard to their respective fair market value appraisals of the assets at issue in this case? If yes, provide the following information:

a. Identify the nature and date(s) of correspondence;

b. Identify the type(s) of correspondence (i.e. written, verbal, etc); and,

c. Provide copies of any written correspondence exchanged between the UVEs

Response: No.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Appraisals**

19. Have Buyer's and Seller's UVE corresponded with regard to their respective fair market value appraisals of the assets at issue in this case? If yes, provide the following information:

a. Identify the nature and date(s) of correspondence;

b. Identify the type(s) of correspondence (i.e. written, verbal, etc); and,

c. Provide copies of any written correspondence exchanged between the UVEs

Response: No. The Buyer's and Seller's UVE did not correspond with regard to their respective fair market value appraisals of the assets at issue in this case.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Miscellaneous**

20. Are there any outstanding compliance issues that the Seller's system has pending with the PA Department of Environmental Protection. If yes, provide the following information:

a. Identify the compliance issue(s);

b. Provide an estimated date of compliance;

c. Explain Buyer's anticipated or actual plan for remediation;

d. Provide Buyer's estimated costs for remediation; and,

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.

Response:

a.- d. Please see the Direct Testimony of Mark J. Bubel, Sr., Application Exhibit V (Aqua Statement No. 2) page 11-13. The Township did not have any sanitary sewer overflows ("SSOs") in the system in 2020 or 2021.

e. Please see responses from utility valuation experts.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Miscellaneous**

20. Are there any outstanding compliance issues that the Seller's system has pending with the PA Department of Environmental Protection. If yes, provide the following information:

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.

Response:

All prospective capital improvements from 2020-2050 were included in Mr. D'Ascendis' valuation appraisal, which would include any capital expenditures associated with any compliance issues pending with the PA Department of Environmental Protection.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Miscellaneous**

20. Are there any outstanding compliance issues that the Seller's system has pending with the PA Department of Environmental Protection. If yes, provide the following information:

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.

Response: Gannet Fleming's appraisal did not factor in specific projected remediation cost. However, the income approach does factor in (deduct) estimated capital expenditures when calculating future net cash flows. Historical remediation cost is reflected in the cost approach to the extent they are included in the Engineers Assessment's inventory.

**AQUA PENNSYLVANIA WASTEWATER, INC.**
**CITY OF BEAVER FALLS**
**Section 1329 Application Standard Data Requests**

**Miscellaneous**

21. Are there any outstanding compliance issues that the Seller's system has pending with the US Environmental Protection Agency. If yes, provide the following information:

a. Identify the compliance issue(s);

b. Provide an estimated date of compliance;

c. Explain Buyer's anticipated or actual plan for remediation;

d. Provide Buyer's estimated costs for remediation; and

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.

Response: Please see the responses to SDR-20. The DEP holds primacy regulatory authority in Pennsylvania.

# EXHIBIT B

# (Public Version)

**EXECUTION VERSION**

# ASSET PURCHASE AGREEMENT

**By and Between**

**City of Beaver Falls, Beaver County,**

**As Seller**

**and**

**Aqua Pennsylvania Wastewater, Inc.,**

**As Buyer**

**Dated as of October 20, 2021**

## TABLE OF CONTENTS


Page

**ARTICLE I.** DEFINITIONS ..... 1

**ARTICLE II.** TERMS OF PURCHASE AND ASSUMPTION OF LIABILITIES ..... 10

Section 2.01. Purchase and Sale of Acquired Assets ..... 10
Section 2.02. Excluded Assets ..... 11
Section 2.03. Sale Free of Liens ..... 12
Section 2.04. Assumption of Liabilities ..... 12
Section 2.05. Further Assurances ..... 13
Section 2.06. Certain Transfers; Assignment of Contracts ..... 13

**ARTICLE III.** PURCHASE PRICE ..... 15

Section 3.01. Purchase Price ..... 15
Section 3.02. Fair Consideration ..... 16
Section 3.03. Allocation Schedule ..... 16
Section 3.04. Transfer Taxes ..... 16

**ARTICLE IV.** REPRESENTATIONS AND WARRANTIES OF THE SELLER ..... 16

Section 4.01. Organization ..... 16
Section 4.02. Power and Authority ..... 16
Section 4.03. Enforceability ..... 17
Section 4.04. No Conflict or Violation ..... 17
Section 4.05. Consents and Approvals ..... 17
Section 4.06. Undisclosed Liabilities ..... 17
Section 4.07. Absence of Certain Changes or Events ..... 17
Section 4.08. Tax Matters ..... 17
Section 4.09. Real Property and Easements ..... 18
Section 4.10. Equipment and Machinery ..... 18
Section 4.11. Employee Benefit Plans ..... 18
Section 4.12. Seller's Personnel ..... 19
Section 4.13. Environmental Compliance ..... 20
Section 4.14. Authorizations and Permits ..... 21
Section 4.15. System Contracts ..... 22
Section 4.16. Compliance with Law; Litigation ..... 22
Section 4.17. Broker's and Finder's Fees ..... 22
Section 4.18. Title to the Acquired Assets; Sufficiency ..... 23
Section 4.19. Pending Development Plans ..... 23

**ARTICLE V.** REPRESENTATIONS AND WARRANTIES OF BUYER ..... 24

Section 5.01. Organization ..... 24
Section 5.02. Authorization and Validity of Agreement ..... 24

Section 5.03. No Conflict or Violation ..... 24
Section 5.04. Consents and Approvals ..... 24
Section 5.05. Broker's and Finder's Fees ..... 24
Section 5.06. Financial Wherewithal ..... 25
Section 5.07. Sufficient Funds ..... 25
Section 5.08. Independent Decision ..... 25
Section 5.09. Scheduled Matters ..... 25
Section 5.10. Independent Investigation ..... 25
Section 5.11. Litigation ..... 26

**ARTICLE VI.** TITLE TO REAL ESTATE; EASEMENTS ..... 26

Section 6.01. Evidence of Title ..... 26
Section 6.02. Objections to Title ..... 26
Section 6.03. Title Expenses ..... 28
Section 6.04. UCC Search; Releases ..... 28
Section 6.05. Easements. ..... 28

**ARTICLE VII.** OTHER AGREEMENTS ..... 30

Section 7.01. Taxes ..... 30
Section 7.02. Cooperation on Tax Matters ..... 30
Section 7.03. Personnel Matters ..... 30
Section 7.04. Initial and Future Rates ..... 33
Section 7.05. Buyer Taxpayer ..... 33
Section 7.06. PaPUC Approval ..... 33
Section 7.07. Remedies for Breach of Article VII Agreements ..... 34
Section 7.08. Operation and Maintenance of MS4 and Stormwater Systems ..... 34
Section 7.09. Pending Development Plans ..... 34
Section 7.10. Act 537 Plan ..... 35
Section 7.11. Utility Valuation Experts and Engineer Assessment ..... 36
Section 7.12. Compliance and Operational Reports ..... 36
Section 7.13. Implementation and Enforcement of Municipal Code ..... 36
Section 7.14. Covenant Survival ..... 36

**ARTICLE VIII.** INDEMNIFICATION ..... 36

Section 8.01. Survival ..... 36
Section 8.02. Indemnification by the Seller ..... 37
Section 8.03. Indemnification by Buyer ..... 37
Section 8.04. Indemnification Procedure ..... 38
Section 8.05. Limitations on Indemnification Obligations ..... 40
Section 8.06. Knowledge of Breach ..... 41

**ARTICLE IX.** PRE-CLOSING COVENANTS OF THE SELLER ..... 41

Section 9.01. Operation of the System ..... 41
Section 9.02. Cooperation ..... 42

Section 9.03. Supplements and Updates ....42
Section 9.04. Governmental Approvals ....42

**ARTICLE X.** PRE-CLOSING COVENANTS OF BUYER ....43

Section 10.01. Actions Before the Closing Date ....43
Section 10.02. Governmental Approvals ....43
Section 10.03. Cooperation ....43
Section 10.04. Supplements and Updates ....43

**ARTICLE XI.** CONDITIONS PRECEDENT TO OBLIGATIONS OF THE SELLER ....44

Section 11.01. Consents and Approvals ....44
Section 11.02. Representations and Warranties of Buyer ....44
Section 11.03. PaPUC Approval ....44
Section 11.04. No Injunctions ....44
Section 11.05. Performance of the Obligations of Buyer ....44
Section 11.06. Deliveries by Buyer ....45
Section 11.07. No Material Adverse Effect ....45

**ARTICLE XII.** CONDITIONS PRECEDENT TO OBLIGATIONS OF BUYER ....45

Section 12.01. Consents and Approvals ....45
Section 12.02. Representations and Warranties of Seller ....45
Section 12.03. PaPUC Approval ....45
Section 12.04. No Injunctions ....46
Section 12.05. No Material Adverse Effect ....46
Section 12.06. Consent Order. ....46
Section 12.07. Deliveries by Seller ....46
Section 12.08. Performance of the Obligations of Seller ....46

**ARTICLE XIII.** CLOSING ....46

Section 13.01. Closing Date ....46
Section 13.02. Deliveries by the Seller ....47
Section 13.03. Deliveries by Buyer ....48

**ARTICLE XIV.** TERMINATION ....48

Section 14.01. Events of Termination ....48
Section 14.02. Effect of Termination ....49

**ARTICLE XV.** MISCELLANEOUS ....49

Section 15.01. Confidentiality ....49
Section 15.02. Public Announcements ....50
Section 15.03. Notices ....50
Section 15.04. Headings ....51

Section 15.05. Severability ..... 51
Section 15.06. Entire Agreement ..... 51
Section 15.07. Amendments; Waivers ..... 51
Section 15.08. Parties in Interest; Third Party Beneficiary ..... 52
Section 15.09. Successors and Assigns ..... 52
Section 15.10. Governing Law; Jurisdiction ..... 52
Section 15.11. Specific Performance ..... 52
Section 15.12. Counterparts; Electronic Mail; Facsimile Execution ..... 53

Exhibits

Exhibit A Bill of Sale
Exhibit B Assignment and Assumption Agreement
Exhibit C Escrow Agreement
Exhibit D Form of Special Counsel Opinion

Schedules

Schedule 2.01(b) Acquired Assets
Schedule 2.02(e) Pre-Closing EDU Payments
Schedule 2.02(h) Excluded Assets
Schedule 3.03 Allocation Schedule
Schedule 4.05 Consents and Approvals
Schedule 4.06 Seller Liabilities
Schedule 4.07 Events Having a Material Adverse Effect
Schedule 4.08 Unpaid Taxes and Tax Claims
Schedule 4.09 Real Property and Easements; Liens
Schedule 4.10 Equipment and Machinery; Associated Liens
Schedule 4.11(a) Plans and Benefit Obligations
Schedule 4.11(b) Multiemployer Plans
Schedule 4.11(c) Benefit Obligations of Terminated and Retired Personnel
Schedule 4.11(e) Severance Agreements
Schedule 4.12(a) Collective Bargaining Agreements
Schedule 4.12(b) Personnel Disputes
Schedule 4.12(c) Labor Disruptions
Schedule 4.12(d) Personnel Payments
Schedule 4.13 Environmental Compliance
Schedule 4.14 Authorizations and Permits
Schedule 4.15 Assigned Contracts
Schedule 4.16 Litigation Involving Seller
Schedule 4.18(a) Title to Acquired Assets
Schedule 4.18(b) Sufficiency

Schedule 4.19 Pending Development Plans
Schedule 5.04 Consents and Approvals
Schedule 5.11 Litigation Involving Buyer
Schedule 6.05(e) Missing Easements
Schedule 7.03(a) Personnel
Schedule 7.04 Rates

## ASSET PURCHASE AGREEMENT

THIS ASSET PURCHASE AGREEMENT (this "Agreement"), dated as of October 20, 2021 (the "Effective Date"), is made and entered into by and between the City of Beaver Falls, Beaver County, a municipality and a city of the Third Class of the Commonwealth of Pennsylvania duly organized and existing under the Constitution and laws of said Commonwealth, (the "Seller"), and Aqua Pennsylvania Wastewater, Inc., (the "Buyer"), a Pennsylvania corporation.

### WITNESSETH:

**WHEREAS**, the Seller owns that certain sanitary wastewater collection and treatment system (the "System") that provides sanitary wastewater service to various individual and wholesale customers in the City of Beaver Falls, Pennsylvania and portions of Patterson Township, North Sewickley Township, West Mayfield Borough, White Township, Big Beaver Borough, Patterson Heights Borough, and Eastvale Borough, each in Beaver County, Pennsylvania (the "Service Area"); and

**WHEREAS**, Buyer is a regulated public utility that furnishes water and wastewater service to the public in various counties throughout Pennsylvania; and

**WHEREAS**, Buyer, in reliance upon the representations, warranties and covenants of the Seller herein, desires to purchase and acquire from the Seller, and the Seller, in reliance upon the representations, warranties and covenants of Buyer herein, desires to sell, transfer and convey to Buyer all of the assets of the System (other than the Excluded Assets), and in connection therewith, Buyer has agreed to assume certain ongoing obligations and liabilities of the Seller related to such acquired assets, all on the terms and conditions set forth in this Agreement.

**NOW, THEREFORE,** in consideration of the foregoing and of the mutual representations, warranties, covenants, and agreements contained in this Agreement, the receipt and sufficiency of which are acknowledged, intending to be legally bound, the Parties agree as follows:

### ARTICLE I.

### DEFINITIONS

In addition to the capitalized terms defined elsewhere in this Agreement, the following terms, as used in this Agreement (unless otherwise specified herein), have the meanings set forth in this Article I:

"**Acquired Assets**" has the meaning specified in Section 2.01.

"**Act 537**" has the meaning specified in Section 7.10.

"**Act 537 Plan**" has the meaning specified in Section 7.10.

"**Affiliate**" means, when used to indicate a relationship with a specified Person, a Person that, directly or indirectly, through one or more intermediaries has a 10% or more voting or economic interest in such specified Person or controls, is controlled by or is under common control with (which include, with respect to a managed fund or trust, the right to direct or cause the direction of the management and policies of such managed fund or trust as manager, advisor, supervisor, sponsor or trustee pursuant to relevant contractual arrangements) such specified Person, and a Person is deemed to be controlled by another Person if controlled in any manner whatsoever that results in control in fact by that other Person (or that other Person and any Person or Persons with whom that other Person is acting jointly or in concert), whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise (and for purposes of this definition, a managed fund or trust is deemed to be an Affiliate of the Person managing, supervising, sponsoring or advising such fund or trust and a limited partner in a managed fund or trust is deemed to be an Affiliate of such fund or trust and of the Person managing, supervising, sponsoring or advising such fund or trust).

"**Agreement**" has the meaning specified in the preamble to this Agreement (and includes all Schedules and Exhibits referred to herein), as amended, modified and supplemented from time to time in accordance with the terms hereof.

"**Allocation Schedule**" has the meaning specified in Section 3.03.

"**Assigned Contracts**" has the meaning specified in Section 4.15.

"**Assignment and Assumption Agreement**" has the meaning specified in Section 13.02(c).

"**Assumed Liabilities**" has the meaning specified in Section 2.04(a).

"**Authorizations and Permits**" mean all licenses, permits, franchises, authorizations, certificates, registrations, consents, orders, adjudications, variances, waivers and approvals currently in effect issued or granted by Governmental Authorities, including without limitation, environmental permits, operating permits and approvals that are held by the Seller that primarily relate directly or indirectly to the operation of the System, including those set forth on Schedule 4.14.

"**Business Day**" means any day that is neither a Saturday, a Sunday nor a day observed as a holiday by either the Commonwealth of Pennsylvania or the United States government.

"**Buyer**" has the meaning specified in the preamble of this Agreement.

"**Buyer Fundamental Representations**" has the meaning specified in Section 8.01.

"**Buyer Indemnified Persons**" has the meaning specified in Section 8.02.

"**CERCLA**" means the Comprehensive Environmental Response Compensation and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended.

"**Closing**" means the consummation of the sale and purchase of the Acquired Assets and assumption of the Assumed Liabilities, the release/waiver of liabilities and the other transactions contemplated by this Agreement, all in accordance with the terms and conditions of this Agreement and as provided for in Article XIII.

"**Closing Date**" has the meaning specified in Section 13.01.

"**Closing Effective Time**" has the meaning specified in Section 13.01.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Collective Bargaining Agreement**" means the existing collective bargaining agreements between the Seller and the Unions expiring December 31, 2021 and excludes any amendments or new collective bargaining agreements between the Seller and the Unions.

"**Confidential Information**" means any non-public information about Buyer, Seller or the System related to the transactions contemplated by this Agreement; except that such term does not include information which the receiving Party can demonstrate (a) is generally available to or known by the public other than as a result of improper disclosure by the receiving Party, (b) is obtained by the receiving Party from a source other than the disclosing Party, and that such source was not bound by a duty of confidentiality to the disclosing Party with respect to such information, or (c) is legally in the public domain.

"**Easements**" means all easements, rights of way, licenses, use agreements, occupancy agreements, leases and other agreements and appurtenances for and over the real property of third parties.

"**EDU**" means equivalent dwelling unit.

"**Effective Date**" has the meaning specified in the preamble.

"**Environment**" means soil, surface waters, ground waters, land, stream sediments, flora, fauna, surface or subsurface strata and ambient air.

"**Environmental Claims**" means all notices of investigations, warnings, notice letters, notices of violations, Liens, orders, claims, demands, suits or administrative or judicial actions for any injunctive relief, fines, penalties, third party claims, or other claims asserting violations of Environmental Requirements or responsibility for Environmental Liabilities.

"**Environmental Conditions**" means the Release of Hazardous Materials or the presence of Hazardous Materials on, in, under or within any property (including the presence in the Environment), other than the presence of Hazardous Materials in locations and at concentrations that are naturally occurring.

"**Environmental Liabilities**" means any legal obligation or liability arising under Environmental Requirements or related to or arising out of any Environmental Condition, including those consisting of or relating to any (a) duty imposed by, breach of or noncompliance with any Environmental Requirements; (b) environmental, health or safety matters or conditions

(including on-site or off-site contamination, occupational safety and health and regulation of Hazardous Materials); (c) Remedial Action undertaken by any Person; (d) bodily injury (including illness, disability and death, and regardless of when any such bodily injury occurred, was incurred or manifested itself), property damage (including trespass, nuisance, wrongful eviction and deprivation of the use of real or personal property), or other losses or damages incurred by any other Person (including any employee or former employee of such Person); (e) any injury to, destruction of, or loss of natural resources, or costs of any natural resource damage assessments; (f) exposure of any Person to any Hazardous Materials; and (g) the presence or Release of any Hazardous Materials.

"**Environmental Requirements**" mean all present Laws (including common law), regulations, legally binding or otherwise enforceable requirements and Authorizations and Permits relating to human health, pollution, or protection of the Environment (including ambient air, surface water, ground water, land surface or surface strata), including (i) those relating to emissions, discharges, Releases, or threatened Releases of Hazardous Materials, and (ii) those relating to the identification, generation, manufacture, processing, distribution, use, treatment, storage, disposal, release, recovery, transport or other handling of Hazardous Materials. Without limiting the foregoing, the term "**Environmental Requirements**" includes (1) CERCLA; the Superfund Amendments and Reauthorization Act, Public Law 99-499, 100 Stat. 1613; the Emergency Planning and Community Right to Know Act, 42 U.S.C. Sections 11001-11050; the Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901-6992k ("RCRA"); the Safe Drinking Water Act, 42 U.S.C. Sections 300f to 300j-26; the Toxic Substances Control Act, 15 U.S.C. Sections 2601-2692; the Hazardous Materials Transportation Act, 49 U.S.C. Sections 5101-5127; the Federal Water Pollution Control Act, 33 U.S.C. Sections 1251-1387; the Oil Pollution Act of 1990, 33 U.S.C. Sections 2701--2761; the Clean Air Act, 42 U.S.C. Sections 7401-7671q; the Atomic Energy Act of 1954, as amended, 42 U.S.C. Sections 2011 et seq.; the Low Level Radioactive Waste Policy Act, as amended, 42 U.S.C. Section 2021b et seq.; the Occupational Safety and Health Act, 29 U.S.C. Sections 651-678, and the regulations promulgated pursuant to the above-listed federal statutes, and (2) counterpart Laws and regulations promulgated or issued by any state or local Governmental Authority, specifically including the Pennsylvania Storage Tank and Spill Prevention Act of 1989 (35 Pa. C.S.A. § 6021.101 *et. seq.*).

"**EPA**" means the United States Environmental Protection Agency, or a successor Governmental Authority with substantially similar power and authority thereto.

"**Equipment and Machinery**" means (i) all the equipment, tangible personal property, machinery, office furniture and equipment, fixtures, tooling, spare maintenance or replacement parts, environmental testing equipment, and vehicles owned or leased by the Seller (including all leases of such property), which are primarily used in the operation of the System, (ii) any rights of the Seller to warranties applicable to the foregoing (to the extent assignable), and licenses received from manufacturers and Seller of any such item, and (iii) any related claims, credits, and rights of recovery with respect thereto. Notwithstanding the foregoing, "Equipment and Machinery" shall not include any Excluded Assets.

"**Excluded Assets**" has the meaning specified in Section 2.02.

"**Excluded Liability**" or "**Excluded Liabilities**" means all liabilities other than Assumed Liabilities.

"**Files and Records**" means all files and records of the Seller primarily relating to the System and the Acquired Assets, whether in hard copy, digital, magnetic or other format including customer and supplier records, customer lists (both current and prospective), personnel and human resources records, records of sales calls, manuals, books, files, records, engineering data, procedures, systems, instructions, drawings, blueprints, plans, designs, specifications, equipment lists, parts lists, equipment maintenance records, equipment warranty information, plant plans, specifications, geographical information systems data, and drawings, sales and advertising material, computer software, and records relating to the System, and whether stored on-site or off-site.

"**Final Order**" means a Governmental Approval by a Governmental Authority as to which (a) no request for stay of the action is pending, no such stay is in effect and if any time period is permitted by statute or regulation for filing any request for such stay, such time period has passed, (b) no petition for rehearing, re-argument, reconsideration, clarification, rescission, amendment, or supersedeas of the action is pending and the time for filing any such petition has passed, (c) such Governmental Authority does not have action under consideration on its own motion and (d) no appeal to a court or administrative tribunal or a request for stay by a court or administrative tribunal of the Government Authority's action is pending or in effect and the deadline for filing any such appeal or request for stay has passed.

"**Governmental Approval**" means any consent, approval, authorization, notice, filing, registration, submission, reporting, order, adjudication or similar item of, to or with any Governmental Authority.

"**Governmental Authority**" or "**Governmental Authorities**" means any court, department, commission, board, bureau, municipality, municipal authority (established pursuant to the Pennsylvania Municipal Authorities Act of the Commonwealth of Pennsylvania), agency or instrumentality of the United States, any state, county, city or political subdivision thereof, or any foreign governmental body, including without limitation, the PaPUC, the EPA, PaDEP, and the Municipal Council.

"**Hazardous Materials**" means any solid, liquid, gas, odor, heat, sound, vibration, radiation or other substance or emission which is a contaminant, pollutant, dangerous substance, toxic substance, hazardous waste, residual waste, solid waste, hazardous material or hazardous substance which is or becomes regulated by applicable Environmental Requirements or which is classified as hazardous or toxic under applicable Environmental Requirements (including gasoline, diesel fuel or other petroleum hydrocarbons, polychlorinated biphenyls, asbestos and urea formaldehyde foam insulation).

"**Indemnified Party**" means any Buyer Indemnified Persons or Seller Indemnified Persons, as applicable, entitled to indemnification pursuant to Article VIII.

"**Indemnifying Party**" means a Party which is obligated to indemnify the Buyer Indemnified Persons or the Seller Indemnified Persons, as applicable, pursuant to Article VIII.

"**Knowledge**" when used to qualify or limit a Party's representations or warranties means the knowledge of such Party's Representatives who are engaged in a material way in performing the functions of such Party with respect to which the representations or warranties are made, after conducting reasonable investigation and inquiry with respect to the subject matter of the representation.

"**Law**" means any applicable law, statute, regulation, ordinance, rule, order, judicial, administrative and regulatory decree, judgment, adjudication, consent decree, settlement agreement or governmental requirement enacted, promulgated, entered into, agreed or imposed by any Governmental Authority, as may be in effect at the relevant time or times in the context in which the term is used.

"**Liability Cap**" has the meaning specified in Section 8.05(c).

"**Lien**" means any lien in a fixed and ascertainable monetary sum, or any pledge, mortgage, deed of trust or security interest securing a fixed and ascertainable monetary sum, or any charge or claim in a fixed and ascertainable monetary sum. In addition, in connection with Real Property, any item otherwise falling within the definition of a "Lien" must be either (i) filed of record; or (ii) an item of which Seller has knowledge.

"**Loss**" means any and all losses, liabilities, obligations, damages, penalties, interest, Taxes, claims, actions, demands, causes of action, judgments, reasonable attorneys', consultants' and other professional fees, and all other reasonable costs and expenses sustained or incurred in investigating, preparing or defending or otherwise incident to any such claim, action, demand, cause of action or judgment or the enforcement of a Party's rights under Article VIII; except that "**Losses**" do not include punitive, incidental, consequential, special or indirect damages, including loss of future revenue or income, loss of business reputation or opportunity relating to the breach or alleged breach of this Agreement, or diminution of value or any damages based on any type of multiple, except in the case of fraud or to the extent actually awarded to a Governmental Authority or other third party in respect of a Third Party Claim.

"**Material Adverse Effect,**" means a material adverse effect on the business, financial condition or results of operations of the System; except that no effect arising out of or in connection with or resulting from any of the following will be deemed, either alone or in combination, to constitute or contribute to a Material Adverse Effect: (i) general economic conditions or changes therein; (ii) financial, banking, currency or capital markets fluctuations or conditions (either in the United States or any international market and including changes in interest rates); (iii) conditions affecting the real estate, financial services, construction, water utility or sewer utility industries generally; (iv) any existing event, circumstance, condition or occurrence of which the Buyer has actual knowledge as of the Effective Date; (v) any action, omission, change, effect, circumstance or condition contemplated by this Agreement or attributable to the execution, performance or announcement of this Agreement or the transactions contemplated by this Agreement; and (vi) negligence, intentional misconduct or bad faith of the Buyer or its Representatives.

"**Missing Easements**" means, as of any particular date, each Easement that is for or used in connection with the operation of the System or to provide continuous and unimpeded rights of

way for the Acquired Assets (including access thereto) that either (a) has not been obtained by the Seller and is for or used in connection with the operation of the System or (b) if such Easement has been obtained by the Seller, such Easement is unrecorded or such Easement is not sufficient to operate the System as currently conducted.

"**Municipal Council**" has the meaning set forth in the recitals to this Agreement.

"**Non-Union Personnel**" means Personnel who are not members of the Unions.

"**Outside Date**" means the date that is 365 days after the date the application to the PaPUC is accepted as complete by the PaPUC.

"**PaDEP**" means the Pennsylvania Department of Environmental Protection, or any successor Governmental Authority with substantially similar powers thereto.

"**PaPUC**" means the Pennsylvania Public Utility Commission, or any successor Governmental Authority with substantially similar powers thereto.

"**Party**" means Buyer or the Seller and the term "Parties" means collectively Buyer and the Seller.

"**PCB Equipment**" means PCB equipment as defined in 40 C.F.R. Part 761.

"**Pending Development Plan**" means any project for the development of real property which is the subject of a subdivision or land development plan that has been submitted to the Seller for approval, or for which the Seller already has granted approval but which has yet to be constructed, pursuant to the Pennsylvania Municipal Planning Code as of the Effective Date (and as updated before the Closing Date), as provided in Schedule 4.19.

"**Permitted Liens**" means (a) Liens for Taxes not yet due and payable or being contested in good faith by appropriate procedures; (b) easements, rights of way, zoning ordinances and other similar encumbrances affecting Real Property and Easements as set forth on Schedule 4.09; (c) other than with respect to Real Property and Easements owned by Seller, Liens arising under original purchase price conditional sales contracts and equipment leases with third parties entered into in the ordinary course of business; (d) other imperfections of title or Liens, if any, that have not had, and would not have, caused a Material Adverse Effect; and (e) any encumbrances, Liens, or other exceptions to title insurance coverage set forth in the Title Commitment not identified, but permitted to be identified, in the Objection Notice in accordance with the procedures and deadlines prescribed in Sections 6.02(a) and 6.05(b).

"**Person**" means any individual (including, the heirs, beneficiaries, executors, legal representatives or administrators thereof), corporation, partnership, joint venture, trust, limited liability company, limited partnership, joint stock company, unincorporated association or other entity or a Governmental Authority.

"**Personnel**" means the employees of the Seller who are primarily employed in connection with the System or are necessary to operate the System and includes Union Personnel and Non-Union Personnel.

"**Purchase Price**" has the meaning specified in Section 3.01.

"**Real Property**" has the meaning specified in Section 4.09.

"**Regulated Asbestos Containing Material**" means regulated asbestos containing material as defined by 40 C.F.R. § 61.141.

"**Release**" means any actual or threatened spilling, leaking, pumping, pouring, injecting, emptying, discharging, emitting, escaping, leaching, dumping, disposal, or release or migration of Hazardous Materials into the Environment, including the abandonment or discarding of barrels, containers and other receptacles containing any Hazardous Materials.

"**Remedial Action**" means any and all actions to (a) investigate, clean up, remediate, remove, treat, contain or in any other way address any Hazardous Materials in the Environment, (b) prevent the Release or threat of Release or minimize the further Release of any Hazardous Materials so it does not migrate or endanger public health or welfare or the indoor or outdoor Environment, and (c) perform pre-remedial studies and investigations and post-remedial monitoring, maintenance and care. The term "**Remedial Action**" includes any action which constitutes (i) a "removal", "remedial action" or "response" as defined by Section 101 of CERCLA, 42 U.S.C. §§ 9601(23), (24), and (25); (ii) a "corrective action" as defined in RCRA, 42 U.S.C. § 6901 et seq.; or (iii) a "response" or "interim response" as defined in the Pennsylvania Hazardous Sites Cleanup Act, 35 P.S. §6020.103.

"**Representative**" means, with respect to any Party, any director (including, in the case of the Seller, any member of the Municipal Council), officer, employee, official, lender mortgagee, financier, provider of any financial instrument (or any agent or trustee acting on their behalf), partner, member, owner, agent, lawyer, accountant, auditor, professional advisor, consultant, engineer, contractor, other Person for whom such Person is at law responsible or other representative of such Person and any professional advisor, consultant or engineer designated by such Person as its "Representative."

"**Schedules**" means the disclosure schedules delivered by Seller and Buyer, respectively, concurrently with the execution and delivery of this Agreement, and as may be supplemented and updated pursuant to Sections 9.03 and 10.04. Any disclosure set forth on any particular Schedule are deemed disclosure in reference to all Schedules comprising the Schedules to which such disclosure is reasonably apparent.

"**Seller**" has the meaning specified in the preamble of this Agreement.

"**Seller Fundamental Representations**" has the meaning specified in Section 8.01.

"**Seller Indemnified Persons**" has the meaning specified in Section 8.03.

"**Seller's Benefit Obligations**" means all material obligations, arrangements, or practices, whether or not legally enforceable, to provide benefits, other than salary or wages to present or former directors, employees or agents, (other than obligations, arrangements and practices that are Seller's Plans), that are owed, adopted or followed by the Seller. Seller's Benefit Obligations also include consulting agreements under which the compensation paid does

not depend upon the amount of service rendered, sabbatical policies, severance payment policies and fringe benefits within the meaning of Code §132.

"**Seller's Plans**" means each voluntary employees' beneficiary association under Section 501(c)(9) of the Code whose members include any Personnel and any employee benefit plans or any other retirement, pension, profit sharing, stock option, stock bonus, deferred compensation (including any "nonqualified deferred compensation plan" within the meaning of Section 409A of the Code), severance, sick leave or other material plan or arrangement providing benefits to current or former Personnel, in each case, if either currently in effect or terminated within the last six (6) years, to which the Seller is a plan sponsor or to which the Seller otherwise contributes or has contributed within the last six (6) years, or in which the Seller otherwise participates or has participated within the last six (6) years.

"**Seller DEP Permits**" means the National Pollutant Discharge Elimination System Permit No. PA0026883 and Water Quality Management Permit No. 0472402 (Part 2), each issued by PaDEP to Seller with respect to the System, including any revisions or amendments thereto.

"**Service Area**" has the meaning specified in the recitals to this Agreement.

"**Supplies**" means all lubricants, spare parts, fuel, chemicals, raw materials, and other supplies and inventory as related to the Acquired Assets, and all rights to warranties received from suppliers with respect to the foregoing, and related claims, credits, and rights of recovery with respect thereto.

"**System**" has the meaning specified in the recitals to this Agreement and includes the Acquired Assets and excludes the Excluded Assets.

"**System Improvements**" has the meaning specified in Section 7.10(a).

"**Taxes**" means any federal, state, local or foreign income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, customs duties, permit fees, capital stock, franchise, profits, withholding, social security, unemployment, disability, real property, personal property, parking, sales, use, transfer, registration, value added, alternative or add-on minimum, estimated or other tax, levy, impost, stamp tax, duty, fee, withholding or similar imposition of any kind payable, levied, collected, withheld or assessed at any time, including any interest, penalty or addition thereto, whether disputed or not.

"**Threshold Amount**" has the meaning specified in Section 8.05(a).

"**Title Commitment**" has the meaning specified in Section 6.01.

"**Title Company**" has the meaning specified in Section 6.01.

"**Title Policy**" has the meaning specified in Section 2.03.

"**Transferred Personnel**" has the meaning specified in Section 7.03(a).

"**UCC Search**" has the meaning specified in Section 6.04.

"**Unions**" means, together, United Steelworkers 9305, Districts 8 and 10.

"**Union Personnel**" means Personnel who are members of the Unions.

"**Unscheduled Real Property**" has the meaning specified in Section 6.06.

"**Utility Valuation Expert**" means an expert that has applied and has been approved by the PaPUC and is currently, at the time of this Agreement, on the list of approved appraisers maintained by the PaPUC.

## ARTICLE II.

## TERMS OF PURCHASE AND ASSUMPTION OF LIABILITIES

Section 2.01. **Purchase and Sale of Acquired Assets**

Subject to the terms and conditions set forth in this Agreement, at Closing, Buyer shall purchase from the Seller and the Seller shall sell, transfer, assign and deliver to Buyer, free and clear of all Liens except for Permitted Liens, all of Seller's right, title and interest in and to all assets, facilities, business, goodwill, properties and rights of the Seller of every kind and description, whether tangible or intangible, real, personal or mixed, wherever situated, in each case used in, held for use in, or acquired or developed for use in, the System, or otherwise related to, or arising out of the operation or conduct of the System (whether or not any such assets have any value for accounting purposes or are carried or reflected on the books or financial records of the Seller), including any of the foregoing in which Seller is entitled to acquire such rights, but in all cases other than the Excluded Assets (the foregoing collectively referred to as the "Acquired Assets"), including:

(a) all real property and appurtenant interests necessary for the operation of the System, including without limitation (i) good and marketable fee simple title to the Real Property set forth on Schedule 4.09 hereof, and (ii) all Easements currently used or necessary to operate the System, including without limitation those set forth on Schedule 4.09;

(b) all sanitary wastewater related treatment and conveyance facilities, including but not limited to the Seller's (i) assets set forth on Schedule 2.01(b), (ii) sewage treatment plant located in the Service Area, and (iii) all collection system mains (whether gravity or force mains), laterals (from the collection system main to the edge-of-road or curb-line when the main is located within a public right-of-way or the edge of an easement where the main is located within private property), generators, manholes, pump stations, and other related appurtenances and any billing and collections related assets necessary to own and operate the System;

(c) all contracts, licenses and leases set forth on Schedule 4.15 to which the Seller is a party, including without limitation, all construction contracts, surety bonds, operation and maintenance agreements, management agreements, reserved capacity agreements, architect agreements and consultant agreements, and agreements relating to vehicles and other items of personal property (the "Assigned Contracts");

(d) all Supplies;

(e) all personal property and fixed assets, including all Equipment and Machinery, auxiliary equipment and plant equipment;

(f) all prepaid expenses and security deposits;

(g) all Files and Records;

(h) all Authorizations and Permits of or held by the Seller (to the extent transferrable to Buyer under applicable Law), including all Authorizations and Permits which are environmental permits, the Seller DEP Permits, other operating permits and those items set forth on Schedule 4.14 hereto; and

(i) all goodwill of the System.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY REGARDING THE FUTURE PROFITABILITY OR FUTURE EARNINGS PERFORMANCE OF THE ACQUIRED ASSETS OR THE SYSTEM OR ANY FUTURE RATEMAKING THAT MAY BE ALLOWED BY THE PAPUC FOR ANY OF THE ACQUIRED ASSETS. NOTWITHSTANDING THE FOREGOING, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE VALID UNTIL THE TIME OF CLOSING.

Section 2.02. **Excluded Assets**

Notwithstanding anything in the Agreement to the contrary, the Acquired Assets do not include the following (the "Excluded Assets"):

(a) all contracts, licenses and leases that are not Assigned Contracts;

(b) the seals, organizational documents, minute books, Tax returns, books of account or other records having to do with the organization of Seller and all employee-related or employee benefit-related files or records;

(c) cash (including any cash resulting from the payment to the Seller for EDUs received on or before the Closing Date as listed in Schedule 2.02(e)) and cash equivalents, including accounts receivable on or before the Closing Date and existing financial security guaranteeing installation of public improvements (including wastewater facilities);

(d) all insurance policies of Seller and all rights to applicable claims and proceeds thereunder;

(e) all Seller's Plans and trusts or other assets attributable thereto;

(f) other than to the extent relating to any Assumed Liability, all rights to any action, suit or claim of any nature available to or being pursued by Seller, whether arising by way of counterclaim or otherwise;

(g) all assets, properties and rights used by Seller other than those which primarily relate to the operations of the System;

(h) the assets, properties and rights specifically set forth on Schedule 2.02(h);

(i) the rights which accrue or will accrue to Seller under this Agreement and any related agreement, exhibit or schedule;

(j) all municipal separate storm sewer system assets and stormwater assets of the Seller (and any related NPDES permits); and

(k) any and all connecting facilities originating from Seller's terminus point of the collection facilities at the main or edge of road to and throughout the customer's property, including grinder pumps, if any.

Section 2.03. **Sale Free of Liens**

After Buyer fulfills its obligations pursuant to Section 3.01(b), on the Closing Date, the Acquired Assets will be free and clear of all Liens other than Permitted Liens. The Seller shall convey such Acquired Assets by appropriate special warranty or other deed (subject to Section 6.02(c)), bills of sale, endorsements, assignments and other instruments of transfer or conveyance described in the Agreement, or by transfer documents satisfactory in form and substance reasonably acceptable to Buyer and Seller and their counsel in their reasonable discretion. Buyer shall use commercially reasonable efforts to cause the Title Company at or prior to Closing to insure the Real Property, at the Title Company's filed rates, as a good and marketable title, free and clear of all Liens and exceptions to title insurance coverage, except for the Permitted Liens, pursuant to an owner's policy of title insurance on the American Land Title Association's ("ALTA") Owner's Form 2006, subject to the terms of Section 6.02 below (the "Title Policy").

Section 2.04. **Assumption of Liabilities**

(a) On the terms and subject to the conditions set forth in this Agreement and excluding the Excluded Liabilities, Buyer shall assume and agrees to pay, perform and discharge when due any and all liabilities and obligations of the Seller to the extent (1) arising under the Seller DEP Permits (arising from, related to, or based on events or circumstances occurring on or after the Closing Date), (2) arising under the Collective Bargaining Agreement or an amended and restated collective bargaining agreement (to the extent arising from, related to or based on events or circumstances occurring on or after the Closing Date and subject to the exclusions provided for in Section 7.03(h) of this Agreement), and (3) arising out of or relating to the System or the Acquired Assets on or after the Closing, including, without limitation, the following:

(i) all liabilities and obligations under the Assigned Contracts, including any liabilities arising under any Corrective Action Plan, and Authorizations and Permits, in

each case to the extent resulting from events that occur or conditions that arise on or after the Closing;

(ii) any litigation initiated against Seller related to the System or the Acquired Assets to the extent resulting from events that occur, or conditions that arise, on or after the Closing;

(iii) all liabilities and obligations for Taxes relating to the System, its operation, the Acquired Assets and the Assumed Liabilities attributable to the period beginning on the Closing Date; and

(iv) all other liabilities and obligations to the extent arising out of or relating to Buyer's ownership or operation of the System and the Acquired Assets on or after the Closing (all of the aforementioned liabilities in this Section 2.04(a) are referred to as the "Assumed Liabilities").

(b) Buyer shall not assume or be liable to pay any liabilities or obligations relating to the Excluded Liabilities or any other liabilities or obligations that are not Assumed Liabilities.

Section 2.05. **Further Assurances** At any time and from time to time after the Closing Date, the Seller shall, upon the request of Buyer, and Buyer shall, upon the request of the Seller, at the cost of requesting Party, promptly execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate, (a) the sale, conveyance, transfer, assignment and delivery hereunder of the Acquired Assets to Buyer, (b) the assumption by Buyer of any of the Assumed Liabilities, (c) performance by the Parties of any of their other respective obligations under this Agreement, (d) the vesting in Buyer of all right, title and interest in the Acquired Assets and the System as provided herein, and (e) any other matters reasonably requested by a Party to carry out the provisions, purposes and intent of this Agreement.

Section 2.06. **Certain Transfers; Assignment of Contracts**

(a) Notwithstanding anything to the contrary in this Agreement, and subject to the provisions of this Section 2.06(a) and Section 2.06(b), to the extent that the sale, transfer, assignment, conveyance and delivery, or attempted sale, transfer, assignment, conveyance and delivery, to Buyer of any Assigned Contract or other Acquired Asset would result in a violation of applicable Law, or would require the consent, authorization, approval or waiver of any Person (other than the Parties hereto), including any Governmental Authority, and such consent, authorization, approval or waiver has not been obtained before the Closing, this Agreement shall not constitute a sale, transfer, assignment, conveyance and delivery, or an attempted sale, transfer, assignment, conveyance and delivery, thereof (any such Acquired Asset, a "Nonassignable Asset"). Following the Closing, the Seller and the Buyer shall use commercially reasonable efforts (at the cost and expense of the Party that is responsible for compliance with such Law or obtaining such consent, authorization, approval or waiver), and shall cooperate with each other, to obtain any such required consent, authorization, approval or

waiver, or any release, substitution, novation or amendment required to sell, transfer, assign, convey and deliver any such Nonassignable Asset to Buyer; except that in no event will Buyer be required to pay any consideration therefor. Once such consent, authorization, approval, waiver, release, substitution or amendment is obtained, the Seller shall sell, transfer, assign, convey and deliver to Buyer the relevant Acquired Asset to which such consent, authorization, approval, waiver, release, substitution or amendment relates for no additional consideration. Any applicable sales, transfer and other similar Taxes in connection with such sale, transfer, assignment, conveyance and delivery shall be paid one-half by Buyer and one-half by the Seller.

(b) Until such time as a Nonassignable Asset is transferred to Buyer pursuant to this Article II, Buyer and Seller shall cooperate in any commercially reasonable and economically feasible arrangements (such as subleasing, sublicensing or subcontracting) to provide to the Parties the economic and, to the extent permitted under applicable Law, operational equivalent of the transfer of such Nonassignable Asset to Buyer at the Closing and the performance by Buyer of its obligations with respect thereto, and so long as the Seller transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that constitutes a Nonassignable Asset, as agent or subcontractor for the Seller, pay, perform and discharge the liabilities and obligations of the Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would constitute Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, the Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by the Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which the Seller is a party which is not set forth on Schedule 4.15 as an Assigned Contract as of the Effective Date, and Buyer reasonably determines such contract is necessary to the operation of the System, Buyer shall give notice of such determination to the Seller and the Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 setting forth such contract, and such contract will thereafter constitute and be deemed an Assigned Contract for all purposes hereunder.

(d) If, during the twelve (12) month period following the Closing Date, Buyer identifies any contract to which the Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary to the operation of the System, the Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract will be deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE

Section 3.01. **Purchase Price**

The purchase price for the Acquired Assets is Forty-One Million, Two Hundred and Fifty Thousand Dollars ($41,250,000.00) (the "Purchase Price") which shall be paid as follows:

(a) Deposits

(i) Buyer shall pay One Million Dollars ($1,000,000) to Seller as a deposit on account of the Purchase Price (the "First Deposit") upon the third business day following the execution by Buyer and Seller of this Agreement; and

(ii) Buyer shall pay One Million Dollars ($1,000,000) to Seller as a deposit on account of the Purchase Price (the "Second Deposit" and, together with the First Deposit, the "Deposits") upon the third business day following the Buyer's receipt of notice from the PaPUC that the application to the PaPUC for the transaction contemplated by this Agreement has been conditionally accepted.

(iii) In the event that this Agreement is terminated for any reason, the Deposits shall be refundable to the Buyer within ninety days following the effective date of termination per Section 14.01, provided, however, if the Agreement is terminated by Seller pursuant to Section 14.01(c), then Seller shall be permitted to offset against Seller's obligation to refund the Deposits any damages recoverable by Seller per the terms of this Agreement.

(iv) Subject to subparagraph (iii) above, Seller shall be free to use the Deposits upon receipt as it determines in the Seller's sole discretion.

(v) The obligation to refund the Deposits hereunder shall be a general obligation of Seller and shall not be subject to the Threshold Amount or the Liability Cap set forth in Article VIII hereof.

(b) Subject to any adjustment in Purchase Price resulting from the proration procedures specified in Section 3.01(c) and the Missing Easement Escrow requirements in Section 6.05(e), Buyer shall pay to the Seller at Closing by wire transfer of immediately available funds the balance of the Purchase Price (taking into account the Deposits) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date.

(c) Final Billing: The Buyer is entitled to all customer billings with respect to sanitary wastewater services for the period on or after the Closing Effective Time, and the Seller is entitled to all such billings before the Closing Effective Time. The Parties shall cooperate to calculate an agreed upon proration of billing amounts and to credit the Purchase Price for the appropriate Party on the Closing Date, or through another agreed upon method to ensure billing amounts are provided to the appropriate Party.

Section 3.02. **Fair Consideration**

The Parties acknowledge and agree that the consideration provided for in this Article III represents fair consideration and reasonable equivalent value for the sale and transfer of the Acquired Assets and the transactions, covenants and agreements set forth in this Agreement, which consideration was agreed upon as the result of arm's-length good faith negotiations between the Parties and their respective Representatives.

Section 3.03. **Allocation Schedule**

The Purchase Price (which for purposes of this Section 3.03 shall include any liabilities required to be treated as part of the Purchase Price for federal income tax purposes), as may be adjusted pursuant to this Section 3.03, shall be allocated among the Acquired Assets in accordance with the allocation reflected in a schedule prepared by Buyer and attached hereto as Schedule 3.03.

Section 3.04. **Transfer Taxes**

Any and all deed stamps or transfer Taxes which may be due the Commonwealth of Pennsylvania or any political subdivision in connection with the sale, transfer, assignment, conveyance and delivery hereunder of the Acquired Assets to Buyer (collectively, "Transfer Taxes"), will be paid fifty percent (50%) by Buyer and fifty percent (50%) by Seller. The terms hereof shall survive Closing. For the purpose of calculating Transfer Taxes, Seller and Buyer agree that the amount specified in Schedule 3.03 as provided by the Buyer shall be allocated to real property assets.

## ARTICLE IV.

## REPRESENTATIONS AND WARRANTIES OF THE SELLER

The Seller makes only the specified representations and warranties which are set forth in this Article IV.

As a material inducement to Buyer to enter into this Agreement and to consummate the transactions contemplated by this Agreement, the Seller represents and warrants, as of the Effective Date (except to the extent any of the following representations and warranties specifically apply to or relate to another date, in which event such representations and warranties shall be true and correct as of such other date), as follows:

Section 4.01. **Organization**

The Seller is a municipality and a city of the Third Class of the Commonwealth of Pennsylvania duly organized and existing under the Pennsylvania Third Class City Code.

Section 4.02. **Power and Authority**

The Seller (i) duly adopted the authorizing ordinance or resolutions authorizing the transactions contemplated in this Agreement, which remains in full force and effect, (ii) duly authorized and approved the execution and delivery of this Agreement and (iii) duly authorized and approved

the performance by the Seller of its obligations contained in this Agreement. The Seller has all requisite power and authority to own, lease and operate the Acquired Assets and the System and has the power and authority to enter into this Agreement and to do all acts and things and execute and deliver all other documents as are required hereunder to be done, observed or performed by it in accordance with the terms hereof.

Section 4.03. **Enforceability**

This Agreement has been duly authorized, executed and delivered by the Seller and constitutes a valid and legally binding obligation of the Seller, enforceable against the Seller in accordance with the terms hereof, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and to general principles of equity.

Section 4.04. **No Conflict or Violation**

The execution and delivery of this Agreement by the Seller, the consummation of the transactions contemplated by this Agreement and the performance by the Seller of the terms, conditions and provisions hereof has not and will not contravene or violate or result in a breach of (with or without the giving of notice or lapse of time, or both) or acceleration of any obligations of the Seller under (i) any applicable Law or (ii) any agreement, instrument or document to which the Seller is a party or by which it is bound.

Section 4.05. **Consents and Approvals**

Schedule 4.05 sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration to or filing or registration with any Governmental Authority required in connection with the execution and delivery of this Agreement by the Seller or the performance by the Seller of its obligations hereunder.

Section 4.06. **Undisclosed Liabilities**

Except as set forth on Schedule 4.06, there are no liabilities or obligations of Seller, either accrued, absolute, contingent or otherwise, relating to the Assets other than liabilities incurred in the ordinary course that could not reasonably be expected to have a Material Adverse Effect.

Section 4.07. **Absence of Certain Changes or Events**

Except as set forth on Schedule 4.07, since December 31, 2019, there has not been any transaction or occurrence that has resulted or is reasonably likely to result in a Material Adverse Effect and the Seller, has operated and maintained the System since December 31, 2019 in the ordinary course.

Section 4.08. **Tax Matters**

Except as set forth on Schedule 4.08, that (i) the Seller has timely paid all Taxes that may have been or may be due and payable by the Seller on or before the Closing Date, arising from the ownership or operation of the Acquired Assets or the System on or before the Closing Date; (ii) no Taxing authority has asserted any claim against the Seller for the assessment of any additional

Tax liability or initiated any action or proceeding which could result in such an assertion; and (iii) the Seller has (x) made all withholding of Taxes required to be made under all applicable Laws and regulations, including without limitation, withholding with respect to compensation paid to employees, and the amounts withheld have been properly paid over to the appropriate Taxing authorities and (y) did not defer the withholding, deposit, and payment of any employee payroll taxes related to Personnel in 2020 pursuant to IRS Notice 2020-65, 2020-38 I.R.B. 567, or the Presidential Memorandum to the Secretary of the Treasury dated August 8, 2020; and (iv) Seller has at all times been exempt from U.S. federal income Tax and from income Taxes imposed by the Commonwealth of Pennsylvania (and its political subdivisions) and by other states (and their respective political subdivisions) and income and revenue produced by or with respect to the System and the Acquired Assets has at all times been excluded from gross income by virtue of the provisions of Section 115(1) of the Code.. This section does not apply to any Tax matter related to an employee benefit plan or compensation arrangement that is addressed separately in Section 4.11.

Section 4.09. **Real Property and Easements**

Schedule 4.09 sets forth all of Seller's fee interests in and to real property ("Real Property") Seller owns and uses in the operation of the System and separately sets forth the Easements. The Seller does not lease (as lessee) any real property that is used in the operation of the System. There are no pending condemnation proceedings relating to any of the Real Property or Easements nor has Seller actually received any written threats of any condemnation proceedings and, to the Knowledge of Seller, no such proceedings are threatened. The Seller has not received any written notices of any violations of any Law from any Governmental Authority with respect to the Real Property or the Easements which has not been cured in all material respects and, to Seller's Knowledge, no such violations of Law exist. With respect to the Real Property (i) there are no leases, options, rights of reversions or other rights of use or rights to acquire the Real Property held by third parties, (ii) Seller is in sole possession of the Real Property, and (iii) to Seller's Knowledge there are no encroachments either way across the boundary of the Real Property, nor any dispute with adjacent property owners over the location of boundaries or potential claims adverse to title.

Section 4.10. **Equipment and Machinery**

Schedule 4.10 sets forth all Equipment and Machinery included in the Acquired Assets. Except as set forth on Schedule 4.10, the Seller has good title, free and clear of all Liens (other than the Permitted Liens and Liens which are released on or before Closing) to the Equipment and Machinery owned by Seller.

Section 4.11. **Employee Benefit Plans**

(a) Schedule 4.11(a) contains a true and complete list of all Seller's Plans and Seller's Benefit Obligations, including amounts owed to current or past employees for severance, unpaid and unused vacation pay or sick leave, or similar obligations. All such Seller's Plans and Seller's Benefit Obligations are in full force and effect and are in material compliance both as to form and operation, with applicable provisions of Employee Retirement Income Security Act of 1974, as amended or the Code, and any other applicable Laws, and with any applicable collective

bargaining agreement. To Seller's Knowledge, no event has occurred which has resulted in the imposition of any liability on the Seller under the Code or other applicable Law with respect to any Seller's Plans or Seller's Benefit Obligations and there is no unfunded pension liability owed or owing to any Person pursuant to Seller's Plans that is required to be assumed by Buyer;

(b) Except as set forth on Schedule 4.11(b), the Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any "multiemployer plan" within the meaning of Section 414(f) of the Code, and has no liability of any nature, whether known or unknown, fixed or contingent, with respect to any such multiemployer plan;

(c) Except as set forth on Schedule 4.11(c), Seller does not sponsor, maintain, contribute to, nor is it required to contribute to, any medical, health, life or other welfare plan or benefits for present or future terminated or retired Personnel or their spouses or dependents, other than as required by COBRA, or any comparable state law, and has no liability of any nature, whether known or unknown, fixed or contingent, with respect to any such post-termination welfare benefits;

(d) The Seller is and has been in compliance in all material respects with the requirements of COBRA and is not subject to any excise Tax under Code Section 4980B for the current or any prior taxable year; and

(e) Except as set forth on Schedule 4.11(e), the Seller has not entered into any severance or similar arrangement with respect to any present or former Personnel that will result in any obligation (absolute or contingent) of Buyer to make any payment to any present or former Personnel following termination of employment, including the termination of employment effected by the transactions contemplated by this Agreement. The consummation of the transactions contemplated by this Agreement will not trigger any severance or other obligation of the Seller for which Buyer shall have any liability.

Section 4.12. **Seller's Personnel**

(a) Schedule 4.12(a) sets forth all collective bargaining agreements and contractual relationships with Personnel relating to the System to which the Seller is a party, including the identification of the parties thereto and the expiration dates. Other than the collective bargaining agreements and relationships set forth on Schedule 4.12(a), there are no commitments, contracts, agreements, arrangements or understandings (whether written or oral, formal or informal) of the Seller with respect to the Unions or the Union Personnel, and the collective bargaining agreements set forth on Schedule 4.12(a) constitute the entire agreement between the Seller and the other parties thereto, with respect to the subject matter thereof.

(b) Except as set forth on Schedule 4.12(b), there are no labor disputes, grievances, arbitration proceedings or litigation pending, or to Seller's Knowledge threatened, between Seller and the Personnel.

(c) Except as set forth in Schedule 4.12(c), there is no strike, slowdown, work stoppage, lockout, refusal to work over time or other labor disruption or dispute affecting Seller or the Personnel underway or, to Seller's Knowledge, threatened or anticipated with respect to Seller or the Personnel, and no such labor disruption has occurred in the past two (2) years.

(d) Except as set forth on Schedule 4.12(d), the Seller shall timely pay, or cause to be timely paid, the Personnel as required under its policies and/or by applicable Law for accrued but unused and unpaid vacation, sick leave and other accrued benefits as of the Closing Date.

(e) The Seller has not, in the past five (5) years, effectuated:

(i) a "plant closing" (as defined in the Worker Adjustment and Retraining Notification Act ("WARN Act")) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the System; or

(ii) a "mass layoff" (as defined in the WARN Act) affecting any site of employment or facility of the System; nor has the System been affected by any transaction or engaged in layoffs or employment terminations sufficient in number to trigger application of any similar state or local Law.

None of the Personnel has suffered an "employment loss" (as defined in the WARN Act) during the previous six months.

Section 4.13. **Environmental Compliance**

Except as set forth on Schedule 4.13 or that otherwise could not be expected to have a Material Adverse Effect:

(a) To the Seller's Knowledge, the System as currently operated by the Seller and all operations and activities conducted by the Seller with respect to the System are in compliance in all material respects with all applicable Environmental Requirements.

(b) To the Seller's Knowledge, the Seller has generated, used, handled, treated, stored and disposed of all Hazardous Materials in (i) compliance in all material respects with all applicable Environmental Requirements and (ii) a manner that has not given, and could not reasonably be anticipated to give, rise to Environmental Liabilities.

(c) Except as has been disclosed to Buyer on Schedule 4.13, the Seller has not received notice of any Environmental Claims related to the System that have not been fully and finally resolved, and to the Knowledge of Seller no claims of Environmental Liabilities have been threatened allegedly arising from or relating to the System that have not been fully and finally resolved.

(d) To Seller's Knowledge, Hazardous Materials are not present in, at or on the System or the Acquired Assets and there has been no Release of Hazardous Materials at, on or from any part of the System or the Acquired Assets, in each case in a manner that violates any Environmental Requirements or has resulted in, or could reasonably be anticipated to give rise to, Environmental Liabilities which has not been appropriately resolved pursuant to applicable Environmental Requirements.

(e) No Lien or activity use limitation or institutional control has been recorded affecting any Acquired Assets by any Governmental Authority due to either the presence of any Hazardous Material on or off the Acquired Assets or a violation of any Environmental Requirement except as has been disclosed by Seller to Buyer.

(f) Except as has been disclosed to Buyer on Schedule 4.13, Seller is not aware of any underground storage tanks on or at any of the Acquired Assets. To the Seller's Knowledge, any underground storage tanks previously located at the Acquired Assets have been removed or otherwise closed, plugged and abandoned in compliance with applicable Environmental Requirements in effect at the time of such closure.

(g) Seller is not aware of any PCB Equipment on or at any of the Acquired Assets. To the Seller's knowledge, any PCB Equipment that previously existed at the Acquired Assets has been flushed of polychlorinated byphenyls or has been removed and properly disposed of in accordance with applicable Environmental Requirements in effect at the time of such disposal, and any remaining PCB Equipment is labeled to the extent required under applicable Environmental Requirements and being managed in compliance with applicable Environmental Requirements.

(h) Except as has been disclosed to Buyer on Schedule 4.13, Seller is not aware of any Regulated Asbestos Containing Material in or on the Acquired Assets in an aggregate amount that would reasonably be expected to result in an Environmental Liability; and to the Seller's knowledge, any Regulated Asbestos Containing Material is being managed in compliance with all applicable Environmental Requirements.

(i) The Seller has delivered to Buyer (1) all environmental site assessments pertaining to the System it is aware of within the previous five years, (2) all compliance audits or compliance assurance reviews prepared within the previous five (5) years relating to compliance with Environmental Requirements by the System, and (3) all documents pertaining to, any known and unresolved Environmental Liabilities incurred in relation to the System, to the extent possessed by or under the reasonable control of the Seller.

(j) Seller has disclosed the Phase 1 Environmental Site Assessment of the Beaver Falls Wastewater Treatment Plan, City of Beaver Falls, Pennsylvania, delivered in July 2021 (the "Phase 1 Report") to the Buyer. Information in the Phase 1 Report shall not be deemed to impute Knowledge to the Seller for purposes of the representations in Section 4.13 hereof, and Seller shall undertake no obligation to commission or provide to the Buyer a Phase II environmental site assessment.

Section 4.14. **Authorizations and Permits**

Schedule 4.14 sets forth the Authorizations and Permits of the Seller. The Seller has made true and complete copies of all Authorizations and Permits available to Buyer. Except as set forth on Schedule 4.14, the Seller is in compliance in all material respects with all terms, conditions and requirements of all Authorizations and Permits, except in each case where such violation or failure, individually or in the aggregate, would not have a Material Adverse Effect, and no proceeding is pending or, to the Knowledge of the Seller threatened relating to the revocation or

limitation of any of the Authorizations or Permits, other than those limitations which do not individually or in the aggregate have a Material Adverse Effect.

Section 4.15. **System Contracts**

(a) Schedule 4.15 sets forth a complete and accurate list of all the Assigned Contracts.

(b) The Seller has made available to Buyer true and complete copies of all the foregoing Assigned Contracts.

(c) All of the Assigned Contracts set forth on Schedule 4.15 are in full force and effect. Seller has not, nor to the Knowledge of the Seller has any other party thereto, breached any material provision of or defaulted under the material terms of, nor does any condition exist which, with notice or lapse of time, or both, would cause the Seller, or to the Knowledge of Seller, any other party, to be in default under any Assigned Contract.

Section 4.16. **Compliance with Law; Litigation**

(a) The Seller has operated and is operating the System in compliance, in all material respects, with all applicable Laws, Authorizations and Permits and is not in breach of any applicable Law, Authorization or Permit that would have a Material Adverse Effect on the operations of the System or on the Buyer. There are no Authorizations or Permits from any Governmental Authority necessary for the operation of the System as currently being operated except for those Authorizations and Permits listed in Schedule 4.14.

(b) Except as set forth on Schedule 4.16 (as updated pursuant to Section 9.03 hereof), there are no facts, circumstances, conditions or occurrences regarding the System that could reasonably be expected to give rise to any environmental claims or governmental enforcement actions that could reasonably be expected to have a Material Adverse Effect, and there are no past, pending or threatened environmental claims or governmental enforcement actions against the Seller that individually or in the aggregate could reasonably be expected to have a Material Adverse Effect.

(c) Except as set forth on Schedule 4.16, there is no action, suit or proceeding, at law or in equity, or before or by any Governmental Authority, pending or, to the Knowledge of the Seller, threatened against the Seller before or at the Closing Effective Time, which will have a Material Adverse Effect. There is no action, suit or proceeding, at Law or in equity, or before or by any Governmental Authority, pending nor, to the Knowledge of the Seller, threatened against the Seller which could materially affect the validity or enforceability of this Agreement.

Section 4.17. **Broker's and Finder's Fees**

No broker, finder, or Person is entitled to any commission or finder's fee by reason of any agreement or action of Seller in connection with this Agreement or the transactions contemplated by this Agreement. Seller has employed PFM Financial Advisors LLC, as municipal advisor to provide transaction structuring advice and to provide Seller with municipal advice relating to the

sale of the System. Seller is solely responsible to pay all fees owed to PFM Financial Advisors LLC in connection with the transactions contemplated by this Agreement.

Section 4.18. **Title to the Acquired Assets; Sufficiency**

(a) Except as set forth on Schedule 4.18(a), the Seller has good and marketable title to, valid leasehold interest in or valid licenses to use, all of the Acquired Assets, free and clear of all Liens, other than Permitted Liens and Liens which will be fully and unconditionally released at or before Closing. The use of the Acquired Assets is not subject to any Liens, other than Permitted Liens, and such use does not encroach on the property or the rights of any Person.

(b) Except as set forth on Schedule 4.18(b), the Acquired Assets are sufficient for, and constitute all the assets, properties, business, goodwill and rights of every kind and description, and services required for, the continued conduct and operation of the System by Buyer in substantially the same manner as currently conducted and operated by Seller. Except for the Excluded Assets and except as set forth on Schedule 4.18(b), (i) the Acquired Assets, taken as a whole, comprise all the assets, properties, business, goodwill and rights of every kind and description used or held for use in, or useful or necessary to the operation of the System as currently operated by Seller, and (ii) there are no assets, properties, business, goodwill, rights or services used in the conduct or operation of the System that are owned by any Person other than Seller that will not be licensed or leased to Buyer under valid, current license arrangements or leases. None of the Excluded Assets are material to the System.

Section 4.19. **Pending Development Plans**

Schedule 4.19 sets forth a full and complete list of all Pending Development Plans for which Seller has received notice as of the Effective Date. Each Pending Development Plan, if consummated, could result in additional customers and reduction of available treatment capacity. Schedule **Error! Reference source not found.** also identifies all agreements with third parties with respect to current or pending extensions of the System or any other sanitary sewer system that is connected to the System together with any financial security held by Seller with respect to such extensions. Seller provides no assurances whatsoever that any development or expansion of the Service Area associated with any Pending Development Plan will actually be undertaken or completed. The Parties expect that Schedule 4.19 will change from time to time between the Effective Date and Closing, and the Seller shall provide updates to Schedule 4.19 upon the occurrence of any significant change, decision or development and shall further deliver such updates pursuant to Section 9.03.

Section 4.20. **Customer Service Laterals and Grinder Pumps**

The Seller does not own, or have any responsibility for: any grinder pumps; connecting facilities located in the area originating from the Seller's terminus point of the collection facilities at the edge-of-road or curb-line or curb stop when the facilities are located with a public right-of-way or the edge of an easement where the collection facilities are located within private property to and throughout the customer's property; or any and all piping and fixtures internal to each individual customer structure (whether residential, commercial, industrial or other customer classes/types).

## ARTICLE V.

## REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer makes only the representations and warranties that are set forth in this Article V.

As a material inducement to the Seller to enter into this Agreement and to consummate the transactions contemplated hereby, Buyer represents and warrants to the Seller, as of the Effective Date (except to the extent any of the following representations and warranties specifically apply or relate to another date, in which event such representations and warranties shall be true and correct as of such other date), as follows:

Section 5.01. **Organization**

The Buyer is duly organized, validly existing and in good standing under the laws of the state of its organization.

Section 5.02. **Authorization and Validity of Agreement**

The Buyer has the power and authority to enter into this Agreement and to do all acts and things and execute and deliver all other documents as are required hereunder to be done, observed or performed by it in accordance with the terms hereof. This Agreement has been duly authorized, executed and delivered by the Buyer and constitutes a valid and legally binding obligation of the Buyer, enforceable against it in accordance with the terms hereof, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and to general principles of equity.

Section 5.03. **No Conflict or Violation**

The execution and delivery of this Agreement by the Buyer, the consummation of the transactions contemplated by this Agreement and the performance by the Buyer of the terms, conditions and provisions hereof has not and will not contravene or violate or result in a breach of (with or without the giving of notice or lapse of time, or both) or acceleration of any material obligations of the Buyer under (i) any applicable Law, (ii) any material agreement, instrument or document to which the Buyer is a party or by which it is bound or (iii) the articles, bylaws or governing documents of the Buyer.

Section 5.04. **Consents and Approvals**

Schedule 5.04, sets forth a list of each consent, waiver, authorization or approval of any Governmental Authority, or of any other Person, and each declaration to or filing or registration with any Governmental Authority required in connection with the execution and delivery of this Agreement by Buyer or the performance by Buyer of its obligations hereunder.

Section 5.05. **Broker's and Finder's Fees**

No broker, finder or third party is entitled to any commission or finder's fee in connection with this Agreement or the transactions contemplated by this Agreement.

Section 5.06. **Financial Wherewithal**

Upon Closing, and after giving effect to the consummation of the transactions contemplated by this Agreement and the incurrence of any indebtedness in connection therewith, Buyer shall have the financial ability and will have sufficient working capital for its needs and anticipated needs to operate the System as a certificated public utility system regulated by the PaPUC authorized, among things, to provide wastewater utility services to retail residential, commercial and industrial customers in the System.

Section 5.07. **Sufficient Funds**

Buyer shall have sufficient funds available at Closing to consummate the transactions contemplated by this Agreement, to pay the Purchase Price in accordance with Article III and expenses related to the transactions contemplated by this Agreement, and on and after Closing, to generally provide ownership, operation and capital for the operations and capital needs of the System following the Closing, and assuring that the customers of the System will receive safe, adequate and reliable wastewater service equal to or better than such customers would have received without the transactions contemplated by this Agreement and at all times consistent with the provisions of the Pennsylvania Public Utility Code, 66 Pa. C. S. § 101 *et seq,* and applicable Law.

Section 5.08. **Independent Decision**

Except as expressly set forth in this Agreement, or any of the related agreements, Buyer acknowledges that (a) Seller has not made any representation or warranty, express or implied, as to the accuracy or completeness of the System or information provided to Buyer, and (b) the Seller does not have or is not subject to any liability to Buyer or any other Person resulting from the distribution to Buyer, or Buyer use of, any information regarding the System or Acquired Assets that has been furnished or made available to Buyer and its Representatives. Buyer acknowledges that other than as expressly set forth in this Agreement or any related agreement, Seller expressly disclaims any warranty of income potential, operating expenses or costs of operation of any Acquired Assets or the System.

Section 5.09. **Scheduled Matters**

Buyer acknowledges that: (a) the inclusion of any matter on any Schedule is not an admission by Seller that such listed matter is material or that such listed matter has or could have a material adverse effect or constitutes a material liability with respect to the Acquired Assets; (b) matters reflected in the Schedules are not necessarily limited to matters required by this Agreement to be reflected in such Schedules; and (c) such additional matters are set forth for informational purposes only and do not necessarily include other matters of a similar nature.

Section 5.10. **Independent Investigation**

Buyer acknowledges that it has conducted an independent investigation of the financial condition, assets, liabilities, properties and projected capital needs and operations of the System in making its determination as to the propriety of the transaction contemplated by this Agreement and, in entering into this Agreement and related agreements, has relied solely on the results of its

investigation and on the representations and warranties of the Seller expressly contained in Article IV of this Agreement.

Section 5.11. **Litigation**

The Buyer is not in breach of any applicable Law that could have a material adverse effect on the operations of the System or the Buyer. Neither the Buyer nor any Affiliate of the Buyer is listed on any of the following lists maintained by the Office of Foreign Assets Control of the United States Department of the Treasury, the Bureau of Industry and Security of the United States Department of Commerce or their successors, or on any other list of Persons with which the Seller may not do business under applicable Law: the Specially Designated Nationals List, the Denied Persons List, the Unverified List, the Entity List and the Debarred List. Except as set forth on Schedule 5.11, there is no action, suit or proceeding, at law or in equity, or before or by any Governmental Authority, pending nor, to the Knowledge of the Buyer, threatened against the Buyer before or at the Closing Effective Time, which will have a material adverse effect on (i) the transactions contemplated by this Agreement or (ii) the validity or enforceability of this Agreement.

## ARTICLE VI.

## TITLE TO REAL ESTATE; EASEMENTS

Section 6.01. **Evidence of Title**

Subject to Section 6.06, with respect to all Real Property, Buyer shall obtain, at its sole cost and expense, a commitment for an owner's policy of title insurance on the American Land Title Association's ("ALTA") Owner's Form 2006 (the "Title Commitment"), issued by a title insurance company selected by Buyer and licensed to insure title to real property by the Commonwealth of Pennsylvania (the "Title Company"), having an effective date after the Effective Date. Following the Effective Date, Buyer shall order the Title Commitment from the Title Company and shall provide Seller evidence of the same. Notwithstanding anything to the contrary in Section 6.02(a) below, Buyer shall not be entitled to send an Objection Notice with respect to any parcel of Real Property and the Title Commitment for the same if, within thirty (30) Business Days after the Effective Date, Buyer has not ordered the Title Commitment from the Title Company for such parcel of Real Property and provided Seller with evidence of the same.

Section 6.02. **Objections to Title**

(a) Notice of Objections. Within forty-five (45) days of Buyer's receipt from the Title Company of a Title Commitment for any of the parcels of Real Property, Buyer shall deliver to Seller a true, correct and complete copy of the Title Commitment for each parcel of Real Property and true, correct, complete and legible copies of any and all exception documents listed in the same, along with Buyer's written notice to Seller of any of the exceptions to title set forth on Schedule B of such Title Commitment to which Buyer objects (such written notice of Buyer being referred to as the "Objection Notice"). Notwithstanding the foregoing, Buyer shall not be entitled to object to exceptions to title which: (a) are Permitted Liens, (b) pertain to the

Buyer or any reasonable and customary requirements, conditions or obligations of the Buyer, (c) are matters of record and set forth in the Title Commitment that do not, either individually or in the aggregate with other matters of record, in Buyer's reasonable opinion, materially and adversely restrict or prevent the use of the Real Property in the operation of the System, or (d) are standard Title Company exceptions (such as the "survey" exception) (such exceptions objected to in the Objection Notice, provided the same are not as described in (a) through and including (d) aforesaid, being referred to as the "Title Objection Items"). The Buyer shall include a true, correct and complete copy of the Title Commitment in the Objection Notice and true, correct, complete and legible copies of any and all exception documents listed in the same in the Objection Notice. If Buyer provides the Seller with an Objection Notice, the Seller shall use commercially reasonable efforts to have all of the Title Objection Items cured, satisfied or released of record, or insured over, by the Title Company (individually, "Cure" and collectively, "Cured") before or as of the Closing. At or before the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that Seller has Cured all such Title Objection Items. In the event that Seller is unable to Cure any Title Objection Item per this Section 6.02(a), Seller shall indemnify Buyer for such inability per the terms of Article VIII hereof, provided that Seller's indemnification obligation arising under this Section 6.02(a) shall not be subject to the Threshold Amount nor the Liability Cap set forth in Section 8.05. For avoidance of doubt, Buyer acknowledges that no item listed in clauses (a) through and including (d) above, may be objected to by Buyer as a Title Objection Item.

(b) Liens. Without limiting the Seller's obligations pursuant to Section 6.02(a) above, before or as of the Closing, the Seller shall, at the Seller's cost and expense, Cure any Lien encumbering the Real Property which can be Cured by the payment of money (other than Permitted Liens).

(c) Title Endorsements/Survey. Buyer shall pay for any endorsements required by the Buyer or any mortgagee of the Buyer to Buyer's Title Policy. If any survey is required by Buyer or its mortgagee, either as a condition to any such endorsement or otherwise, the Buyer shall obtain it at its sole cost and expense. If Buyer obtains a survey of any or all of the Real Property and desires the deed to contain the legal description based on such survey, if the same is not identical to the legal description contained in Seller's deed of record, Seller is not obligated to include the same in the deed to Buyer unless the survey is certified to Seller and such description is included in the deed on a "quitclaim" basis only and without warranty of title.

(d) License at Closing. Seller shall provide Buyer with a license agreement granting Buyer a license in all of Seller's rights to access such Real Property in order to allow Buyer to operate and maintain in the System until such time as Buyer is provided title to such Real Property as provided for in this Agreement. For the avoidance of doubt, Seller shall provide such title as soon as reasonably practicable in accordance with Section 6.01.

(e) Insurable Claims. To the extent any Claim for Losses under Article VIII constitutes an Insurable Claim (as defined below), Buyer shall assert the Insurable Claim and use its commercially reasonable efforts to obtain recovery for such Insurable Claim against the Title Company (which shall include commencing litigation and diligently prosecuting such Insurable Claim to judgment) before pursuing a Claim for Losses under Article VIII. If at any time following a non-favorable judgment that substantially denies the relief sought by Buyer from the

Title Company in connection with the Insurable Claim (each a "Non-Favorable Judgment"), Buyer may, following such Non-Favorable Judgment, to pursue the Seller with a Claim for Losses under Article VIII (any such Claim against the Seller following an attempted Insurable Claim against the Title Company being a "Residual Title Claim"). Notwithstanding anything to the contrary in Article VIII, Buyer may assert a Claim for Losses based upon a Residual Title Claim for a sixty (60) day period after the Non-Favorable Judgment. For purposes of this Section 6.02(d), an "Insurable Claim" means a Claim that: (i) arises out of Buyer's discovery of a title defect or encumbrance with respect to any of the Real Property following the Closing that materially restricts or prevents the use of such Real Property in the operation of the System; and (ii) constitutes a claim against the Title Company under Buyer's Title Policy. Buyer acknowledges that any and all Claims which Buyer could otherwise bring as a breach of a covenant of title under the special warranty deed to the Real Property shall be included within the Claim for Losses under Article VIII and is subject to the terms of this Section 6.02(e).

Section 6.03. **Title Expenses**

Irrespective of whether the transactions described by this Agreement are consummated and Closing occurs, Buyer shall pay all costs and expenses of obtaining the Title Commitment, Title Policy and any survey.

Section 6.04. **UCC Search; Releases**

Not later than ninety (90) days after the Effective Date, Buyer shall obtain at its sole cost and expense a Uniform Commercial Code search against Seller covering any of the personal property or fixtures included among the Acquired Assets from the Office of the Secretary of the Commonwealth of Pennsylvania and the Recorder of Deeds of Beaver County, Pennsylvania (the "UCC Search"). On or before the Closing Date, Seller shall at its sole cost and expense obtain releases of any and all security interests in any of the Acquired Assets which are not Permitted Liens. The Seller shall provide the form of the releases of such security interests to Buyer on or before the Closing Date.

Section 6.05. **Easements.**

(a) Promptly after the Effective Date and before the Closing, the Seller will, at its sole cost and expense, cause an abstractor selected by the Seller and reasonably acceptable to Buyer and the Title Company (the "Abstractor"), to perform a search of the public land records of Beaver County, based on the Seller's records and plans of the System (and such other sources of information as are reasonably related thereto), by searching the grantee index in the names of the Seller and such other searches as the Abstractor may reasonably make, to (i) identify and provide Buyer with title information on any and all recorded Easements (including information related to any Liens or encumbrances on Seller's title thereto), and (ii) together with the Seller, identify all Missing Easements. During the process, as the Abstractor provides written search results to the Seller (including updated versions of the Abstractor Search Result Chart), the Seller will promptly provide the same to Buyer for its review, and, without limiting the foregoing, the Seller shall, or shall cause the Abstractor to, provide Buyer with periodic updates (which shall occur no less frequently than bi-weekly) on the status of the activities set forth in the previous sentence.

(b) Notice of Objections. Within forty-five (45) days of Buyer's receipt from the Seller (or the Abstractor) of each piece of information specified in subsection (a) above, which shall be delivered to Buyer on a rolling basis as prepared by the Abstractor, Buyer shall deliver to Seller written notice identifying the encumbrances on the Easements that, in Buyer's reasonable opinion, could either individually or in the aggregate with other matters of record, materially and adversely restrict or prevent the use of the Easements in the operation of the System, (an "Easement Objection Notice"). Buyer shall not be permitted to include in its Easement Objection Notice any encumbrances that: (a) are Permitted Liens, (b) pertain to the Buyer or any reasonable and customary requirements, conditions or obligations of the Buyer, or (c) are matters of record and set forth in the Abstractor's search results that either individually or in the aggregate with other matters of record, do not, in Buyer's reasonable opinion, materially and adversely restrict or prevent the use of the Easements in the operation of the System (specifically including mortgages or other instruments securing indebtedness incurred by the owner of the land burdened by the Easement) (such exceptions objected to in the Objection Notice, the "Easement Objection Items." If Buyer provides the Seller with an Easement Objection Notice, the Seller shall use commercially reasonable efforts to have the Easement Objection Items Cured, prior to or as of the Closing. At or prior to the Closing, the Seller shall deliver written evidence to Buyer, in form and substance reasonably satisfactory to Buyer, evidencing that all objections identified in the Easement Objection Notice have been cured. In the event that Seller is unable to Cure any such objection Item per this Section 6.05(b), Seller shall indemnify Buyer for such inability per the terms of Article VIII hereof, provided that Seller's indemnification obligation arising under this Section 6.05(b) shall not be subject to the Threshold Amount. Seller acknowledges and agrees that (x) the forty-five (45) day period set forth in this Section 6.05(b) does not and shall not apply with respect to Buyer determining whether there are any Missing Easements, and (y) Buyer may notify Seller of any Missing Easement at any time up to and including the Closing Date.

(c) If during the process of Abstractor's review and investigation of the Beaver County land records, Seller determines, based on the Abstractor's investigation, that there is a Missing Easement, the Seller (at its cost and expense) shall take any and all actions (including the use of its power of condemnation) to obtain any such Missing Easements so that the same may be sold, assigned, transferred and conveyed to Buyer at the Closing pursuant to the terms and conditions of this Agreement. The Seller shall pay for all costs and expenses incurred in connection with obtaining each Missing Easement (including any consideration payable to the landowner in connection with condemnation, in lieu of condemnation or otherwise to obtain Missing Easements). If Seller has not obtained all Missing Easements by the date that is ninety (90) days after the date that Abstractor has completed his review of the County land records and delivered the last results of the same to Seller (the "Abstract Completion Date"), then the Seller (at its cost and expense) shall, as soon as reasonably practicable, commence and file in the Court of Common Pleas, Beaver County, a condemnation or eminent domain proceeding to obtain any and all such Missing Easements. For the purposes of clarity, upon obtaining each Missing Easement (including upon the final resolution of a condemnation proceeding), each Missing Easement that has been acquired or obtained by the Seller is considered an Easement. The Seller shall be responsible for the costs and expenses of all condemnation and eminent domain proceedings.

(d) License at Closing. Seller shall provide Buyer with a license agreement granting Buyer a license in all of Seller's rights to access all Missing Easements in order to allow Buyer to operate and maintain the System until such time as Buyer is provided title to such Missing Easements as provided for in this Agreement.

(e) Escrow at Closing for Missing Easements. For all of the Missing Easements listed on attached Schedule 6.05(e) as of the Closing Date, Seller will have additional time following the Closing Date to secure and assign and transfer the Missing Easements to Buyer. Seller shall diligently pursue and deliver the Missing Easements on or before the third (3rd) anniversary of the Closing Date, subject to any extension as permitted by Escrow Agreement, in the form attached as Exhibit C, that will require, among other things, the funding of an escrow account in the amount of Two Thousand Dollars ($2,000) for each Missing Easements set forth on Schedule 6.05(e) as of the Closing Date to secure the Seller's obligations under this Agreement and the Escrow Agreement.

(f) Unscheduled Property

The Parties acknowledge that the Seller may own interests in or have the legal right to use or occupy the Real Property and/or Easements that are necessary or essential to the operation of the System and that are not set forth in Schedule 4.09 (the "Unscheduled Real Property"). If the Parties discover before or after the Closing Date, one or more parcels of Unscheduled Real Property, the discovering Party shall give written notice of such discovery to the non-discovering Party. In addition to its obligations in Section 2.03, Seller shall convey, assign or otherwise transfer any rights to each parcel of Unscheduled Real Property, with no adjustment to the Purchase Price, in such a manner as to provide Buyer with reasonable assurances that Buyer will have the right to use or occupy the Unscheduled Real Property as it was used by Seller as of the Effective Date.

## ARTICLE VII.

## OTHER AGREEMENTS

Section 7.01. **Taxes**

Except as provided in this Agreement, the Seller shall pay any and all Taxes, if any, arising out of the ownership of the Acquired Assets and out of the operation of the System before the Closing Date.

Section 7.02. **Cooperation on Tax Matters**

The Seller shall furnish or cause to be furnished to Buyer, as promptly as practicable, whether before or after the Closing Date, such information and assistance relating to the System as is reasonably necessary for the preparation and filing by Buyer of any filings relating to any Tax matters.

Section 7.03. **Personnel Matters**

(a) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, Buyer shall, or shall cause an Affiliate of Buyer to, offer employment effective on the Closing Date, to the Personnel set forth on Schedule 7.03(a) who are employed by the Seller in operating the System as of the Closing Date, subject to Buyer's existing standard hiring policies and procedures applicable to new employees, including but not limited to a criminal background check and drug screening, except with respect to benefits as otherwise provided in Section 7.03(c). The Personnel who accept such employment and commence employment on the Closing Date, are referred to in this Agreement as the "Transferred Personnel." Schedule 7.03(a) shall not be amended after the date this Agreement is executed without the prior written consent of Buyer. For purposes of clarity, nothing contained in this Section 7.03 shall be deemed to limit, restrict or prohibit Buyer from interviewing the applicable Personnel for informational purposes only in connection with the transfer of employment of the Personnel to Buyer as provided in this Section 7.03. Buyer may make the required offer of employment at such a time to permit Buyer to require such offerees' decision to accept or reject such offers up to three (3) months prior to the Closing Date.

(b) Transferred Personnel who are Non-Union Personnel shall be employees-at-will of Buyer. Buyer shall provide each of the Transferred Personnel who are Non-Union Personnel compensation and benefits which are substantially comparable (i) in the aggregate to Seller's compensation and benefits as of the Effective Date and (ii) the compensation and benefits then provided to similarly situated employees of Buyer. Nothing in this Agreement requires Buyer to provide any particular form or type of employee benefit program, plan or policy to any Transferred Personnel who are Non-Union Personnel as a result of the transaction contemplated by this Agreement.

(c) Subject to the obligations of Seller under the Collective Bargaining Agreement and Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, with respect to any employee benefit plan maintained by Buyer or an Affiliate of Buyer for the benefit of any Transferred Personnel, effective as of the Closing Date, Buyer shall, or shall cause its Affiliate to, recognize all previous service of the Transferred Personnel with Seller, as if such service were with Buyer for the purposes of determining eligibility and vesting for benefits. Notwithstanding the foregoing, to the extent Buyer sponsors a defined benefit pension plan or post-retirement medical benefits, Transferred Personnel shall not receive vesting credit under such plan with respect to service performed for Seller to the extent that any such Transferred Personnel are fully vested in a defined benefit pension plan or post-retirement medical benefits to which Seller contributes.

(d) Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, effective as of the Closing, the Transferred Personnel's employment with Seller shall end and the Transferred Personnel shall cease active participation in the Seller's Plans. Seller shall remain liable for all eligible claims for benefits under the Seller's Plans that are incurred by the Transferred Personnel before the Closing Date. Subject to the obligations of Seller under the Collective Bargaining Agreement and applicable Law and Buyer's obligations specified in Section 7.03(h) below with respect to Union Personnel, Seller shall remain liable to make any contributions to Seller's Plans related to, and/or to fund any retirement benefits

accrued by, the Transferred Personnel prior to Closing. Seller shall remain liable for all pay, expenses, wages, Taxes and all other obligations and Liabilities of any nature whatsoever relating to (i) the period prior to the Closing Date with respect to any Personnel that become Transferred Personnel and (ii) relating to all periods before or after the Closing Date with respect to any current or former Personnel who do not become Transferred Personnel.

(e) This Section 7.03 shall be binding and inure solely for the benefit of each of the Parties to this Agreement, and nothing in this Section 7.03, express or implied, shall confer upon any other Person any rights or remedies of any nature whatsoever under or because of this Section 7.03. This Section 7.03 shall not create any right in any Transferred Personnel or any other Person to any continued employment with Buyer or any of its Affiliates or compensation or benefits of any nature or kind whatsoever, and shall not be deemed to restrict Buyer in the exercise of its independent business judgment in establishing or modifying any of the terms or conditions of the employment of the Transferred Personnel. Nothing contained in this Section 7.03 shall constitute an amendment of, or an undertaking to amend, any employee benefit plan, program or arrangement maintained by Buyer or its Affiliates or is intended to prevent Buyer or its Affiliates from amending or terminating any such employee benefit plan, program or arrangement in accordance with its terms.

(f) Notwithstanding anything in this Agreement to the contrary, it is expressly understood that Buyer will not acquire any asset, or assume any liability or obligation in connection with the transactions contemplated by this Agreement relating to any of the Seller's Benefit Plans or Seller's Benefit Obligations. Seller shall be solely responsible for any liability, funding obligation, claim or expense arising from the Seller's Plans and Seller's Benefit Obligations, both before, and after, the Closing Date, except as provided in Section 7.03(c).

(g) At a reasonable time prior to the Closing Date, Seller shall transfer copies of all records pertaining to the employment of the Transferred Personnel to Buyer including, but not limited to, all personnel and human resources Files and Records.

(h) Effective as of and conditioned upon Closing and to the greatest extent permissible by law:

(1) Buyer shall recognize the Union as the exclusive bargaining representative for Union Personnel in their current bargaining unit if the Buyer's employees performing the bargaining unit work previously performed by Union Personnel constitute at least a majority of Union Personnel in the applicable bargaining unit and the related bargaining unit contains more than one (1) employee;

(2) To the extent the Union is recognized pursuant to Section 7.03(h)(1) herein, Buyer shall collectively bargain in good faith with the Union to establish a new collective bargaining agreement(s). Except as outlined in Section 7.03(h)(3) herein, if initial terms and conditions of employment cannot be agreed to by the Buyer and the Union, Buyer will adopt Seller's Collective Bargaining Agreement(s)(as defined in Article I herein) for employees in the applicable bargaining unit as of and conditioned upon Closing.

(3) Buyer is not obligated, however, and will not provide medical insurance, paid time off or pension benefits as provided for in the Collective Bargaining Agreements, but instead will provide Union Personnel with the medical insurance, paid time off and retirement benefits it provides to similarly situated employees. The Buyer also shall not be bound by the employee Residency requirement provisions of the Collective Bargaining Agreements, specifically, Article XXII of the Local 9305-08 agreement, and Article XXI of the Local 9305-10 agreement and any provision of the Collective Bargaining Agreement(s) with which it legally cannot comply. Seller makes no representations, and Buyer is solely responsible for determining, that these terms meet Buyer's obligations under applicable labor law.

Effective upon the Closing Date, Municipal Council shall no longer participate in the grievance procedures, as provided for by the Collective Bargaining Agreements. Furthermore, upon the Closing Date, neither Municipal Council nor any other administrative body of Seller shall have any further involvement in the operations of the System, wherever such involvement may be provided for by the Collective Bargaining Agreements.

Section 7.04. **Initial and Future Rates**

(a) Rates. After Closing, Buyer shall implement the Seller's sanitary wastewater rates then in effect at Closing, as set forth on Schedule 7.04, and inclusive of any PaPUC permitted or required surcharges or pass-through costs ("Base Rates"), as Buyer's effective sanitary wastewater rates, provided that the rates reflected on Schedule 7.04 (at Closing) shall not be lower than those in effect on the date of the Effective Date. Buyer shall apply, at and after Closing, its then-existing miscellaneous fees and charges, rules and regulations for wastewater service as set forth in Buyer's tariff within Seller's Service Area, or, if Buyer does not have a tariff previously approved by the PaPUC, miscellaneous fee and charges, rules and regulations as proposed by Buyer and approved by the PaPUC.

(b) PaPUC Approval. The Buyer shall include the rate provisions of Sections 7.04(a) in its requested PaPUC Governmental Approval.

(c) Billing. The Buyer shall bill customers on a monthly basis.

Section 7.05. **Buyer Taxpayer**

From and after the Closing Date, Buyer acknowledges that, upon conveyance of the Acquired Assets to Buyer, the Buyer will be subject to, among other Taxes, real estate Taxes, which Buyer shall pay when due.

Section 7.06. **PaPUC Approval**

(a) Promptly after the Effective Date, Buyer shall timely initiate and faithfully prosecute the necessary proceedings to obtain from the PaPUC (i) the issuance of certificates of public convenience to Buyer to provide wastewater services in the Service Area, (ii) the approval of the acquisition of the System by Buyer under terms and conditions that are reasonably

acceptable to Seller and Buyer, and (iii) the approval of any inter-municipal agreements. Seller shall cooperate with and assist Buyer in proceedings before the PaPUC.

(b) The Parties agree that the procedures for determining fair market value of the System and Acquired Assets outlined in subsection (a) of Section 1329 of Title 66 of the Pennsylvania Consolidated Statutes ("Section 1329") shall be utilized and filed with the PaPUC as contemplated by Section 1329.

(c) The fees and expenses related to engaging the licensed engineer for such Section 1329 determination shall be paid fifty percent (50%) by Buyer and fifty percent (50%) by the Seller.

(d) To the extent requested by Buyer, Seller shall participate in any proceedings before the PaPUC as an intervenor and active party, provided that the Seller shall bear the fees and expenses directly related to such intervention, including legal expenses. Seller may be represented by the counsel of its choice in any such proceedings.

(e) Buyer, in Buyer's first base rate proceeding with respect to the System following the Closing, shall propose the use of statutory and regulatory mechanisms available to benefit the Buyer's acquired customers for ratemaking purposes.

Section 7.07. **Remedies for Breach of Article VII Agreements**

If Buyer breaches any of the covenants and agreements set forth in this Article VII, in addition to all other rights and remedies available at law or in equity, including specific performance and/or injunctive relief, Seller may commence proceedings before the PaPUC seeking enforcement of such covenants and agreements.

Section 7.08. **Operation and Maintenance of MS4 and Stormwater Systems**

The Seller, and/or its successor or designee-in-interest, shall remain at all times responsible for the operation and maintenance of its MS4 system and stormwater system assets. This provision shall not preclude Seller from transferring its MS4 system and stormwater system assets to another governmental entity, municipal authority or other qualified purchaser at a future time.

Section 7.09. **Pending Development Plans**

(a) Buyer and the Seller acknowledge that from the time of the Effective Date, the Seller shall continue to administer, and perform its duties and responsibilities with respect to the Pending Development Plans set forth on Schedule 4.19. For the avoidance of doubt, after the Closing Date, the Seller shall not seek to collect any EDU or tapping-related fees.

(b) Following the Effective Date, Seller shall not enter into any contract with a third party that contemplates the construction of new sanitary wastewater facilities, including, without limitation, pumping stations, force mains, manholes, or pipelines for service to future customers related to Pending Development Plans (collectively, "New System Assets") without providing a draft of such contracts to Buyer for its review and approval as to the design and specifications before execution by the parties to such contracts. Buyer shall have thirty (30) Business Days to

review and approve such contracts, and Buyer's failure to object in writing to any terms of such contracts within such thirty (30) Business Day review period is deemed an approval of the same by Buyer.

Section 7.10. **Act 537 Plan**

(a) Buyer acknowledges that Seller has previously committed to an official plan, commonly known as an Act 537 Plan (the "Act 537 Plan") under the Pennsylvania Sewage Facilities Act ("Act 537"), which has been made available to Buyer. Buyer understands that the Act 537 Plan contains obligations and commitments, as more fully set forth in the Act 537 Plan to complete certain improvements and upgrades to the System (the "System Improvements"). Buyer shall accept and complete all of the System Improvements as Seller agreed to complete under the existing Act 537 Plan. Prior to agreeing to further obligations pursuant to future amendments to the Act 537 Plan that could reasonably be deemed to affect Buyer, Buyer and Seller shall negotiate in good faith to resolve any objections Buyer may raise in connection with such proposed amendment(s).

(b) Buyer acknowledges Seller has jurisdiction over sewage facilities planning and sewer service through the Act 537 Plan and its Act 537 planning program, zoning, subdivision and land development ordinances and comprehensive land use planning policies. Buyer and Seller shall cooperate with respect to current and future sewage facilities planning and sewer service consistent with the provisions of this Section 7.10.

(c) Subject to PaPUC approval of the Service Area as provided in Section 7.06, Buyer shall maintain and, if necessary, extend sewer lines and provide sewage collection and treatment services to properties within the Service Area in a manner consistent with the Plan and the Buyer's Tariff. Seller will confer with Buyer concerning any revision to the Plan that would affect the provision of sewage collection and treatment services within the Service Area. Seller shall not propose or adopt any revision to the Act 537 Plan that would reduce the Service Area or divert wastewater flows generated from properties located within the Service Area from being served by the System without the written approval of Buyer.

(d) Buyer will not request, pursue, or implement expansions of the System beyond the current Service Area (that would trigger an Act 537 Plan revision) without the prior written approval of Seller and the PaDEP. Seller shall promptly notify and confer with Buyer, and consider Buyer's comments, concerning any proposed Act 537 Plan revision (including any sewage facilities planning module) that would involve the provision of sewage collection and treatment services by the System to area or properties outside of the Service Area. With respect to any such potential Plan revision, Seller and Buyer shall cooperate in evaluating alternatives for provision of sewage services to such areas consistent with the requirements of 25 Pa Code Ch. 71, including consideration of the technical feasibility, economic feasibility and cost effectiveness, consistency with the objectives and policies of plans and requirements of 25 Pa. Code Ch. 71.21(a)(5), consistency with municipal land use plans and ordinances, subdivision ordinances and other ordinances and plans for controlling land use and development, technically and administratively able to be implemented, and other factors required under Act 537 or under Buyer's Tariff.

(e) If Seller and Buyer each determine that the provision of sewage collection and treatment services by the System to certain areas or properties outside of the Service Area is technically feasible, economically feasible and cost effective, and meets all of the requirements set forth in Act 537 and 25 Pa. Code Ch. 71, the Seller shall revise the Act 537 Plan to include such identified areas and properties in the Service Area. If Seller revises the Act 537 Plan pursuant to this subsection and such amendment is approved by PaDEP, (i) Buyer shall request that the modified Service Area be approved by PaPUC; and (ii) subject to PaPUC approval of the inclusion of such modified Service Area, Buyer shall extend sewer lines and provide sewage collection services to properties within such expanded Service Area in a manner consistent with the Act 537 Plan and Buyer's Tariff.

Section 7.11. **Utility Valuation Experts and Engineering Assessment**

Buyer and Seller shall each be responsible for the costs associated with their respective Utility Valuation Expert for the preparation and completion of their respective Utility Valuation Expert's appraisal report and any additional work by their respective Utility Valuation Expert necessary to assist in the processing and prosecution of the application to the PaPUC in regard to this transaction under Section 1329.

Section 7.12. **Compliance and Operational Reports**

After the Effective Date and through the Closing Date, Seller shall provide Buyer with a monthly report to the person designated by Buyer, disclosing any and all material compliance or operational deficiencies that occurred during the previous month. During the same period, Seller shall also provide Buyer with copies of all reports filed with PaDEP regarding the System, including any discharge monitoring reports, associated supplemental reports, and WETT reports, when available.

Section 7.13. **Implementation and Enforcement of Municipal Code**

Following the Closing Date, Seller shall continue to implement and enforce the relevant provisions of the Municipal Code of the City of Beaver Falls, as amended.

Section 7.14. **Covenant Survival**

The covenants set forth in this Article survive Closing.

## ARTICLE VIII.

## INDEMNIFICATION

Section 8.01. **Survival**

All representations and warranties contained in this Agreement shall survive until twelve (12) months following the Closing Date, except that (a) the representations and warranties of the Seller specified in Section 4.01 (Organization), Section 4.02 (Power and Authority), Section 4.03 (Enforceability), Section 4.10 (Equipment and Machinery), Section 4.17 (Brokers' and Finders' Fees), and Section 4.18(a) (Title to Acquired Assets) (collectively, the "Seller Fundamental

Representations") shall survive the Closing indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof), (b) the representations and warranties of Seller specified in Section 4.13 (Environmental Compliance) shall survive the Closing until the expiration of the applicable statute of limitations (giving effect to any waiver, mitigation or extension thereof), and (c) the representations and warranties of Buyer specified in Section 5.01 (Organization), Section 5.02 (Authorization and Validity of Agreement), and Section 5.05 (Brokers' and Finders' Fees) (collectively, the "Buyer Fundamental Representations") shall survive the Closing indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof). The covenants and agreements of the Parties contained herein shall survive the Closing indefinitely or for the shorter period explicitly specified therein, except that for such covenants and agreements that survive for such shorter period, breaches thereof shall survive indefinitely or until the applicable statute of limitations expires (giving effect to any waiver, mitigation, or extension thereof). Notwithstanding the preceding sentences, (x) any breach of representation, warranty, covenant or agreement in respect of which indemnity may be sought under this Agreement shall survive the time at which it would otherwise terminate pursuant to the preceding sentences, if notice of the inaccuracy or breach thereof giving rise to such right of indemnity shall have been given to the party against whom such indemnity may be sought before such time, and (y) nothing contained in this Section 8.01 shall limit in any way any rights a Party may have to bring claims grounded in fraud, intentional misrepresentation or willful misconduct, which rights shall survive the Closing indefinitely.

Section 8.02. **Indemnification by the Seller**

To the maximum extent permitted by applicable Law and subject to the terms and conditions of this Article VIII, the Seller shall indemnify, defend and hold harmless, Buyer and its successors and Affiliates and their respective employees, officers, directors, trustees and agents (the "Buyer Indemnified Persons"), from and against any and all claims for Losses arising from or relating to: (a) any breach of, material misrepresentation as to, or any material inaccuracy in, any of the representations and warranties of the Seller contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by the Seller before the Closing pursuant to this Agreement (without regard to any materiality, Material Adverse Effect or related qualifications in the relevant representation or warranty (except where such provision requires disclosure of lists of items of a material nature or above a certain threshold)); (b) any breach or material nonfulfillment of any of the covenants or agreements of the Seller contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by the Seller before the Closing pursuant to this Agreement; (c) any Excluded Liability or Excluded Asset or (d) the ownership, use, operation or control of the Acquired Assets or the System prior to the Closing or any incident, occurrence, condition or claim arising prior to Closing and relating to the ownership, use, operation or control of the Acquired Assets or the System prior to Closing.

Section 8.03. **Indemnification by Buyer**

To the maximum extent permitted by applicable Law and subject to the terms and conditions of this Article VIII, Buyer shall defend, indemnify and hold harmless the Seller and its successors and Affiliates and each of their respective employees, officers, directors and agents (the "Seller

Indemnified Persons") from and against any and all claims for Losses arising from or relating to: (a) any breach of, misrepresentation as to, or any material inaccuracy in, any of the representations and warranties of Buyer contained in this Agreement or in any exhibit, schedule, certificate or other instrument or document furnished or to be furnished by Buyer pursuant to this Agreement; (b) any material breach of any of the covenants or agreements of Buyer contained in this Agreement or in any exhibit, schedule certificate or other instrument or document furnished or to be furnished by the Buyer pursuant to this Agreement; (c) any Assumed Liability as and when payment and performance is due, including without limitation any liability related to any claims by any Governmental Authority; (d) for the avoidance of doubt, Buyer's actions involving Environmental Requirements, Hazardous Materials or environmental claims from and after the Closing Date; or (e) the ownership, operation or control of the Acquired Assets or the System from and after the Closing Date.

Section 8.04. **Indemnification Procedure**

(a) Third Party Claims. If any Indemnified Party receives notice of the assertion or commencement of any action, suit, claim or other legal proceeding made or brought by any Person who is not a party to this Agreement or an Affiliate of a party to this Agreement or a representative of the foregoing (a "Third Party Claim") against such Indemnified Party with respect to which the Indemnifying Party may be obligated to provide indemnification under this Agreement, the Indemnified Party shall give the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses because of such failure. Such notice by the Indemnified Party shall describe the Third Party Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Loss that has been or may be sustained by the Indemnified Party. The Indemnifying Party may participate in, or by giving written notice to the Indemnified Party (and subject to the other requirements herein) to assume the defense of any Third Party Claim at the Indemnifying Party's expense and by the Indemnifying Party's own counsel (which counsel is reasonably acceptable to the Indemnified Party), so long as (i) the Indemnifying Party notifies the Indemnified Party, within ten (10) Business Days after the Indemnified Party has given notice of the Third Party Claim to the Indemnifying Party (or by such earlier date as may be necessary under applicable procedural rules in order to file a timely appearance and response) that the Indemnifying Party is assuming the defense of such Third Party Claim, provided, that if the Indemnifying Party assumes control of such defense it must first agree and acknowledge in such notice that the Indemnifying Party is fully responsible (with no reservation of any rights other than the right to be subrogated to the rights of the Indemnified Party) for all Losses relating to such Third Party Claim, (ii) the Indemnifying Party conducts the defense of the Third Party Claim actively and diligently and at its own cost and expense, and (iii) the Third Party Claim (A) does not involve injunctive relief, specific performance or other similar equitable relief, any claim in respect of Taxes, any Governmental Authority, any criminal allegations, or any potential damage to the goodwill, reputation or overriding commercial interests of Buyer or its Affiliates, (B) is not one in which the Indemnifying Party is also a party and joint representation would be inappropriate or there may be legal defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying Party, or (C) does not involve a claim which, upon petition by the Indemnified Party, the appropriate court rules that the Indemnifying Party failed or is

failing to vigorously prosecute or defend. The Indemnified Party shall reasonably cooperate in good faith in such defense. If the Indemnifying Party assumes the defense of any Third Party Claim, subject to Section 8.04(b), it shall have the right to take such action as it deems necessary to avoid, dispute, defend, appeal or make counterclaims pertaining to any such Third Party Claim in the name and on behalf of the Indemnified Party. The Indemnified Party may, at its own cost and expense, to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party's right to control the defense thereof. If the Indemnifying Party elects not to compromise or defend such Third Party Claim or fails to promptly notify the Indemnified Party in writing of its election to defend as provided in this Agreement, the Indemnified Party may, subject to Section 8.04(b), pay, compromise, defend such Third Party Claim and seek indemnification for any and all Losses based upon, arising from or relating to such Third Party Claim. The Seller and Buyer shall reasonably and in good faith cooperate with one another in all reasonable respects in connection with the defense of any Third Party Claim, including making available records relating to such Third Party Claim and furnishing, without expense (other than reimbursement of actual out-of-pocket expenses) to the defending party, management employees of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim.

(b) Settlement of Third Party Claims. Notwithstanding any other provision of this Agreement, the Indemnifying Party shall not enter into settlement of any Third Party Claim without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld or delayed), except as provided in this Section 8.04(b). If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation on the part of the Indemnified Party and provides, in customary form, for the unconditional release of each Indemnified Party from all liabilities and obligations in connection with such Third Party Claim and the Indemnifying Party desires to accept and agree to such offer, the Indemnifying Party shall give prompt written notice to that effect to the Indemnified Party. If the Indemnified Party fails to consent to such firm offer within fifteen (15) days after its receipt of such notice, the Indemnified Party may continue to contest or defend such Third Party Claim and in such event, the maximum liability of the Indemnifying Party as to such Third Party Claim shall not exceed the amount of such settlement offer. If the Indemnified Party fails to consent to such firm offer and also fails to assume defense of such Third Party Claim, the Indemnifying Party may settle the Third Party Claim upon the terms set forth in such firm offer to settle such Third Party Claim. If the Indemnified Party has assumed the defense pursuant to Section 8.04(a), it shall not agree to any settlement without the written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

(c) Direct Claims. Any claim by an Indemnified Party with respect to any Loss which does not arise or result from a Third Party Claim (a "Direct Claim") shall be asserted by the Indemnified Party giving the Indemnifying Party prompt written notice thereof. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits material rights or material defenses because of such failure. Such notice by the Indemnified Party shall describe the Direct Claim in reasonable detail and shall indicate the estimated amount, if reasonably practicable, of the Losses that have been or may be sustained by the Indemnified Party. The Indemnifying Party shall have thirty (30) days after its receipt of such notice to respond in writing to such Direct Claim. During the thirty (30) day period, the

Indemnified Party shall reasonably cooperate and assist the Indemnifying Party in determining the validity and amount of such Direct Claim. If the Indemnifying Party does not so respond within such thirty (30) day period, by delivery of written notice disputing the basis or amount of the Direct Claim, the Indemnifying Party is deemed to have rejected such claim, in which case the Indemnified Party is free to pursue such remedies as may be available to the Indemnified Party on the terms and subject to the provisions of this Agreement. If the Indemnifying Party has timely disputed its indemnity obligation for any Losses with respect to such Direct Claim, the Parties shall proceed in good faith to negotiate a resolution of such dispute and, if not resolved through negotiations, such dispute may be resolved by litigation in an appropriate court of jurisdiction determined pursuant to this Agreement.

Section 8.05. **Limitations on Indemnification Obligations**

(a) Subject to the other limitations contained in this Section 8.05, neither Buyer nor the other Buyer Indemnified Persons is entitled to indemnification pursuant to Section 8.02(a) (other than for an intentional breach of any agreement or covenant contained in this Agreement) unless the aggregate amount of Losses incurred by Buyer and the other Buyer Indemnified Persons under this Agreement exceeds One Percent (1.0%) of the Purchase Price (the "Threshold Amount"), in which case Seller shall then be liable for Losses in excess of the Threshold Amount; except that the foregoing limitations contained in this Section 8.05(a) shall not apply to any claims for indemnification (i) based on fraud, intentional misrepresentation or willful misconduct, (ii) based on any inaccuracy in, misrepresentation as to or breach of any of the Seller Fundamental Representations or any of the representations and warranties set forth in Section 4.13, or (iii) pursuant to Sections 8.02 (c) or (d).

(b) Subject to the other limitations contained in this Section 8.05 neither Seller nor the other Seller Indemnified Persons is entitled to indemnification pursuant to Section 8.03(a) (other than for an intentional breach of any agreement or covenant contained in this Agreement) unless the aggregate amount of Losses incurred by Seller and the other Seller Indemnified Persons under this Agreement exceeds the Threshold Amount, in which case Buyer shall then be liable for Losses in excess of the Threshold Amount; except that the foregoing limitations contained in this Section 8.05(a) shall not apply to any claims for indemnification based on fraud, intentional misrepresentation or willful misconduct or pursuant to Sections 8.03(c)(d) and (e).

(c) Except in the case of fraud, intentional misrepresentation or willful misconduct (for which all applicable legal and equitable remedies will be available to Buyer and the other Buyer Indemnified Persons subject to a cap of the Purchase Price), Buyer and the other Buyer Indemnified Persons shall only be entitled to assert claims under Section 8.02(a) (other than claims with respect to breaches of any of the Seller Fundamental Representations, which shall not be subject to the Liability Cap (as such term is hereinafter defined), but shall be capped at the Purchase Price)) up to the aggregate amount of 7.5% of Purchase Price (the "Liability Cap"), which shall represent the sole and exclusive remedy of Buyer and the other Buyer Indemnified Parties for any such claims under Section 8.02(a).

(d) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Loss is limited to the amount of any liability or damage that remains after

deducting therefrom any insurance proceeds actually received and any indemnity, contribution or other similar payment received or reasonably expected to be received by the Indemnified Party in respect of any such claim. The Indemnified Party shall use its commercially reasonable efforts to recover under insurance policies or indemnity, contribution or other similar agreements for any Losses before seeking indemnification under this Agreement.

(e) Payments by an Indemnifying Party pursuant to Section 8.02 or Section 8.03 in respect of any Loss will be reduced by an amount equal to any Tax benefit realized or reasonably expected to be realized as a result of such Loss by the Indemnified Party.

(f) Each Indemnified Party shall take, and cause its Affiliates to take, all reasonable steps to mitigate any Loss upon becoming aware of any event or circumstance that would be reasonably expected to, or does, give rise thereto, including incurring costs only to the minimum extent necessary to remedy the breach that gives rise to such Loss.

(g) Subject to the provisions of Sections 3.01, 7.07, 15.11 and any other provisions for equitable relief and/or specific performance, the Parties acknowledge and agree that their sole and exclusive remedy with respect to any and all claims for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement, shall be pursuant to the indemnification provisions set forth in this Article VIII. In furtherance of the foregoing, each Party waives, to the fullest extent permitted under Law, any and all rights, claims and causes of action for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement it may have against the other Party hereto and their Affiliates and each of their respective representatives arising under or based upon any Law, except pursuant to the indemnification provisions set forth in this Article VIII. Nothing in this Section 8.05(g) limits any Parties' right to seek and obtain any equitable relief and/or specific performance to which any Party is entitled pursuant to this Agreement.

Section 8.06. **Knowledge of Breach**

The Seller will not be liable under this Article VIII for any Losses based upon or arising out of any inaccuracy in or breach of any of the representations or warranties of Seller contained in this Agreement if Buyer had actual knowledge of such inaccuracy or breach before the Closing Date. Buyer will not be liable under this Article VIII for any Losses based upon or arising out of any inaccuracy in or breach of any of the representations or warranties of Buyer contained in this Agreement if Seller had actual knowledge of such inaccuracy or breach before the Closing Date.

## ARTICLE IX.

## PRE-CLOSING COVENANTS OF THE SELLER

Section 9.01. **Operation of the System**

Except as otherwise expressly permitted by this Agreement, as required by applicable Law or with the prior written consent of Buyer (which consent shall not be unreasonably withheld, delayed or conditioned), from the Effective Date until the Closing, the Seller shall (i) operate and manage the System only in the ordinary course of business in accordance with past practices and

procedures, (ii) comply in all material respects with all applicable Laws and Authorizations and Permits, and (iii) use commercially reasonable efforts to maintain and preserve intact the business and assets of the System and preserve the rights, franchises, goodwill and relationships of the Seller and the System and their customers, lenders, suppliers, regulators and others having business relationships with the Seller and the System including, but not limited to, the land development agreements in existence as of the Effective Date which such agreements shall not be materially amended without notice to and the consent of Buyer, which consent shall not be unreasonably withheld or delayed.

Section 9.02. **Cooperation**

The Seller shall reasonably cooperate with Buyer and its employees, attorneys, accountants and other agents and, generally, act in reasonably good faith to timely carry out the purposes of this Agreement and the consummation of the transactions contemplated by this Agreement.

Section 9.03. **Supplements and Updates**

The Seller shall promptly deliver to Buyer any supplemental information updating the information in the representations and warranties set forth in Article IV of this Agreement so that such representations and warranties as supplemented by such information will be true and correct as of the Closing Date (or such other date as provided in such representations and warranties) as if then made. Within at least ten (10) Business Days of having Knowledge of the same, but in no event later than (3) Business Days before the Closing Date, the Seller shall advise Buyer of any facts which would constitute a breach of a representation or warranty as of the date made or a default in a covenant contained in this Agreement. Subject to Section 8.06, no supplemental information or facts provided by Seller pursuant to this Section 9.03 shall be deemed to have cured any breach of any representation or warranty contained in this Agreement, including for purpose of the indemnification rights contained in this Agreement. For the avoidance of doubt, no such supplemental information or facts provided pursuant to this Section 9.03 shall be deemed to alter any Schedules without the prior written consent of Buyer (such consent not to be unreasonably withheld, conditioned or delayed).

Section 9.04. **Governmental Approvals**

Promptly after the execution of this Agreement, or as required by Law, except as provided in Section 7.06 or otherwise expressly provided herein, the Seller shall file all applications, reports, and requests for consent that are required to be filed by Seller with any Governmental Authority, as provided on Schedule 4.05. The Seller shall also promptly provide all information that any Governmental Authority may require in connection with any such application or report. The Seller shall use commercially reasonable efforts to obtain all required material consents, waivers, authorizations or approvals of any Governmental Authority, including all those listed on Schedule 4.05, or of any other Person in connection with the transactions contemplated by this Agreement. All such consents, waivers, authorizations, or approvals of any Governmental Authority necessary to consummate the transactions contemplated by this Agreement shall be in form and content reasonably satisfactory to Buyer and the Seller before Closing and must be final and non-appealable. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

## ARTICLE X.

## PRE-CLOSING COVENANTS OF BUYER

Section 10.01. **Actions Before the Closing Date**

Buyer shall not take any action that will cause it to be in breach of any representation, warranty, covenant or agreement contained in this Agreement or cause it to be unable to perform in any material respect its obligations hereunder, and Buyer shall use commercially reasonable efforts (subject to any conditions set forth in this Agreement) to perform and satisfy all conditions to Closing to be performed or satisfied by Buyer under this Agreement, including action necessary to obtain all consents and approvals of third parties required to be obtained by Buyer to effect the transactions contemplated by this Agreement.

Section 10.02. **Governmental Approvals**

Promptly after the execution of this Agreement, or as required by Law, except as otherwise expressly provided herein, Buyer shall file all applications and reports which are required to be filed by Buyer with any Governmental Authority as provided on Schedule 5.04. Buyer shall also promptly provide all information that any Governmental Authority may reasonably require in connection with any such application or report. Buyer shall use commercially reasonable efforts to obtain all consents, waivers, authorizations or approvals of any Governmental Authority, or of any other Person of any kind in connection with the transactions contemplated by this Agreement.

Section 10.03. **Cooperation**

Buyer shall reasonably cooperate with the Seller and their employees, attorneys, accountants and other agents and, generally, do such other acts and things in good faith as may be reasonable to timely carry out the purposes of this Agreement and the consummation of the transactions contemplated in accordance with the provisions of this Agreement.

Section 10.04. **Supplements and Updates**

Buyer shall promptly deliver to the Seller any supplemental information updating the information in the representations and warranties set forth in Article V of this Agreement so that such representations and warranties as supplemented by such information will be true and correct as of the Closing Date (or such other date as provided in such representations and warranties) as if then made. Within ten (10) Business Days of having Knowledge of the same, and at least three (3) Business Days before the Closing Date, Buyer shall advise the Seller of any facts which would constitute a breach of a representation or warranty as of the date made or a default in a covenant contained herein.

## ARTICLE XI.

## CONDITIONS PRECEDENT TO OBLIGATIONS OF THE SELLER

The obligation of the Seller to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by the Seller in its sole discretion:

Section 11.01. **Consents and Approvals**

Receipt of all required consent, waiver, authorization or approval of any Governmental Authority, or of any other Person and any other approvals necessary to consummate the transactions contemplated by this Agreement set forth on Schedule 5.04, including without limitation all required EPA and PaDEP approvals, and all such Authorizations and Permits and Governmental Approvals must be final (and not subject to any appeal and any applicable appeal period having expired). Seller shall obtain the consent of any Governmental Authority as required by the PaPUC.

Section 11.02. **Representations and Warranties of Buyer**

The representations and warranties made by Buyer in Article V which are (a) not qualified by materiality shall be true and correct in all material respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all material respects as of such specified date) and (b) qualified by materiality shall be true and correct in all respects on and as of the Closing Date (except for representations or warranties that speak of a specific date or time other than the Closing Date which shall be true and correct in all respects as of such specified date), and the Seller shall have received a certificate to the effect of the foregoing from a duly authorized officer of Buyer dated as of the Closing Date.

Section 11.03. **PaPUC Approval**

PaPUC must have issued a Final Order approving the acquisition of the System under terms and conditions that are reasonably acceptable to the Seller and the Buyer. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

Section 11.04. **No Injunctions**

Neither the Seller nor the Buyer shall be subject to any injunction, preliminary restraining order or other similar decree of a court of competent jurisdiction prohibiting the consummation of the transactions contemplated by this Agreement.

Section 11.05. **Performance of the Obligations of Buyer**

Buyer shall have performed in all material respects all obligations required under this Agreement to be performed by Buyer on or before the Closing Date, and the Seller shall have received a certificate to that effect from Buyer dated the Closing Date.

Section 11.06. **Deliveries by Buyer**

Buyer shall have made delivery to the Seller of the documents and items specified in Section 13.03 herein.

Section 11.07. **No Material Adverse Effect**

There shall not have occurred any event or condition which gives rise to a Material Adverse Effect with respect to the Acquired Assets or the System.

## ARTICLE XII.

## CONDITIONS PRECEDENT TO OBLIGATIONS OF BUYER

The obligation of Buyer to consummate the transactions provided for in this Agreement is subject to the satisfaction, at or before the Closing, of the following conditions, any one or more of which may be waived in writing by Buyer in its sole discretion:

Section 12.01. **Consents and Approvals**

(a) Receipt of all required material, non-governmental third party consents and any other approvals necessary or advisable to consummate the transactions contemplated by this Agreement set forth on Schedule 4.05 and all consents, waivers, authorizations and approvals of any Governmental Authority required pursuant to Section 5.04, including without limitation all required EPA and PaDEP approvals/renewals and all such Authorizations and Permits and Governmental Approvals must be final (and not subject to any appeal and any applicable appeal period having expired);

(b) The discharge of any outstanding debt of Seller which has resulted in any lien or other encumbrance on the System; and

(c) Seller shall have taken all actions to acquire title to the System and the Acquired Assets required to permit Seller to convey the System and the Acquired Assets to Buyer as required under this Agreement.

Section 12.02. **Representations and Warranties of Seller**

The representations and warranties made by the Seller in Article IV of this Agreement (disregarding all "materiality" and "Material Adverse Effect" or similar qualifications contained therein) shall be true and correct on and as of the Closing Date (except for representations and warranties expressly stated to relate to a specific date, in which case each such representation and warranty shall be true and correct as of such earlier date), with only such exceptions as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and the Buyer shall have received a certificate to that effect from the Seller dated as of the Closing Date.

Section 12.03. **PaPUC Approval**

PaPUC must have issued a Final Order approving the acquisition of the System under terms and conditions that are reasonably acceptable to the Seller and the Buyer. If a party to the PaPUC proceeding appeals PaPUC authorization of the transaction, the Buyer and the Seller may agree to proceed to consummate the transaction.

Section 12.04. **No Injunctions**

Neither the Seller nor the Buyer are subject to any injunction, preliminary restraining order or other similar decree of a court of competent jurisdiction prohibiting the consummation of the transactions contemplated by this Agreement.

Section 12.05. **No Material Adverse Effect**

There shall not have occurred any event or condition which gives rise to a Material Adverse Effect with respect to the Acquired Assets or the System.

Section 12.06. **Consent Order.**

If Buyer determines that a Consent Order and Agreement ("CO&A") with the PaDEP or any other regulatory agency is necessary in order to address compliance issues with respect to the System, Buyer may engage in the negotiation and entry into a CO&A between the Buyer and PaDEP in a form and substance and on terms and conditions reasonably satisfactory to Buyer. Buyer shall be responsible for all costs, expenses and efforts related to securing the CO&A with the PaDEP.

Section 12.07. **Deliveries by Seller**

Seller shall have made delivery to Buyer of the documents and items specified in Section 13.02 herein.

Section 12.08. **Performance of the Obligations of Seller**

Seller shall have performed in all material respects all obligations required under this Agreement to be performed by Seller on or before the Closing Date, and Buyer shall have received a certificate to that effect from Seller dated the Closing Date.

## ARTICLE XIII.

## CLOSING

Section 13.01. **Closing Date**

The Closing shall take place at a place in Pennsylvania that is mutually agreed upon by the Parties, at 10:00 a.m. eastern standard time on the earliest agreed upon date or within twenty (20) Business Days after the date upon which all the conditions precedent to Closing described in this Agreement have been fulfilled or waived and Buyer and the Seller receive the last of the required

consents, waivers, authorizations and approvals from the Governmental Authorities, in each case, for the transactions contemplated by this Agreement, or at such other place and time, by such other method, or on such other date, as may be mutually agreed to by the Parties (the "Closing Date"). For purposes of prorating revenues and expenses, the Closing will be deemed to be effective at 12:01 a.m., City of Beaver Falls, Beaver County, Pennsylvania time, on the Closing Date (the "Closing Effective Time"). For all other purposes, specifically including the Parties' indemnity obligations set forth in Article VIII, the Closing will be effective upon the receipt by the Seller of the Purchase Price.

Section 13.02. **Deliveries by the Seller**

At the Closing, the Seller, shall have delivered or cause to be delivered to Buyer executed copies of the following agreements, documents and other items:

(a) A Bill of Sale transferring all of the Acquired Assets comprising personal property, in the form attached hereto as Exhibit A;

(b) Possession of the Acquired Assets, including without limitation, the Real Property, the Easements and an interest in the Missing Easements, including a license from Seller to Buyer;

(c) A duly executed counterpart to an Assignment and Assumption Agreement with respect to the Assumed Liabilities (the "Assignment and Assumption Agreement"), in the form attached hereto as Exhibit B;

(d) The consents to transfer all of the Assigned Contracts and Authorizations and Permits (including environmental Authorizations and Permits), to the extent required hereunder;

(e) One or more special warranty or other deeds in recordable form reasonably acceptable to Buyer transferring fee simple title of Real Property, and one or more assignments in recordable form reasonably acceptable to Buyer with respect to the Easements (exclusive of any Missing Easements);

(f) Copies or originals of all Files and Records, materials, documents and records in possession of the Seller relating to the Real Property or the Assigned Contracts;

(g) Certificate of the Seller pursuant to Section 12.02 of this Agreement;

(h) Certificate of the Seller pursuant to Section 12.07 of this Agreement;

(i) Any documents duly executed by Seller required by the Title Company to issue final owner's title policies in accordance with the procedures set forth in Article VI;

(j) An opinion of special counsel to the Seller in the form attached hereto as Exhibit D;

(k) A duly executed counterpart to the Escrow Agreement;

(l) All such other instruments of conveyance or other documents as shall, in the reasonable opinion of Buyer and its counsel, be necessary to transfer to Buyer the Acquired Assets in accordance with this Agreement or to carry out the terms of this Agreement, duly executed and acknowledged by Seller, if necessary, and in a recordable form;

(m) A certification of Seller's non-foreign status in accordance with U.S. Treasury Regulation § 1.1445-2(b)(2); and

(n) A form W-9 properly completed by the Seller.

Section 13.03. **Deliveries by Buyer**

At the Closing, Buyer shall have delivered or caused to be delivered to the Seller the following agreements, documents and other items:

(a) Payment in full of the Purchase Price;

(b) A duly executed counterpart to the Assignment and Assumption Agreement;

(c) Certificate of Buyer pursuant to Section 11.02 of this Agreement;

(d) Certificate of Buyer pursuant to Section 11.05 of this Agreement;

(e) Evidence of PaPUC approval as provided in Section 12.03;

(f) A duly executed counterpart to the Escrow Agreement; and

(g) All such other instruments of assumption as shall, in the reasonable opinion of Seller and its counsel, be necessary for Buyer to assume the Assumed Liabilities in accordance with this Agreement.

## ARTICLE XIV.

## TERMINATION

Section 14.01. **Events of Termination**

This Agreement may, by notice given in the manner provided in this Agreement, be terminated and abandoned at any time before completion of the Closing:

(a) By the consent of both of the Seller and the Buyer;

(b) By either of the Seller or the Buyer if:

(i) the Closing shall not have occurred on or before the Outside Date; except that the Buyer shall have the one-time right to extend the Outside Date for

up to ninety (90) days if, in the Buyer's sole discretion, any such amount of time up to ninety (90) days is necessary to obtain a required Governmental Approval; or

(ii) any Governmental Authority shall have issued an order, decree or ruling or taken any other action, in each case permanently restraining, enjoining or otherwise prohibiting the material transactions contemplated by this Agreement and such order, decree, ruling or other action will have become final and non-appealable; provided, however, that the Party seeking termination pursuant to this clause (b) of this Section 14.01 is not in breach in any material respect of any of its representations, warranties, covenants or agreements contained in this Agreement;

(c) By the Seller (if Seller is not then in material breach of any provision of this Agreement) in the event of a material breach of any covenant or agreement to be performed or complied with by the Buyer pursuant to the terms of this Agreement or of any representation or warranty of the Buyer contained in this Agreement, which breach (i) has continued without cure for a period of sixty (60) days following written notice thereof by the Seller to the Buyer or if such breach cannot be cured and (ii) would result in a condition to Closing set forth in Article XI of this Agreement not being satisfied (which condition has not been waived by the Seller in writing); or

(d) By the Buyer (if Buyer is not then in material breach of any provision of this Agreement) in the event of a material breach of any covenant or agreement to be performed or complied with by the Seller pursuant to the terms of this Agreement or of any representation or warranty of the Seller contained in this Agreement, which breach (i) has continued without cure for a period of sixty (60) days following written notice thereof by the Buyer to the Seller or if such breach cannot be cured and (ii) would result in a condition to Closing set forth in Article XII of this Agreement not being satisfied (which condition has not been waived by the Buyer in writing).

This Agreement may not be terminated after completion of the Closing.

Section 14.02. **Effect of Termination**

If this Agreement is terminated by the Seller or the Buyer pursuant to Section 14.01, written notice thereof will forthwith be given to the other and all further obligations of the Parties under this Agreement will terminate without further action by any Party and without liability or other obligation of any Party to any other Party hereunder; except that no Party will be released from liability hereunder if this Agreement is terminated and the transactions abandoned because of any willful breach of this Agreement.

## ARTICLE XV.

## MISCELLANEOUS

Section 15.01. **Confidentiality**

Except as and to the extent required by applicable Law (including but not limited to the Pennsylvania Right-To-Know Act at 65 Pa § 67.101) or pursuant to an order of a court of

competent jurisdiction and as required hereunder to obtain any and all required Governmental Approvals, no Party hereto shall, directly or indirectly, disclose or use (and no Party shall permit its representatives to disclose or use) any Confidential Information with respect to any other Party furnished, or to be furnished, by such other Party hereto or its shareholders, directors, officers, agents, or representatives to the other Party hereto or its employees, directors, officers, agents or representatives in connection herewith at any time or in any manner other than in connection with the completion of the transactions contemplated by this Agreement and related transactions.

Section 15.02. **Public Announcements** Subject to applicable Law or listing rules of an exchange on which Buyer's parent corporation's stock is listed, and except as otherwise set forth in this Agreement, the initial public announcement relating to the transactions contemplated herein will be mutually agreed upon and jointly made by the Parties. Subsequent public announcements by one Party are subject to review and approval by the other Parties before issuance, such approval not to be unreasonably withheld, conditioned or delayed.

Section 15.03. **Notices**

The Parties shall make all notices, other communications and approvals required or permitted by this Agreement in writing, stating specifically that they are being given pursuant to this Agreement and shall be addressed as follows:

in the case of the Seller:

Attention:

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010
Attention: City Manager

with a copy to:

Solicitor of Beaver Falls
Santicola, Steele & Fedeles, P.C.
722 Turnpike St.
Beaver, PA 15009
Attn: Shannon Steele

in the case of the Buyer:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attention: Marc A. Lucca, President
malucca@aquaamerica.com

With a copy to:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attention: Frances P. Orth, Vice President and Senior Managing Counsel
fporth@aquaamerica.com

or such other persons or addresses as a Party may from time to time designate by notice to the other Party. A notice, other communication or approval is deemed to have been sent and received (i) on the day it is delivered, or if such day is not a Business Day or if the notice is received after ordinary office hours (time of place of receipt), the notice, other communication or approval is deemed to have been sent and received on the next Business Day, or (ii) on the fourth Business Day after mailing if sent by United States registered or certified mail.

Section 15.04. **Headings**

The article, section and paragraph headings in this Agreement are for reference purposes only and have no affect the meaning or interpretation of this Agreement.

Section 15.05. **Severability**

If any term, provision, covenant or restriction contained in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions contained in this Agreement remain in full force and effect and in no way be affected, impaired or invalidated.

Section 15.06. **Entire Agreement**

This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof and supersedes all prior agreements, negotiations, discussions and understandings, written or oral, between the Parties. There are no representations, warranties, conditions or other agreements, whether direct or collateral, or express or implied, that form part of or affect this Agreement, or that induced any Party to enter into this Agreement or on which reliance is placed by any Party, except as specifically set forth in this Agreement. The Parties acknowledge and agree that (i) each has substantial business experience and is fully acquainted with the provisions of this Agreement, (ii) the provisions and language of this Agreement have been fully negotiated and (iii) no provision of this Agreement shall be construed in favor of any Party or against any Party because of such provision of this Agreement having been drafted on behalf of one Party rather than the other Party.

Section 15.07. **Amendments; Waivers**

This Agreement may be amended, changed or supplemented only by a written agreement signed by the Parties. Any waiver of, or consent to depart from, the requirements of any provision of this Agreement will be effective only if it is in writing and signed by the Party giving it, and only in the specific instance and for the specific purpose for which it has been given. No failure on the part of any Party to exercise, and no delay in exercising, any right under this Agreement will

operate as a waiver of such right. No single or partial exercise of any such right precludes any other or further exercise of such right or the exercise of any other right.

Section 15.08. **Parties in Interest; Third Party Beneficiary**

Except as provided in this Agreement, this Agreement is not intended to and shall not be construed to create upon any Person other than the Parties any rights or remedies hereunder.

Section 15.09. **Successors and Assigns**

Neither Party to this Agreement may assign any right or delegate any performance under this Agreement without the prior written consent of the other Party, and any purported assignment or purported delegation without prior written consent is void. This Agreement is binding upon, and inures to the benefit of, the Parties and their respective permitted successors and assigns.

Section 15.10. **Governing Law; Jurisdiction**

The laws of the Commonwealth of Pennsylvania (without giving effect to its conflicts of law principles) govern all matters arising and relating to this Agreement, including torts. The Parties irrevocably agree and consent to the jurisdiction of the United States District Court for the Western District of Pennsylvania and the Court of Common Pleas of Beaver County, Pennsylvania, for the adjudication of any matters arising under or in connection with this Agreement. Any action initiated in court shall be filed and litigated (including all discovery proceedings) exclusively in the United States District Court for the Western District of Pennsylvania and the Court of Common Pleas of Beaver County, Pennsylvania, and each Party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by mail to such Party's address set forth in this Agreement shall be effective service of process for any suit, action or other proceeding brought in any such court. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 15.11. **Specific Performance**

The Parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the Parties is entitled to specific performance of the terms hereof, in addition to any other remedy to which they are entitled at law or in equity.

Section 15.12. **Counterparts; Electronic Mail; Facsimile Execution**

This Agreement may be executed in any number of counterparts which, taken together, shall constitute one and the same agreement. This Agreement will be effective when it has been executed by each Party and delivered to both Parties. To evidence the fact that it has executed this Agreement, a Party may send a copy of its executed counterpart to the other Party by electronic mail or facsimile transmission. Such Party is deemed to have executed and delivered this Agreement on the date it sent such electronic mail or facsimile transmission. In such event, such Party shall forthwith deliver to the other Party an original counterpart of this Agreement executed by such Party.

[THIS SPACE INTENTIONALLY LEFT BLANK;

SIGNATURES NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized Representatives, this Agreement as of the Effective Date.

CITY OF BEAVER FALLS, BEAVER COUNTY

By: _____
Printed: George Quay III
Its: Mayor

**ATTEST**:

By: _____
Name: Charles R. Jones, Jr.
Its: City Manager

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____
Printed: _____
Its:

**ATTEST**:

By: _____
Name:
Its:

IN WITNESS WHEREOF, the Parties hereto have executed, or caused to be executed by their duly authorized Representatives, this Agreement as of the Effective Date.

CITY OF BEAVER FALLS, BEAVER COUNTY

By: _____
Printed: George Quay III
Its: Mayor

**ATTEST**:

By: _____
Name: Charles R. Jones, Jr.
Its: City Manager

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____
Printed: MARC A. LUCCA
Its: PRESIDENT

**ATTEST**:

By: _____
Name: LANA MRAZ
Its: EXECUTIVE ASSISTANT

**ASSET PURCHASE AGREEMENT**

**By and Between**

**City of Beaver Falls, Beaver County**

**As Seller**

**and**

**Aqua Pennsylvania Wastewater, Inc.,**

**As Buyer**

## SCHEDULES AND EXHIBITS

Capitalized terms used in the Schedules which are not otherwise defined herein shall have the respective meanings ascribed to such terms in the Agreement. The Schedules are to be read in their entirety. Nothing in the Schedules is intended to broaden the scope of any representation or warranty in the Agreement. The disclosure of any item, explanation, exception or qualification in any Schedule is disclosure of that item for all purposes for which disclosure is required under the Agreement when it is reasonably apparent from the context that such item, explanation, exception or qualification also relates to another Schedule irrespective of whether any cross reference is made or no Schedule is provided with respect to a representation. Other than as expressly set forth herein or when the Schedules reference agreements or other matters not documented in a separate writing, all descriptions of agreements, written materials or other matters appearing herein, are summary in nature and are qualified by reference to the complete documents, which have been supplied to the Buyer or its counsel.

**Schedule 2.01(b)**

Acquired Assets

All sanitary wastewater related treatment and conveyance facilities, including but not limited to the Seller's sewage treatment plant located in the Service Area, and all collection system mains (whether gravity or force mains), laterals (from the collection system main to the edge-of-road or curb-line when the main is located within a public right-of-way or the edge of an easement where the main is located within private property), generators, manholes, pump stations, and other related appurtenances and any billing and collections related assets necessary to own and operate the System.

**Schedule 2.02(e)**
Pre-Closing EDU Payments

[None as of December 31, 2022]

**Schedule 2.02(h)**

Excluded Assets

1. 2011 Vactor combination truck
   International 7500 cab
   1HTWKAZR9CJ564923

2. (2) 2008 Envorosight Rovver 125's
   6 wheel drive crawlers
   Multiple sets of wheels
   Both crawlers are set up to go from 6' – 48"
   (1) reel with 1000' of Kevlar coated cable
   Portable recording station

**Schedule 3.03**

Allocation Schedule

To be prepared by Buyer at Closing.

**Schedule 4.05**

Governmental Consents

Pennsylvania Department of Environmental Protection
Pennsylvania Public Utility Commission
City of Beaver Falls
Patterson Township*
Patterson Heights Borough*
White Township*
West Mayfield Borough *
North Sewickley Municipal Authority *
Big Beaver Municipal Authority *
Eastvale Borough*

* If required.

**Schedule 4.06**

Seller Liabilities

None.

## Schedule 4.07

Events Having a Material Adverse Effect

None.

## Schedule 4.08

Tax Matters

None.

## Schedule 4.09

Real Property and Easements; Liens

- Water Filtration Plant, Seventh Avenue, Beaver Falls, Beaver County, Pennsylvania, consisting of 4.76 acres of land in eight parcels and seven buildings as follows:

| Tax Parcel Identification | Owner of Record | Deed BookVol./Pg. | Deed Date |
|---|---|---|---|
| 01-001-0111-000 | City of Beaver Falls | 1005/137 | 02/01/1973 |
| 01-001-0100-003 | | NA | 01/01/1930 |
| 01-001-0100-002 | | NA | 01/02/1930 |
| 01-001-0100-004 | | 865/279 | 10/01/1964 |
| 01-001-0100-001 | | 1005/137 | 02/01/1973 |
| 01-002-0101-000 | | 1005/137 | 02/01/1973 |
| 01-001-0100-007 | | 1005/137 | 02/01/1973 |
| 01-002-0100-001 | | 1005/137 | 02/01/1973 |

- [Abstractor to determine real property interest of the City for Eastvale Pumping Station, SR 588 Bridge Street & Second Avenue, Beaver Falls, Beaver County, Pennsylvania.]

**Preliminary Required Easement List [to be updated]:**

| | | | LOCATION | | |
|---|---|---|---|---|---|
| MAP ID# | PIN | Owner_Name | # | STREET | MAP SHEET |
| 1 | 010010100006 | BVV REALTY,LLC | 0 | 7TH AVENUE | 6 |
| 2 | 010010101000 | COMMONWEALTH OF PA-DOT | 108 | 7TH AVE | 6 |
| 3 | 010020200000 | BVV REALTY LLC | 220 | 7TH AVE | 6 |
| 4 | 010030203000 | 2M METALS,LLC | 526 | 2ND AVE | 6 |
| 5 | 010030303000 | BEAVER FALLS (CITY OF) | 111 | 8TH ST | 6 |
| 6 | 020020102000 | SCHERDER,PHILIP J & BRIDGET | 301 | 7TH AVE | 6 |
| 7 | 020020105000 | GESCO SALES AND CONSULTING LLC | 711 | 4TH ST | 6 |
| 8 | 020020713000 | MCDANEL ADVANCED CERAMIC TECHNOLOGIES LLC | 510 | 9TH AVE | 6 |

| | | | | | |
|---|---|---|---|---|---|
| 9 | 020020800000 | MCDANEL ADVANCED CERAMIC TECHNOLOGIES LLC | 726 | 6TH ST | 6 |
| 10 | 020030101000 | TUMAS,JOHN PAUL | 0 | OAK AVENUE | 6 |
| 11 | 020030200000 | AVERY,BRITTANY JOLYNN & KIRKLAND,CHRISTOPHER M | 0 | HILLSIDE AVENUE | 6 |
| 12 | 020030313000 | TUMAS,GREGORY & BARBARA | 305 | PARK AVE | 6 |
| 13 | 020030314000 | MCCONAHY,DONALD G & MARGARET A | 307 | PARK AVE | 6 |
| 14 | 020030315000 | BERGLUND,JOSEPHINE A | 311 | PARK AVE | 6 |
| 15 | 020030317000 | WATSON,ERIC J | 313 | PARK AVE | 6 |
| 16 | 020030318000 | ROSE,TIMOTHY | 317 | PARK AVE | 6 |
| 17 | 020030416000 | KESTER,DONALD L & CYNTHIA L | 1306 | W 4TH ST | 6 |
| 18 | 020030417000 | KESTER,DONALD L & CYNTHIA L | 0 | 4TH STREET EXTENSION | 6 |
| 19 | 020030419000 | SACER,DAVID A | 405 | PARK AVE | 6 |
| 20 | 020030431000 | JAVENS,THOMAS | 0 | OAK AVENUE | 6 |
| 21 | 020050107000 | HAMILTON,FREDERICK P SR & PATRICIA G | 1017 | 10TH ST | 5 |
| 22 | 020060200000 | HOLLEN,DANI | 0 | WEST 9TH STREET | 5 |
| 23 | 020060300000 | TOSH BROS ENTERPRISES C/O JOSEPH N TOSH II | 0 | WEST 10TH STREET | 5 |
| 24 | 020060301000 | KIRKPATRICK,THOMAS W & ARTHERINE | 0 | WEST 10TH STREET | 5 |
| 25 | 020060302000 | KIRKPATRICK,THOMAS W & ARTHERINE | 0 | WEST 10TH STREET | 5 |
| 26 | 020060303000 | KIRKPATRICK,THOMAS W & ARTHERINE | 0 | WEST 10TH STREET | 5 |
| 27 | 020060305000 | MILLIGAN,EDITH M & RICHARD C JR | 1213 | W 10TH ST | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 28 | 020060600000 | POLICARO,FRANK JR | 0 | W 10TH&UPPER 11TH STS | 5 |
| 29 | 020060700000 | MCGREAL,AUSTIN J & KELLY JO | 0 | WEST 11TH STREET | 5 |
| 30 | 020060702000 | BYERS,SHERRY L & JONES,BONNIE S,CO-TRUSTEES | 1105 | W 11TH ST | 5 |
| 31 | 020060902000 | MILLER,ERIC J & DENISE E | 700 | 14TH AVE | 5 |
| 32 | 020060923000 | MAIN,DARWIN R & PHYLLIS A | 800 | 15TH AVE | 5 |
| 33 | 040020600000 | KUBECK & KUBECK,LP | 1018 | 11TH ST | 5 |
| 34 | 040030104000 | AGUDATH ACHIM CONGREGATION % NATHAN ORTINBERG | 0 | 12TH AVENUE | 5 |
| 35 | 040030109000 | BARNETT,DONALD & DOROTHY | 0 | 12TH AVENUE | 5 |
| 36 | 040040103000 | HOUSING AUTHORITY OF BVR COUNTY IN LIEU OF TAXES | 1300 | 16TH AVE | 5 |
| 37 | 050010100001 | BEAVER FALLS (CITY OF) CITY BUILDING | 0 | 2ND AVENUE | 4 |
| 38 | 05001010000E | CSX TRANSPORTATION,INC C/O TAX DEPARTMENT | 0 | 15TH STREET | 4 |
| 39 | 050040200000 | LOKEY,CYNTHIA L & JAMES R | 0 | 3RD AVENUE | 4 |
| 40 | 050040308000 | BEAVER FALLS (CITY OF) | 0 | 3RD AVENUE | 4 |
| 41 | 050040400000 | BEAVER FALLS (CITY OF) | 0 | 4TH AVENUE | 4 |
| 42 | 050040604000 | BEAVER FALLS (CITY OF) | 0 | 4TH AVENUE | 4 |
| 43 | 050050100002 | BEAVER FALLS (CITY OF) CITY BUILDING | 0 | 6TH AVENUE (REAR) | 4 |
| 44 | 050050200000 | BEAVER FALLS (CITY OF) | 0 | 5TH AVENUE | 4 |
| 45 | 050050314000 | RAMER,JOHN C | 0 | 21ST ST & THOMAS ALLY | 4 |

| | | | | | |
|---|---|---|---|---|---|
| 46 | 05006010000E | CSX TRANSPORTATION,INC C/O TAX DEPARTMENT | 0 | 25TH STREET OFF | 4 |
| 47 | 060020301000 | BIG BEAVER FALLS AREA SCHOOL DISTRICT | 1601 | REAR 8TH AVE | 4 |
| 48 | 060030702000 | BARNETT,DONALD R & DOROTHY M | 0 | 16TH ST & RIDGE AVE | 4 |
| 49 | 060050100000 | BIG BEAVER FALLS AREA SCHOOL DISTRICT | 1701 | 8TH AVE | 4 |
| 50 | 06005040000E | NORFOLK SOUTHERN CORP C/O CONRAIL | 0 | 10TH AVENUE | 4 |
| 51 | 060060901000 | HUMPHREY,ALEX D & STRICKLAND,BARBARA A | 1701 | 11TH AVE | |
| 52 | 060061402000 | NESMITH,KEVIN & GENEVA | 1704 | 12TH AVE | |
| 53 | 060061901000 | MCCANN,JACK D & JO ANN E REVOCABLE LIVING TRUST | 1703 | 12TH AVE | |
| 54 | 060070601000 | SWARMER,DENNIS B & KATHY A | 1700 | RIDGE AVE | 4 |
| 55 | 060070602000 | BREIT,MARTIN E & MARTHA J | 0 | 14TH AVENUE | 4 |
| 56 | 070010202000 | GENEVA COLLEGE | 0 | COLLEGE AVENUE | 3 |
| 57 | 070010300000 | GENEVA COLLEGE | 3200 | COLLEGE AVE | 3 |
| 58 | 070021510001 | LATSKO BEAVER FALLS REALTY LLC | 3000 | 24TH STREET EXT | 3 |
| 59 | 070021510002 | TURNEY,ROY W & PATRICIA A | 0 | 6TH AVE | 3 |
| 60 | 070021600000 | FILUARI,ROBERT | 0 | 6TH AVENUE | 3 |
| 61 | 070021610000 | FILAURI,ROBERT P & MARILYN M | 0 | 6TH AVENUE REAR | 3 |
| 62 | 070022000000 | LIFE MANAGEMENT CONSULTANTS,INC | 3301 | 8TH AVE | 3 |
| 63 | 070022002000 | DASHIO,HARRISON & TAMMIE | 3305 | 8TH AVE | 3 |
| 64 | 070022100001 | MEYER,PAUL M & STEPHEN P | 3120 | 24TH STREET EXT | 3 |
| 65 | 070022101000 | MEYER,PAUL M & STEPHEN P | 0 | 24TH STREET EXT | 3 |

| | | | | | |
|---|---|---|---|---|---|
| 66 | 070022102000 | COX'S BOXES ADT,LLC | 0 | 24TH STREET EXT | 3 |
| 67 | 070022102001 | REBICH,E TODD | 0 | 24TH STREET EXT | 3 |
| 68 | 070022102002 | COX,RICHARD | 0 | 24TH STREET EXT | 3 |
| 69 | 070022102003 | D&D WAREHOUSING,LLC | 3100 | 24TH STREET EXT | 3 |
| 70 | 07002220000E | NORFOLK SOUTHERN CORP C/O CONRAIL | 0 | 24TH STREET EXT REAR | 3 |
| 71 | 070030101000 | SHULER,SCOTT M & YVONNE L | 0 | 41ST & 4TH AVENUES | 2 |
| 72 | 070030101001 | SHULER,SCOTT M & YVONNE L | 4012 | 4TH STREET | 2 |
| 73 | 070030103000 | SHULER,SCOTT M & YVONNE L | 4012 | REAR 4TH AVE | 2 |
| 74 | 070030105000 | SHULER,DONALD A & BARBARA A | 0 | 40TH ST COLLEGE HILL | 2 |
| 75 | 070030108000 | LINDSAY,MELINDA A | 3910 | COLLEGE AVE | 2 |
| 76 | 070030112000 | MATOTEK,MICHAEL T & JAUNITA C | 204 | 39TH ST | 2 |
| 77 | 070030115000 | BEAVER FALLS (CITY OF) | 0 | 2ND AVENUE | 2 |
| 78 | 070030123000 | GOEHRING,JAMES W & NANCY J | 0 | 2ND AVENUE | 2 |
| 79 | 070030124000 | GOEHRING,JAMES W & NANCY J | 3810 | 2ND AVE | 2 |
| 80 | 070030125000 | WALLER,SANTA SCOTT & URSIDA,JOSEPH M | 3808 | 2ND AVE | 2 |
| 81 | 070030126000 | GREIG,H KEVIN C/O RICHARD GREIG | 3806 | 2ND AVE | 2 |
| 82 | 070030137000 | MULLEN,DONALD R & PATRICIA A | 3706 | 2ND AVE | 2 |
| 83 | 070030138000 | BEAVER FALLS (CITY OF) | 3704 | 2ND AVE | 2 |
| 84 | 070030250000 | SMITH,DEAN R & NANCY I | 3600 | 36TH STREET PL | 2 |
| 85 | 070030251000 | SEEGER,TYLER | 3526 | COLLEGE AVE | 2 |

| | | | | | |
|---|---|---|---|---|---|
| 86 | 070030252000 | PEZZI,ROBERT NICHOLAS & ANITA O | 3524 | COLLEGE AVE | 2 |
| 87 | 070030253000 | HARPER,RONALD & JO ELLEN | 3518 | COLLEGE AVE | 2 |
| 88 | 070030254000 | DINSMORE,CRAIG & ERICA | 3514 | COLLEGE AVE | 2 |
| 89 | 070030255000 | SPINNENWEBER,CAROLYN | 3510 | COLLEGE AVE | 2 |
| 90 | 070030256000 | CAPLINGER,REBECCA | 3506 | COLLEGE AVE | 2 |
| 91 | 070030257000 | BOXEN,GEORGE A JR & EDITH F | 3502 | COLLEGE AVE | 2 |
| 92 | 070030258000 | DECHICKO,EUGENE & JANE | 3426 | COLLEGE AVE | 2 |
| 93 | 070030259000 | DELIVUK IRREVOCABLE TRUST | 3422 | COLLEGE AVE | 2 |
| 94 | 070030260000 | MILLER,MICHAEL | 3416 | COLLEGE AVE | 2 |
| 95 | 070030261000 | MACIOCE,DENISE M | 3414 | COLLEGE AVE | 2 |
| 96 | 070030262000 | PAGANI,PAUL D & HEATHER | 3410 | COLLEGE AVE | 2 |
| 97 | 070041400000 | SCHOOL DISTRICT OF BEAVER FALLS | 0 | 37TH-38TH W OF 4TH AV | 2 |
| 98 | 070041900000 | MARTIN,EDWARD R & BRIAN | 803 | 34TH ST | 2 |
| 99 | 070042000000 | RAMAR LAND CORPORATION | 1009 | 24TH STREET EXT | 2 |
| 100 | 070042009000 | KING,DAVID P & SHANNON L | 0 | 8TH AVENUE | 2 |
| 101 | 07004230000E | NORFOLK SOUTHERN CORP C/O CONRAIL | 0 | 37TH STREET | 2 |
| 102 | 070050200000 | SNEDEKER,KIM J | 4100 | 4TH AVE | 2 |
| 103 | 070050201000 | LEKSELL,AMBER N | 4104 | 4TH AVE | 2 |
| 104 | 070050203000 | CAMPBELL,GLENN L JR & JANICE A | 4106 | 4TH AVE | 2 |
| 105 | 070050208000 | UC REALTY LLC | 4460 | 4TH AVENUE | 2 |
| 106 | 070050209001 | SNOW,DEAN R | 4460 | 4TH AVE | 1 |

| | | | | | |
|---|---|---|---|---|---|
| 107 | 070050209002 | SNOW,DEAN R | 4460 | 4TH AVE | 1 |
| 108 | 070050209003 | VARNER-WAITE RENEE ADMINISTRATRIX | 0 | 4TH AVE | 1 |
| 109 | 070050500000 | HOUSING AUTHORITY OF BVR COUNTY IN LIEU OF TAXES | 0 | 45TH STREET | 1 |

**Schedule 4.10**

Equipment and Machinery

| Description | Year |
|---|---|
| **Office Equipment** | |
| Office Furniture and fixtures - workstations | 2020 |
| Computers, laptops, printers, etc. | 2020 |
| Miscellaneous EDP Equipment, computers, printers | 2020 |
| | |
| **Transportation Equipment** | |
| Ford F250 4x4 Truck, 1,466 miles. | 2020 |
| Ford F150 4x4 Truck, VIN NO. 1FTMF1EM4EKG07810, 36,779 Miles | 2014 |
| Ford F350 1-ton Dump Truck YEAR 1992, VIN No. 1FDKF37GXNNA08298, 90,687Miles, Manual Transmission | 1992 |
| Case Backhoe/Loader Model 580 SUPER L EXTEND-A-HOE, #JJG0195825, 5,828 Hrs, 4 X 4 | 1998 |
| Bobcat Skid Steer Loader, Model 553 C Series, #513012370, 864 Hrs. | 1999 |
| Car Mate Trailer VIN NO. 5A3Y510S12L003959, 5 X 10, 13" Sidewalls | 2002 |
| Mansfield Flatbed Trailer, VIN NO. 1M9BU142X6M620139, 6 X 10 Diamond Plate Deck, Tandem Axle | 2006 |
| | |
| **Stores Equipment** | |
| Misc | 1996 |
| Chlorine Scales | 1996 |
| Lockers | 1996 |
| Shelving | 1996 |
| Storage bins | 1996 |
| | |
| **Tools and Shop Equipment** | |
| Gorman-Rupp Trailer Mounted Pump | 2020 |
| Cub Cadet Zero Turn Mower | 2020 |
| Lawn Tractor, Toro Wheel Horse Model 73542, #000000111, Hydrostatic, 1071 HRS | 2020 |
| Capital Equipment TP300 Industrial Trash Pump, 3", Gas 208 CC Engine | 2020 |
| Industrial Plus Industrial Trash Pump, 3", 8HP, Gas Fired | 2020 |
| Drill Press DELTA ModelL 17-900, #8810 | 2020 |
| Miller MIG Welder, Multimatic 220 | 2020 |
| Lincoln Welder, Gas Fired | 2020 |
| Capital Equipment PW3000 Industrial Pressure Washer | 2020 |
| Stihl TS800 Cutoff Saw with 16-inch wheel | 2020 |

| | |
|---|---|
| Toro CCR3650 Snow blower 6Hp | 2020 |
| I-R Air Compressor, Gas Fired T10 Series | 2020 |
| Capital Equipment 7500D Portable Generator, Diesel Fired, 10 Hrs | 2020 |
| I-R Portable Air Compressor, Gas Fired, T10 SERIES | 2020 |
| Porter Cable Portable Air Compressor, Jet Stream Series, Model CPL55GH810, 55HP Gas Engine, 8 Gallon Tank | 2020 |
| BOSCH Brute Electric Demolition Jackhammer with hand truck and tooling | 2020 |
| HONDA Portable Generator, 8HP, 4000 Watt | 2020 |
| Ridgid KOLLMANN K1500 Sectional Sewer Cleaning Machine | 2020 |
| WEN Construction Zone Series Plate Compactor, 212 CC Gas Engine | 2020 |
| I-R Air Compressor, Model TS5, #NAR10524662, 5HP, Vertical Tank With Wiring, Control and Hose Reel | 2020 |
| Shop Crane | 2020 |
| VENTUR Electric Truck Bed | 2020 |
| Rotary Automotive Lift, Model DP10AN100BBL, #NEP11E0057, 10,000# Capacity with Wiring and Controls | 2020 |
| Western Snowplow Model ProPlow$60390, 8' with mount | 2020 |
| Minor Equipment - shelves, fire ext., time clock, vacuum, floor machine, valet, spare motors, lockers, fans, etc. | 2020 |
| Minor Equipment | 2020 |
| Fairbanks Morse, No. 27 Platform Scale, Twin Beams, 4 x 5 Platform with Mettler Toledo Digital Readout | 2020 |
| Minor Equipment consisting of fire extinguisher and shelving | 2020 |
| Minor Equipment - Fire extinguisher , ladder, etc. | 2020 |
| Minor Equipment - Trucks, chairs, Fire extinguisher , etc. | 2020 |
| Minor Equipment | 2020 |
| Minor Equipment yard tools, cabinets, vacuum, shelf/Cabinet, respirators | 2020 |
| Confined Space Set complete with tripod and lift | 2020 |
| Kellogg-America Air Compressor, single stage, 5HP with vertical 60 gallong capacity Tank, complete with piping, connectins, wiring and controls | 2020 |
| Continental Shop Press Model HV100, #10776, 30 ton capacity, hydraulic | 2020 |
| Minor equipment consisting of hand tools,  power tools, jack, racks, fire extinguisher, etc. | 2020 |
| Rigid 535 Pipe Threader with tooling | 2020 |
| Steel shop table, 8 x 5 with Jib Crane, Vise and Pipe Vise | 2020 |
| Proto tool chest, 4x2x5 1/2 with hand tools | 2020 |
| Lincoln Idealarc 250 Welder | 2020 |
| Jet Drill Press Model JDP-20MF, #14046692 | 2020 |
| Jet Horizontal Band Saw, Model HBS-916W, #414468 | 2020 |
| Minor Equipment - Fire extinguisher , fan, pump, etc. | 2020 |
| Minor Equipment - Desk, Chair, File, Bookcase, Vaccum, Fire extinguisher , air conditioner, etc. | 2020 |

| | |
|---|---|
| Minor equipment consisting of ladder, yard tools and fire extinguisher, etc. | 2020 |
| Minor equipment consisting of life ring, floatation Devicefor Primary Settling Tanks | 2020 |
| Minor equipment consisting of life ring, floatation Device ffor Final Settling Tanks 1 & 2 | 2020 |
| Minor equipment consisting of life ring, floatation Device for Final Settling Tanks 3, 4 and 5 | 2020 |
| Minor equipment consisting of life ring, floatation Device for chlorine tanks | 2020 |
| Minor equipment consisting of battery chargers. Drum pumps, airless painter, counters, sprayers, ladders, pressure washer, space heaters, air compressor, hand and power tools, hand trucks, fire extinguishers, shop lights, jacks, refrigerators, chain saw, leaf blowers, string trimmers, utility cart, sandblaster, yard tools, files credenza, chairs, vacuum, safety cabinets | 2020 |
| | |
| **Laboratory Equipment** | |
| Orio Ph/ RDO/DO meter | 1996 |
| Glassware | 1996 |
| Refrigerator | 1996 |
| Manning effluent composite sampler | 2021 |
| Process Control Equipment | 1996 |
| Lab Equip & Furniture | 1996 |
| | |
| **Communications Equipment** | |
| iPhone XR's | 2021 |
| iPads (4G) | 2021 |
| NEC Master Telephone System  With PA, Amplifier and phones | 2020 |
| | |
| **Miscellaneous Equipment** | |
| Surveillance System  - 4-cameras, 2-monitor, 1-controller | 2020 |
| DVR Recorder | 2018 |

**Schedule 4.11(a)**

Plans and Benefit Obligations

| 2022 Beaver Falls Sewage Treatment Plant Personnel Info | | | | | | |
|---|---|---|---|---|---|---|
| Name | Position | Hourly Wages | Hire Date | Longevity Pay | Vacation Days | Personal Days |
| [redacted] | | | | | | |

Note: Wages of Transferred Personnel as of 2023; Vacation, personal and sick days are as of 1/1/2022.

UPMC HEALTH PLAN

Current Plan Design Renewal Rate Quotation: COG

City of Beaver Falls
Group Number: 800054
Policy Period: January 01, 2021 - December 31, 2021

CURRENT MEDICAL PLAN

| | | | | Single | EE & Spouse | EE & 1 Child | EE & Children | Family | Estimated Annual Premium |
|---|---|---|---|---|---|---|---|---|---|
| | | | # of Employees Enrolled in Medical: | 10 | 13 | 1 | 0 | 21 | |
| Current Rates | NS EPO EPFJK | EPFJK | $10/$20/$40/$40 | $612.94 | $1,640.23 | $1,233.24 | $1,233.24 | $1,710.11 | $775,175.28 |

UPMC HEALTH PLAN

## Schedule of Benefits

**UPMC Business *Advantage***
**EPO - Premium Network**
**Deductible:** $0 / $0
**Coinsurance:** 0%
**Total Annual Out-of-Pocket:** $6,350 / $12,700

**Primary Care Provider:** $10 Copayment per visit
**Specialist:** $20 Copayment per visit
**Emergency Department:** $50 Copayment per visit
**Urgent Care Facility:** $20 Copayment per visit
**Rx:** $10/$20/$40/$40

# CITY OF BEAVER FALLS PENSION PLAN: SUMMARY OF PLAN BENEFITS

**Effective Dates**
*Plan Established* - January 1, 1960
*Most Recent Plan Amendment* - October 22, 1996

**Participation**
Any person employed on a full-time basis by the City of Beaver Falls, excluding any member of the Police or Fire Departments. Participants enter the plan on the last day of the month following date of employment.

**Employee Contributions**
5.0% of Compensation.

**Normal Retirement**
*Eligibility* - Age 60 and the completion of 20 years of service.
*Benefit* - 50% of Monthly Average Compensation.

**Disability Retirement**
*Eligibility* - Total and permanent disablement that occurs following the completion of 10 years of service.
*Benefit* - Normal Retirement Benefit based on Monthly Average Compensation at date of disablement.

**Death Benefits**
*Before Retirement* - Refund of Employee Contributions.
*After Retirement, Disability or if Killed in Service* - 50% of the pension the participant was receiving is payable to the participant's spouse until death or remarriage.

**Vesting**
*Schedule* - 100% after the completion of 12 years of service.
*Benefit* - Normal Retirement Benefit based on Monthly Average Compensation at date of termination, multiplied by service to termination and divided by service to Normal Retirement Date; payable at Normal Retirement.

**Early Termination Benefit**

*Eligibility* - Termination of employment after the completion of 20 years of service, but prior to attainment of age 60 and continuation of monthly participant contributions in an amount equal to the last amount paid as an Employee.

*Benefit* - Normal Retirement Benefit based on Monthly Average Compensation at date of termination, payable at Normal Retirement.

**Principal Definitions**

*Compensation:* Regular base pay plus overtime. For employees hired after August 30, 1992, lump sum payments for vacation and sick pay will not be included.

*Monthly Average Compensation*: Compensation averaged over the highest 12 consecutive months of the last 60 months prior to retirement or other severance.

*Refund of Employee Contributions*: Accumulated contributions without interest.

**Vision and Dental Plans**

**Life Insurance, Accidental Death/Dismemberment, and Short Term Disability Insurances through UNUM:**

| Title | Life Insurance | Accidental Death/Dismemberment | Short Term Disability | |
|---|---|---|---|---|
| | Amount | Amount | Amount | Total Premium (Monthly) |
| Superintendent | [redacted] | | | |
| Laborer | | | | |
| Laborer | | | | |
| Laborer | | | | |
| Laborer | | | | |
| Secretary | | | | |

**Schedule 4.11(b)**

Multiemployer Plans

None.

**Schedule 4.11(c)**

Benefit Obligations of Terminated and Retired Personnel

Post-retirement life insurance premiums paid for retired personnel as follows:

| | | Life Insurance | |
|---|---|---|---|
| **Name** | **Title** | **Amount** | **Monthly Premium** |
| [redacted] | | | |

**Schedule 4.11(e)**

Severance Agreements

[None.]

**Schedule 4.12(a)**

Collective Bargaining Agreements

Agreement between the City of Beaver Falls and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO-CLC, on behalf of Local Union 9305-08, expiring December 31, 2025

Agreement between the City of Beaver Falls and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO-CLC, on behalf of Local Union 9305-10, expiring December 31, 2023

**Schedule 4.12(b)**

Personnel Disputes

None.

**Schedule 4.12(c)**

Labor Disruptions

None.

**Schedule 4.12(d)**

Personnel Payments

None.

## Schedule 4.13

Environmental Compliance

- Storm-based overflows on Rock Avenue underpass in West Mayfield Township as reported in Chapter 94 Reports
- Failed to comply with effluent limitations under NPDES permit on multiple occasions from December 2016-2019; Civil Penalty of $8,500 by Consent Assessment assessed and agreed to on September 26, 2019
    - Effluent limitation violations from 2016-2019 as noted on Discharge Monitoring Reports
- Excessive wastewater flows during precipitation events as noted by the Pennsylvania Department of Environmental Protection in June 2020
    - Big Beaver Borough Corrective Action Plan submitted on September 24, 2020
    - Beaver Falls 2020 Corrective Action Plan
    - Patterson Township Corrective Action Plan dated September 22, 2020
    - North Sewickley Township Sewer Authority Corrective Action Plan 2020
    - White Township Corrective Action Plan 2020
    - Corrective Action Plans have not been supplied by Patterson Heights, West Mayfield, or Eastvale Borough
- Secondary bypass of 1,035,000 gallons on September 9-10, 2018 as a result of several inches of rain
- All items identified in Phase I Environmental Site Assessment prepared by Gannett Fleming and provided to the Bidders in July 2021.
- Reference is made to the Technical Memorandum dated June 11, 2021 of Gannett Fleming re: Beaver Falls Wastewater Treatment Plan-Main Equipment Building Hazardous Materials Assessment – Asbestos, noting the presence of asbestos on the ground and lower floors of the Main Equipment Building in several collected samples. Seller removed this asbestos in 2021.

## Schedule 4.14

Authorizations, Licenses and Permits

1. Commonwealth of Pennsylvania Department of Environmental Protection National Pollutant Discharge Elimination System Permit No. PA0026883, expiring October 31, 2023

2. Commonwealth of Pennsylvania Department of Environmental Protection Water Quality Management Permit No. 0472402, originally issued November 3, 1972 and amended on November 5, 1991, July 30, 1992, March 16, 1997, and March 10, 2010.

3. Commonwealth of Pennsylvania Department of Environmental Protection Water Quality Management Permit No. 0405405, issued in connection with the Eastvale Pumping Station

## Schedule 4.15

Assigned Contracts

| Agreements | | | |
|---|---|---|---|
| **Term of Agreement** | **Parties to Contract** | **Date of Contract** | **Subject** |
| Silent | City of Beaver Falls and Patterson Township | April 28, 1977 | Intermunicipal Service Agreement* |
| Renews annually on December 31 | City of Beaver Falls and Big Beaver Municipal Authority | November, 1998 | Intermunicipal Service Agreement†* |
| Renews annually on December 31 | City of Beaver Falls and North Sewickley Township Sewer Authority | January 9, 2003 | Intermunicipal Service Agreement†* |
| Until December 31, 2024 | City of Beaver Falls and Joint Sewer Users | April 8, 2014 | Capital lease of main trunk line*‡ |
| Silent | City of Beaver Falls and Borough of Eastvale | May 1, 1983 | Eastvale collection system* |

* It is anticipated Buyer will enter into a new service agreement with this municipality, upon which date the listed agreement will be terminated.
† Consent required for assignment as noted in Schedule 4.05.
‡ Seller includes this agreement for the sake of disclosure but has been unable to identify the counterparty entity and makes no representations as to the validity of such agreement.

## Schedule 4.16

Seller Litigation

Patterson Township, Patterson Heights Borough, West Mayfield Township, and White Township v. City of Beaver Falls and Aqua Pennsylvania Wastewater, Inc., Case No. 2022-11219.

**Schedule 4.18(a)**

Exception to Title to Acquired Assets

[None other than disclosed potential claim to possible leasehold interest on main trunk line that City intends to vigorously dispute.]

**Schedule 4.18(b)**

Sufficiency

None.

**Schedule 4.19**

Pending Development Plans

None.

**Schedule 5.04**

Buyer Consents and Approvals

Pennsylvania Department of Environmental Protection
Pennsylvania Public Utility Commission

## Schedule 5.11

Buyer Litigation

Patterson Township, Patterson Heights Borough, West Mayfield Township, and White Township v. City of Beaver Falls and Aqua Pennsylvania Wastewater, Inc., Case No. 2022-11219.

**Schedule 7.03(a)**

Transferred Personnel

- Joseph Durish Jr., Plant Manager (Non-Union)
- Kathryn Borghi, Secretary (Union)
- Joseph Durish Sr., Chief Mechanic (Union)
- Costas Apostolis,Mechanic Trainee (Union)
- Nicholas Perza, Mechanic Laborer (Union)
- Brian Petronchak, Chief Operator (Union)
- Vacant (to be filled prior to closing), Operator Trainee (Union)

## Schedule 7.04

Rates

Seller's rates as of the Closing Date are anticipated to be as follows (evidencing anticipated 3% increase on 1/1/2023):

**City Customers:**

| | |
|---|---|
| **Minimum water usage rate**: | $42.37 per quarter for 3,000 gallons of water or less used per quarter (the "Base") |
| **Additional usage**: | $8.46/1,000 gallons over the Base |

**Wholesale Customers:**

| | |
|---|---|
| **Water usage**: | $4.54/1,000 gallons |

**Exhibit A**

Bill of Sale

**BILL OF SALE**

This BILL OF SALE (this "**Bill of Sale**") is dated as of _____ __, 20__ by and between **THE CITY OF BEAVER FALLS, BEAVER COUNTY**, a body corporate and politic, duly organized under the laws of the Commonwealth of Pennsylvania ("**Seller**") and [_____] ("**Buyer**").

**RECITALS:**

WHEREAS, pursuant to that certain Asset Purchase Agreement by and between Seller and Buyer dated _____ __, 20__ (the "**APA**"), Seller has agreed to sell and Buyer has agreed to purchase, certain assets of Seller as more particularly described in Section 2.01 of the APA (the "**Acquired Assets**") owned and used in connection with that certain sanitary wastewater collection and treatment system (the "**System**") that provides sanitary wastewater service to various individual and wholesale customers in the City of Beaver Falls, Pennsylvania and portions of Patterson Township, North Sewickley Township, West Mayfield Borough, White Township, Big Beaver Borough, Patterson Heights Borough, and Eastvale Borough, each in Beaver County, Pennsylvania as described in the Recitals to the APA (the "**Service Area**"); and

WHEREAS, the use, maintenance and right of access to the Acquired Assets constituting interests in real property are being transferred on the date hereof by Seller to Buyer by deeds, assignments and/or a license; and

WHEREAS, Seller intends to convey the Acquired Assets not constituting interests in real property as more particularly described in **Exhibit "A"** attached hereto as of the date hereof.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, Seller and Buyer agree as follows:

1. **Recitals; Capitalized Terms**. The Recitals of this Bill of Sale are incorporated herein as if set forth in full. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the APA.

2. **Transfer of Acquired Assets**. Seller hereby sells, assigns, conveys, transfers, and grants to Buyer all of Seller's right, title and interest in and to the Acquired Assets.

3. **Further Assurances**. Promptly upon request of the other party, Buyer and Seller shall each execute and deliver to the others such further assurances and take such further actions as may be reasonably required or appropriate to perfect the transfer of the Acquired Assets and otherwise carry out the intent and purpose of this Bill of Sale.

4. **As Is. THIS BILL OF SALE IS MADE ON AN "AS-IS, WHERE-IS, WITH ALL FAULTS" BASIS, WITHOUT RECOURSE AND WITHOUT ANY REPRESENTATION OR WARRANTY (EXPRESS OR IMPLIED) WHATSOEVER EXCEPT AS MAY EXPRESSLY BE SET FORTH IN THE APA.**

5. **Binding Effect**. All of the terms and provisions of this Bill of Sale shall be binding upon, inure to the benefit of and be enforceable by the legal representatives, successors and assigns of Seller and Buyer.

6. **Law to Govern**. This Bill of Sale shall be governed by and interpreted and enforced in accordance with the laws of the Commonwealth of Pennsylvania without giving effect to any conflicts of law's provisions.

7. **Headings, Gender, etc.** All section headings contained in this Bill of Sale are for convenience of reference only, do not form a part of this Bill of Sale and shall not affect in any way the meaning or interpretation of this Bill of Sale. Words used herein, regardless of the number and gender specifically used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context requires.

8. **Schedules and Exhibits**. All Schedules and Exhibits referred to herein are intended to be and hereby are specifically made a part of this Bill of Sale.

9. **Counterparts**. This Bill of Sale may be executed by facsimile, electronically or by exchange of documents in PDF format, and in several counterparts, each of which shall be deemed an original instrument and all of which together shall constitute a single agreement. Any signature page to any counterpart may be detached from such counterpart without impairing the legal effect of the signatures thereon and thereafter attached to another counterpart identical thereto except having attached to it additional signature pages.

(*Signatures appear on following page*)

**IN WITNESS WHEREOF**, the parties have executed this Bill of Sale under seal as of the date first above written.

**SELLER:**

**ATTEST**:

**CITY OF BEAVER FALLS**

By: _____
Name:
Its:

By: _____
Name:
Its:

**BUYER:**

**ATTEST**:

**[_____]**

By: _____
Name:
Its:

By: _____
Name:
Its:

**EXHIBIT "A"**

**ACQUIRED ASSETS**

*[Signature Page to the Bill of Sale]*

**Exhibit B**

Assignment and Assumption Agreement

**ASSIGNMENT AND ASSUMPTION AGREEMENT**

**THIS ASSIGNMENT AND ASSUMPTION AGREEMENT** (the "Agreement") is made and entered into to be effective as of the ____ day of _____, 20__, by and between **THE CITY OF BEAVER FALLS, BEAVER COUNTY**, a body corporate and politic, duly organized under the laws of the Commonwealth of Pennsylvania ("Assignor"), and **[_____]** ("Assignee").

**BACKGROUND**

This Agreement is made pursuant to the Asset Purchase Agreement (the "Asset Purchase Agreement") of even date herewith by and between Assignor and Assignee, in which Assignor is concurrently herewith selling, transferring, conveying, assigning and delivering to Assignee the Acquired Assets, as defined in the Asset Purchase Agreement. Capitalized terms used and not defined herein shall have the meanings given to them in the Asset Purchase Agreement.

Pursuant to the Asset Purchase Agreement, as part of the consideration for the Acquired Assets, Assignee is required to assume and agree to perform, pay or discharge, when due, certain Assumed Liabilities, as defined in the Asset Purchase Agreement.

NOW, THEREFORE, in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the parties hereby covenant and agree as follows:

1. Assignor hereby assigns, and Assignee hereby assumes and agrees to pay, perform and discharge, in accordance with their terms, the Assumed Liabilities.

2. Notwithstanding the foregoing or any other provision of this Agreement, Assignee will not assume or be bound by and shall be deemed not to have assumed, agreed to pay, perform, fulfill or discharge any of the Excluded Liabilities.

3. Assignor hereby assigns, transfers, sets over and grants to Assignee all of its rights and obligations under the Assigned Contracts. Assignee hereby accepts such assignment and transfer and hereby assumes and agrees to perform all obligations and duties of and to make all payments and perform all required actions under the Assigned Contracts. Assignor is hereby released and discharged from all obligations and duties arising from this day forward under, or in respect of, the Assigned Contracts.

4. The assumption by Assignee of the Assumed Liabilities shall not be construed to defeat, impair or limit in any way the rights, claims or remedies of Assignee under the Asset Purchase Agreement.

5. Nothing contained herein shall change, amend, extend or alter (nor shall it be deemed or construed as changing, amending, extending or altering) the terms or conditions of the Asset Purchase Agreement in any manner whatsoever. This Agreement does not create or establish liabilities or obligations not otherwise created or existing under or pursuant to the Asset Purchase Agreement. In the event of any conflict or other difference between the Asset Purchase Agreement and this Agreement, the provisions of the Asset Purchase Agreement shall control.

6. Nothing contained herein shall confer any rights on any third party or in any way enhance or expand the rights of any third party with respect to any of the Assumed Liabilities, and Assignee reserves any and all defenses, rights of offset, claims and counterclaims that either the Assignor or Assignee may have with respect to any of the Assumed Liabilities.

7. The law of the Commonwealth of Pennsylvania shall govern all questions concerning the construction, validity, interpretation and enforceability of this Agreement, without giving effect to any choice of law or conflict of law rules or provisions (whether of the Commonwealth of Pennsylvania or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the Commonwealth of Pennsylvania.

8. This Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns; provided, however, that no party may assign any of its rights or delegate any of its duties under this Agreement without the prior written consent of the other party hereto.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the undersigned have executed this Assignment and Assumption Agreement as of the day and year first above written.

**ASSIGNOR:**

CITY OF BEAVER FALLS

By:_____
Name:
Title:

**ASSIGNEE:**

[_____]

By:_____
Name:
Title:

**Exhibit C**

Escrow Agreement

**Exhibit D**

Form of Opinion of Special Counsel

(215) 575-7000

_____ __, 202_

[Buyer]
Attention: _____
[Address]

Re: City of Beaver Falls Asset Purchase Agreement, dated as of _____ __, 202_

Dear _____:

This firm has acted as special counsel for the City of Beaver Falls, Beaver County, a municipality and a city of the Third Class of the Commonwealth of Pennsylvania duly organized and existing under the Constitution and laws of said Commonwealth (the "**City**"), in connection with the Asset Purchase Agreement, dated as of _____ __, 202_ (the "**Agreement**"), between the City and _____ (the "**Buyer**"), providing for the sale of the System (as defined in the Agreement) to the Buyer.

We are delivering this opinion letter to you at the request of the City. Unless otherwise defined herein, capitalized terms shall have the respective meanings set forth in the Agreement.

As special counsel for the City we have examined originals or copies, certified to our satisfaction, of the following documents:

(i) the Agreement, executed and delivered by the City and the Buyer, and the exhibits and schedules thereto, as supplemented on or before the date hereof, and all documents being executed by the City in connection with the Closing occurring on the date hereof;

(ii) that certain Escrow Agreement dated as of the date hereof by and among the City, the Buyer, and an entity acting as escrow agent (the "**Escrow Agreement**" and together with the Agreement, the "**Agreements**"), executed and delivered by the City and the Buyer, and the exhibits and schedules thereto;

(iii) the Pennsylvania Third Class City Code (the "**Code**");

(iv) Ordinance No. _____ of the City Council enacted on _____ __, 202_ (the "**Ordinance**"), relating to the Agreements and as attested by the Secretary of the City;

(v) such other documents, records and certificates as we have deemed necessary or appropriate as a basis for the opinions expressed below.

In rendering this opinion, we have assumed the following:

1. the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the original documents of all documents submitted to us as copies;

2. that all natural persons, including each representative of the City, who signed the Agreements had sufficient legal capacity to do so;

3. that all parties other than the City have the authority to execute and deliver the documents, certificates and agreements to which they are a party or that they have signed;

4. that the Pennsylvania Public Utility Commission has issued a Final Order approving the sale of the System;

5. that there has not been any mutual mistake of fact, fraud, duress or undue influence in connection with this transaction that could affect the validity or enforceability of any of the Agreements;

6. that each of the Agreements has been duly authorized, executed and delivered by each party thereto (other than the City) and that each of the Agreements are binding and enforceable against each such party in accordance with its terms; and

7. that the terms and conditions of the Agreements have not been amended, modified or supplemented, directly or indirectly, by any other agreement or understanding of the parties or the waiver of any of the material provisions of the Agreements.

As to questions of fact material to the opinions expressed herein, we have relied solely and without independent investigation upon the certificate executed by authorized official[s] of the City with respect to the accuracy of the factual matters contained therein, the opinion of Santicola, Steele, and Fedeles, P.C., Solicitor of the City given in connection with the Agreement, and such other documents as we have deemed appropriate, as well as on the representations of the City contained in the Agreements (including the exhibits thereto) and the documents delivered pursuant thereto.

On the basis of and subject to the assumptions, qualifications, exceptions and limitations set forth herein, we are of the opinion that:

1. The City is a city of the third class duly organized and existing under the Constitution and laws of the Commonwealth of Pennsylvania and the Code.

2. The City has taken all action necessary to adopt the Ordinance and to authorize the execution, delivery and performance of the Agreements by the City, and the City has duly executed and delivered the Agreements.

3. The Agreements constitute valid and binding obligations of the City, enforceable against the City in accordance with their respective terms.

4. The execution and delivery by the City of the Agreements does not, and the performance by the City of its obligations thereunder will not, (a) result in a violation of the Code, or (b) result in a violation of any order or decree by the City of which we have knowledge.

The foregoing opinions are subject to the following qualifications, exceptions and limitations:

(a) Our opinions are subject to limitations imposed by general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law), including without limitation concepts of materiality, reasonableness, good faith and fair dealing.

(b) We have made no examination of, and express no opinion with respect to, the title to or ownership of any City property.

(c) The opinions in this letter are limited to the matters set forth herein, and no opinion may be inferred or implied beyond the matters expressly stated in this letter. The opinions expressed herein must be read in conjunction with the assumptions, limitations, exceptions and qualifications set forth in this letter. We assume no obligation to update this opinion or to advise you of any changes in facts or laws subsequent to the date hereof.

(d) Our opinion is limited in all respects to the laws of the United States of America and the laws of the Commonwealth of Pennsylvania in effect as of the date hereof that, in our experience, are normally applicable to transactions such as set forth in the Agreements, and we express no opinion as to the laws of any other jurisdiction. Our opinion is limited to a consideration of judicial decisions that are published in recognized legal authorities or readily available in electronic databases.

This opinion letter may be relied upon only by you in connection with the execution and delivery of the Agreement and the transactions contemplated thereby. You may not rely upon this opinion letter for any other purpose, and no other person or entity may rely upon this opinion letter for any purpose without our prior written consent. This opinion letter may not be referred to, or described, furnished or quoted to, any other person, firm or entity, without in each instance our prior written consent.

Very truly yours,

# EXHIBIT BB1

## VERIFICATION

I, William C. Packer, Vice President, Regulatory Accounting & Regional Controller of Aqua Pennsylvania Wastewater, Inc., hereby state that Aqua Pennsylvania Wastewater, Inc. selected ScottMadden, Inc. as its Utility Valuation Expert to conduct a Fair Market Value Appraisal of the wastewater system assets of the City of Beaver Falls. I understand that my statement herein is made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

William C. Packer
Vice President, Regulatory
Accounting & Regional Controller
Aqua Pennsylvania Wastewater, Inc.

Dated: January 25, 2023

# EXHIBIT BB2

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that City of Beaver Falls selected Gannett Fleming Valuation and Rate Consultants, LLC as its Utility Valuation Expert to conduct a Fair Market Value Appraisal of its wastewater system assets. I understand that my statement herein is made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: December 14th, 2022

# EXHIBIT C

GL293 Date: 01/20/22 JOB SUBMISSION PARAMETERS
Time: 07:13

User Name: AQUAAMERICA\pagill
Job Name: Q22019
Step Nbr: 1

Main

Company: 15
or Company Group:

Year Code:
or
Year: 2021
Period Range: 1- 12

Organization

Accounting Units:

Accounting Unit List:

Level Group:

Individual Reporting

Company: X Level One: Level Two:
Level Three: Level Four: Level Five:

Report Options

| | | |
|---|---|---|
| Chart Depth: | | All |
| Account Detail: | S | Subaccount |
| Suppress Zero Accounts: | Y | Yes |
| Report Sequence: | L | Level |
| Budget: | | |
| Report Currency: | B | Base |
| XBRL Tag: | N | No |

GL293 Date 01/20/22 Company 15 - AQUA PENNSYLVANIA INC. USD Page 1
Time 07:13 Income Statement
For Period 1 Through 12 Ending December 31, 2021 Fiscal Year 2021

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| NETPROFIT | Net Profit | | | | |
| NETINCOME | Net Income | | | | |
| NIBT | Net Icome Before Taxes | | | | |
| OPER INC | Operating Income | | | | |
| TOTREV | Revenue | | | | |
| OPREV | OPREV | | | | |
| OPREV-WTR | OPREV-WTR | | | | |
| 460100-0000 | Unmetered Rev-RESIDENTIAL | 32,141.94- | 32,141.94- | 30,673.29- | 30,673.29- |
| 461100-0000 | Metered Sales-Residential | 310,570,416.62- | 310,570,416.62- | 318,190,211.32- | 318,190,211.32- |
| 461200-0000 | Metered Sales-Commercial | 108,546,401.53- | 108,546,401.53- | 102,713,516.32- | 102,713,516.32- |
| 461300-0000 | Metered Sales-Industrial | 18,683,089.15- | 18,683,089.15- | 18,329,697.19- | 18,329,697.19- |
| 461400-0000 | Metered Sales-Public Authority | 8,481,675.45- | 8,481,675.45- | 8,254,557.99- | 8,254,557.99- |
| 461605-0000 | Metered Sales - Bulk Water | 76,323.98- | 76,323.98- | 224,501.75- | 224,501.75- |
| 462000-0000 | Metered Fire Protection Rev | 12,792,948.31- | 12,792,948.31- | 12,878,316.09- | 12,878,316.09- |
| 462100-0000 | Public Fire Protection | 6,519,980.27- | 6,519,980.27- | 6,505,768.06- | 6,505,768.06- |
| 462200-0000 | Private Fire Protection | 2,099,416.43- | 2,099,416.43- | 2,078,549.40- | 2,078,549.40- |
| 466000-0000 | Sales for Resale-Metered | 2,972,592.77- | 2,972,592.77- | 2,635,538.82- | 2,635,538.82- |
| 471000-0000 | Misc Srv Rev | 524,604.72- | 524,604.72- | 495,985.82- | 495,985.82- |
| 471010-0000 | Misc Srv Rev-RECONNECTION FEE | 251,385.00- | 251,385.00- | 51,703.77- | 51,703.77- |
| 471050-0000 | Misc Srv Rev-LATE PAYMENT FEES | 581,929.87- | 581,929.87- | 860,552.79- | 860,552.79- |
| 471060-0000 | Misc Srv Rev-BAD CHECK FEE | 71,996.87- | 71,996.87- | 21,635.00- | 21,635.00- |
| 471070-0000 | Misc Srv Rev-NEW ACCT FEE | 50.00- | 50.00- | 100.00- | 100.00- |
| 471100-0000 | Misc Srv Rev-DSIC IMPRV SURCH | 21,335,733.96- | 21,335,733.96- | 3,682,858.12- | 3,682,858.12- |
| 471200-0000 | Misc Srv Rev-ST TAX ADJ SURCH | 622.53 | 622.53 | 1,217.84 | 1,217.84 |
| | Total OPREV-WTR | 493,540,064.34- | 493,540,064.34- | 476,952,947.89- | 476,952,947.89- |
| OPREV-SWR | OPREV-SWR | | | | |
| 521100-0000 | SW-Flat Rate Rev-Residential | 5,905,178.04- | 5,905,178.04- | 5,868,956.60- | 5,868,956.60- |
| 521200-0000 | SW-Flat Rate Rev-Commercial | 1,473,114.27- | 1,473,114.27- | 1,433,233.99- | 1,433,233.99- |
| 521600-0000 | SW-Flat Rate Rev-Other Sytems | 7,771.33- | 7,771.33- | 0.00 | 0.00 |
| 521700-0000 | SW-Flat Rate Rev-Avail Lot | 693.02 | 693.02 | 0.00 | 0.00 |
| 522100-0000 | SW-Measured Rev-Residential | 18,589,091.39- | 18,589,091.39- | 16,710,472.41- | 16,710,472.41- |
| 522200-0000 | SW-Measured Rev-Commercial | 8,395,856.14- | 8,395,856.14- | 6,429,743.91- | 6,429,743.91- |
| 522300-0000 | SW-Measured Rev-Industrial | 3,851.91- | 3,851.91- | 3,684.71- | 3,684.71- |
| 522400-0000 | SW-Measured Rev-Pub Authority | 1,315,264.89- | 1,315,264.89- | 1,284,873.39- | 1,284,873.39- |
| 532000-0000 | SW-Forfeited Discounts/Abate | 63,164.86- | 63,164.86- | 63,705.05- | 63,705.05- |
| 536000-0000 | SW-Other WW Revenues | 284.39- | 284.39- | 219.62- | 219.62- |
| 536030-0000 | SW-Other WW Rev-DSIC | 707,007.32- | 707,007.32- | 134,046.24- | 134,046.24- |
| | Total OPREV-SWR | 36,459,891.52- | 36,459,891.52- | 31,928,935.92- | 31,928,935.92- |
| | Total OPREV | 529,999,955.86- | 529,999,955.86- | 508,881,883.81- | 508,881,883.81- |
| NON OPER REV | NON-OPER REV | | | | |
| 415000-0000 | Rev-Merch,Job,Contract | 23,193.38- | 23,193.38- | 79,937.73- | 79,937.73- |
| 415010-0000 | Rev-Contract-WW Billing | 2,802,110.58- | 2,802,110.58- | 2,801,476.98- | 2,801,476.98- |
| 415020-0000 | Rev-Contract-Lab Services | 327,289.90- | 327,289.90- | 557,562.00- | 557,562.00- |
| 421020-0000 | Nonutil Inc-Rental Prop | 32,023.50- | 32,023.50- | 27,393.75- | 27,393.75- |
| 421030-0000 | Nonutil Inc-Antennae | 2,333,380.97- | 2,333,380.97- | 2,208,860.84- | 2,208,860.84- |
| 421501-0000 | Nonutil Inc-Ums Outside Serv | 445,825.87- | 445,825.87- | 437,537.92- | 437,537.92- |
| 421900-0000 | Nonutil Inc-Other | 1,438,013.60- | 1,438,013.60- | 3,189,600.57 | 3,189,600.57 |
| | Total NON-OPER REV | 7,401,837.80- | 7,401,837.80- | 2,923,168.65- | 2,923,168.65- |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| | Total Revenue | 537,401,793.66- | 537,401,793.66- | 511,805,052.46- | 511,805,052.46- |
| OPER EXP | Utility Costs & Expenses | | | | |
| OM | Operations & Maint | | | | |
| OM LABOR | OM LABOR | | | | |
| 601110-0000 | WT-Source Oper LBR-Employ-Rg | 252,615.88 | 252,615.88 | 265,007.60 | 265,007.60 |
| 601119-0000 | WT-Source Oper LBR-Employ-OT | 20,418.37 | 20,418.37 | 20,295.24 | 20,295.24 |
| 601210-0000 | WT-Source Maint LBR-Employ-Rg | 329,145.37 | 329,145.37 | 217,561.82 | 217,561.82 |
| 601219-0000 | WT-Source Maint LBR-Employ-OT | 49,500.94 | 49,500.94 | 26,162.37 | 26,162.37 |
| 601310-0000 | WT-WTRTRT Oper LBR-Employ-Rg | 5,853,707.81 | 5,853,707.81 | 5,221,112.00 | 5,221,112.00 |
| 601319-0000 | WT-WTRTRT Oper LBR-Employ-OT | 918,301.37 | 918,301.37 | 779,479.17 | 779,479.17 |
| 601410-0000 | WT-WTRTRT Maint LBR-Employ-Rg | 105,669.06 | 105,669.06 | 164,094.28 | 164,094.28 |
| 601419-0000 | WT-WTRTRT Maint LBR-Employ-OT | 21,188.34 | 21,188.34 | 24,643.11 | 24,643.11 |
| 601510-0000 | WT-T&D Oper LBR-Emp-Sys-GEN-Rg | 4,710,638.01 | 4,710,638.01 | 4,004,121.30 | 4,004,121.30 |
| 601519-0000 | WT-T&D Oper LBR-Emp-Sys-GEN-OT | 105,099.43 | 105,099.43 | 76,032.42 | 76,032.42 |
| 601520-0000 | WT-T&D Oper LBR-Emp-Sy-Main-Rg | 256,162.24 | 256,162.24 | 209,768.51 | 209,768.51 |
| 601529-0000 | WT-T&D Oper LBR-Emp-Sy-Main-OT | 5,281.26 | 5,281.26 | 5,902.10 | 5,902.10 |
| 601530-0000 | WT-T&D Oper LBR-Emp-Sy-Srv-Rg | 793.67 | 793.67 | 1,757.76 | 1,757.76 |
| 601539-0000 | WT-T&D Oper LBR-Emp-Sy-Srv-OT | 2,850.84 | 2,850.84 | 0.00 | 0.00 |
| 601540-0000 | WT-T&D Oper LBR-Emp-Sy-Mtr-Rg | 802,377.24 | 802,377.24 | 717,872.34 | 717,872.34 |
| 601549-0000 | WT-T&D Oper LBR-Emp-Sy-Mtr-OT | 102,951.15 | 102,951.15 | 97,430.98 | 97,430.98 |
| 601550-0000 | WT-T&D Oper LBR-Emp-Sy-Hyd-Rg | 759,008.50 | 759,008.50 | 777,383.41 | 777,383.41 |
| 601559-0000 | WT-T&D Oper LBR-Emp-Sy-Hyd-OT | 181,734.94 | 181,734.94 | 183,277.03 | 183,277.03 |
| 601560-0000 | WT-T&D Oper LBR-Emp-Lost Tm-Rg | 173,791.52 | 173,791.52 | 173,753.66 | 173,753.66 |
| 601569-0000 | WT-T&D Oper LBR-Emp-Lost Tm-OT | 8,104.83 | 8,104.83 | 8,159.55 | 8,159.55 |
| 601570-0000 | WT-T&D Oper LBR-Emp-Oth Wrk-Rg | 311,661.85 | 311,661.85 | 340,232.68 | 340,232.68 |
| 601579-0000 | WT-T&D Oper LBR-Emp-Oth Wrk-OT | 311,544.46 | 311,544.46 | 212,222.11 | 212,222.11 |
| 601610-0000 | WT-T&D Maint LBR-Emp-Sy-GEN-Rg | 552,637.57 | 552,637.57 | 324,312.83 | 324,312.83 |
| 601619-0000 | WT-T&D Maint LBR-Emp-Sy-GEN-OT | 68,877.50 | 68,877.50 | 55,316.19 | 55,316.19 |
| 601620-0000 | WT-T&D Maint LBR-Emp-Sy-Main-R | 73,840.52 | 73,840.52 | 166,112.13 | 166,112.13 |
| 601629-0000 | WT-T&D Maint LBR-Emp-Sy-Main-O | 23,287.57 | 23,287.57 | 46,446.52 | 46,446.52 |
| 601630-0000 | WT-T&D Maint LBR-Emp-Sy-Srv-Rg | 1,050,958.74 | 1,050,958.74 | 764,664.39 | 764,664.39 |
| 601639-0000 | WT-T&D Maint LBR-Emp-Sy-Srv-OT | 187,055.55 | 187,055.55 | 116,435.93 | 116,435.93 |
| 601640-0000 | WT-T&D Maint LBR-Emp-Sy-Mtr-Rg | 142,913.69 | 142,913.69 | 133,315.18 | 133,315.18 |
| 601649-0000 | WT-T&D Maint LBR-Emp-Sy-Mtr-OT | 7,976.53 | 7,976.53 | 16,542.44 | 16,542.44 |
| 601650-0000 | WT-T&D Maint LBR-Emp-Sy-Hyd-Rg | 129,714.42 | 129,714.42 | 180,472.77 | 180,472.77 |
| 601659-0000 | WT-T&D Maint LBR-Emp-Sy-Hyd-OT | 6,029.39 | 6,029.39 | 6,518.15 | 6,518.15 |
| 601660-0000 | WT-T&D Maint LBR-Emp-LostTm-Rg | 167,406.12 | 167,406.12 | 144,666.44 | 144,666.44 |
| 601669-0000 | WT-T&D Maint LBR-Emp-LostTm-OT | 71,119.52 | 71,119.52 | 50,325.65 | 50,325.65 |
| 601670-0000 | WT-T&D Maint LBR-Emp-OthWrk-Rg | 31,984.96 | 31,984.96 | 28,952.63 | 28,952.63 |
| 601679-0000 | WT-T&D Maint LBR-Emp-OthWrk-OT | 7,613.53 | 7,613.53 | 3,120.52 | 3,120.52 |
| 601710-0000 | WT-Cust Accts Labor-Employ-Rg | 538,124.70 | 538,124.70 | 585,649.05 | 585,649.05 |
| 601719-0000 | WT-Cust Accts Labor-Employ-OT | 29,744.64 | 29,744.64 | 27,418.25 | 27,418.25 |
| 601810-0000 | WT-A & G Labor-Employ-Rg | 12,730,113.83 | 12,730,113.83 | 12,939,357.28 | 12,939,357.28 |
| 601819-0000 | WT-A & G Labor-Employ-OT | 773,100.56 | 773,100.56 | 732,151.15 | 732,151.15 |
| 603810-0000 | WT-A & G Labor-Officers, Exec | 451,321.86 | 451,321.86 | 582,557.67 | 582,557.67 |
| 603820-0000 | WT-A & G Labor-Bonuses | 1,303,511.03 | 1,303,511.03 | 2,003,984.47 | 2,003,984.47 |
| 603840-0000 | WT-A & G Labor-Stock Option Co | 51,698.83 | 51,698.83 | 140,596.26 | 140,596.26 |
| 603842-0000 | WT-A & G PSU Amortization | 520,506.78 | 520,506.78 | 358,358.45 | 358,358.45 |
| 603843-0000 | WT-A & G RSU Amortization | 281,685.08 | 281,685.08 | 265,432.27 | 265,432.27 |
| 650520-0000 | WT-Trans-T&D OP-Payrol-RG | 492,596.33 | 492,596.33 | 488,252.70 | 488,252.70 |
| 650529-0000 | WT-Trans-T&D OP-Payrol-OT | 95,319.25 | 95,319.25 | 85,444.84 | 85,444.84 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM LABOR | OM LABOR | | | | |
| 701110-0000 | SW-Collect Oper-LBR-Employ-Rg | 569.70 | 569.70 | 0.00 | 0.00 |
| 701119-0000 | SW-Collect Oper-LBR-Employ-OT | 41.40 | 41.40 | 0.00 | 0.00 |
| 701310-0000 | SW-Pump Oper-LBR-Employ-Rg | 98,103.24 | 98,103.24 | 114,694.68 | 114,694.68 |
| 701319-0000 | SW-Pump Oper-LBR-Employ-OT | 26,016.41 | 26,016.41 | 24,316.50 | 24,316.50 |
| 701410-0000 | SW-Pump Maint-LBR-Employ-Rg | 1,374.69 | 1,374.69 | 2,615.44 | 2,615.44 |
| 701419-0000 | SW-Pump Maint-LBR-Employ-OT | 420.69 | 420.69 | 238.29 | 238.29 |
| 701510-0000 | SW-T&D Oper-LBR-Employ-Rg | 218,320.46 | 218,320.46 | 150,574.67 | 150,574.67 |
| 701519-0000 | SW-T&D Oper-LBR-Employ-OT | 17,091.33 | 17,091.33 | 13,794.07 | 13,794.07 |
| 701710-0000 | SW-Cust Accts-LBR-Employ-Rg | 3,260.11 | 3,260.11 | 3,991.57 | 3,991.57 |
| 701719-0000 | SW-Cust Accts-LBR-Employ-OT | 1,154.29 | 1,154.29 | 1,170.41 | 1,170.41 |
| 701810-0000 | SW-A&G-LBR-Employ-Rg | 2,447,536.07 | 2,447,536.07 | 2,180,854.86 | 2,180,854.86 |
| 701819-0000 | SW-A&G-LBR-Employ-OT | 262,299.39 | 262,299.39 | 195,121.70 | 195,121.70 |
| 703810-0000 | SW-A&G-LBR-Officers,Executives | 290.68 | 290.68 | 0.00 | 0.00 |
| 750520-0000 | SW-Trans-T&D OP-Payroll-RG | 9,675.00 | 9,675.00 | 2,090.00 | 2,090.00 |
| | Total OM LABOR | 38,157,839.04 | 38,157,839.04 | 36,462,135.79 | 36,462,135.79 |
| OM EMP BEN | OM EMP BENEFITS | | | | |
| 604810-0000 | WT-A&G Empl-HEALTH PLANS | 442.40 | 442.40 | 0.00 | 0.00 |
| 604813-0000 | WT-A&G Emp-DENTAL PLAN | 449,573.56 | 449,573.56 | 540,444.26 | 540,444.26 |
| 604815-0000 | WT-A&G Emp-HIMARK | 50.00 | 50.00 | 0.00 | 0.00 |
| 604820-0000 | WT-A&G Emp-KEYSTONE HMO | 8,392,337.10 | 8,392,337.10 | 8,363,517.37 | 8,363,517.37 |
| 604822-0000 | WT-A&G Empl-Insurance Payments | 1,604,705.08- | 1,604,705.08- | 1,479,615.78- | 1,479,615.78- |
| 604824-0000 | WT-A&G Empl-Contributions Dent | 58,408.48- | 58,408.48- | 47,654.03- | 47,654.03- |
| 604827-0000 | WT-A&G Empl-Pension Service Co | 17,051,262.00 | 17,051,262.00 | 9,576,600.00 | 9,576,600.00 |
| 604828-0000 | WT-A&G Empl-OPEB Service Costs | 2,079,553.00 | 2,079,553.00 | 1,345,170.00 | 1,345,170.00 |
| 604829-0000 | WT-A&G Empl-Nonqual Service Co | 141,500.00- | 141,500.00- | 127,487.04- | 127,487.04- |
| 604837-0000 | WT-A&G Empl-CONTRIB THRIFT PL | 1,561,974.84 | 1,561,974.84 | 1,362,397.35 | 1,362,397.35 |
| 604838-0000 | WT-Aqua Year End Contribution | 817,032.95 | 817,032.95 | 773,778.11 | 773,778.11 |
| 604840-0000 | WT-A&G Empl-GROUP LIFE INS | 213,866.56 | 213,866.56 | 212,703.40 | 212,703.40 |
| 604842-0000 | WT-A&G Empl-LTD INSURANCE | 268,883.84 | 268,883.84 | 261,674.86 | 261,674.86 |
| 604845-0000 | WT-A&G Empl-EDUCATION | 46,786.40 | 46,786.40 | 65,378.80 | 65,378.80 |
| 604850-0000 | WT-A&G Empl-WELFARE EXP-Gen | 0.00 | 0.00 | 2,097.70- | 2,097.70- |
| 604852-0000 | WT-A&G Emp-BACKGROUND CHECKS | 0.00 | 0.00 | 4.95 | 4.95 |
| 604855-0000 | WT-A&G Emp-EASE CONTRACT | 39,881.16 | 39,881.16 | 36,501.30 | 36,501.30 |
| 604857-0000 | WT-A&G Emp-FLOWERS & FRUIT | 3,042.02 | 3,042.02 | 2,541.15 | 2,541.15 |
| 604860-0000 | WT-A&G Emp-RETIREMENT LUNCHS | 600.00 | 600.00 | 2,406.79 | 2,406.79 |
| 604864-0000 | WT-A&G Emp-PROF SERV - HR | 3,350.00 | 3,350.00 | 7,955.00 | 7,955.00 |
| 604867-0000 | WT-A&G Emp-TUITION RFND-NONTAX | 76,536.61 | 76,536.61 | 68,420.24 | 68,420.24 |
| 604880-0000 | WT-A&G Fees COLI Accounts | 49,112.94 | 49,112.94 | 47,840.76 | 47,840.76 |
| 604891-0000 | WT-A&G Empl-INTERCO BENEFITS | 1,715,434.98- | 1,715,434.98- | 1,619,201.21- | 1,619,201.21- |
| 704845-0000 | SW-A&G Empl-EDUCATION | 3,975.00 | 3,975.00 | 0.00 | 0.00 |
| 704850-0000 | SW-A&G Empl-WELFARE EXP-Gen | 2,007.13 | 2,007.13 | 1,564.23 | 1,564.23 |
| 704891-0000 | SW-A&G Empl-INTERCO BENEFITS | 1,654,788.09 | 1,654,788.09 | 1,548,515.67 | 1,548,515.67 |
| | Total OM EMP BENEFITS | 29,195,007.06 | 29,195,007.06 | 20,941,358.48 | 20,941,358.48 |
| OM PRCH WTR | OM PURCH WATER | | | | |
| 610100-0000 | WT-Purchased Water | 4,732,165.15 | 4,732,165.15 | 4,808,831.54 | 4,808,831.54 |
| | Total OM PURCH WATER | 4,732,165.15 | 4,732,165.15 | 4,808,831.54 | 4,808,831.54 |
| OM PRCH WW T | OM PURCH WW TRMT | | | | |
| 710500-0000 | SW-Purchased WW-T&D-OPER | 6,805,626.74 | 6,805,626.74 | 5,028,151.65 | 5,028,151.65 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM PRCH WW T | OM PURCH WW TRMT | | | | |
| 710510-0000 | SW-Purchased WW Hauling-T&D-OP | 969,724.00 | 969,724.00 | 0.00 | 0.00 |
| | Total OM PURCH WW TRMT | 7,775,350.74 | 7,775,350.74 | 5,028,151.65 | 5,028,151.65 |
| OM SLUDGE | OM SLUDGE | | | | |
| 711500-0000 | SW-Sludge Removal-T&D-OPER | 1,147,648.22 | 1,147,648.22 | 1,046,248.55 | 1,046,248.55 |
| | Total OM SLUDGE | 1,147,648.22 | 1,147,648.22 | 1,046,248.55 | 1,046,248.55 |
| OM PRCH PWR | OM PURCH POWER | | | | |
| 615100-0000 | WT-Purchased Power-SOURCE OPER | 5,998,500.22 | 5,998,500.22 | 7,665,181.89 | 7,665,181.89 |
| 615300-0000 | WT-Purchased Power-TREAT OPER | 155,577.47 | 155,577.47 | 120,279.89 | 120,279.89 |
| 615500-0000 | WT-Purchased Power-T&D OPER | 1,160,803.96 | 1,160,803.96 | 1,374,533.52 | 1,374,533.52 |
| 615800-0000 | WT-Purchased Power-A & G EXPS | 274,771.19 | 274,771.19 | 304,525.53 | 304,525.53 |
| 616100-0000 | WT-Fuel PWR Prod-SOURCE OPER | 183,704.10 | 183,704.10 | 215,846.91 | 215,846.91 |
| 616300-0000 | WT-Fuel PWR Prod-TREAT OPER | 3,226.38 | 3,226.38 | 4,173.20 | 4,173.20 |
| 616500-0000 | WT-Fuel PWR Prod-T&D OPER | 3,672.17 | 3,672.17 | 2,184.99 | 2,184.99 |
| 616700-0000 | WT-Fuel PWR Prod-CUST ACCTS | 6,780.32 | 6,780.32 | 2,423.69 | 2,423.69 |
| 616800-0000 | WT-Fuel PWR Prod-A & G EXPS | 111,192.09 | 111,192.09 | 68,004.20 | 68,004.20 |
| 715100-0000 | SW-Purchased PWR-Collect Oper | 1,299,908.91 | 1,299,908.91 | 1,340,752.47 | 1,340,752.47 |
| 715300-0000 | SW-Purchased PWR-Pump Oper | 587.81 | 587.81 | 1,794.38 | 1,794.38 |
| 716100-0000 | SW-Fuel PWR Prod-Collect Oper | 48,661.32 | 48,661.32 | 51,451.21 | 51,451.21 |
| 716300-0000 | SW-Fuel PWR Prod-Pump Oper | 643.61- | 643.61- | 5,731.63 | 5,731.63 |
| | Total OM PURCH POWER | 9,246,742.33 | 9,246,742.33 | 11,156,883.51 | 11,156,883.51 |
| OM CHEMICALS | OM CHEMICALS | | | | |
| 618300-0000 | WT-Chem-WTRTRT-OPER-GENERAL | 718,167.76 | 718,167.76 | 673,741.70 | 673,741.70 |
| 618315-0000 | WT-Chem-WTRTRT-OPER-LIQUI ALUM | 1,207,103.11 | 1,207,103.11 | 1,125,138.97 | 1,125,138.97 |
| 618320-0000 | WT-Chem-WTRTRT-OPER-CAUSTIC | 214,305.50 | 214,305.50 | 175,601.62 | 175,601.62 |
| 618325-0000 | WT-Chem-WTRTRT-OPER-CHLORINE | 414,905.41 | 414,905.41 | 393,747.07 | 393,747.07 |
| 618330-0000 | WT-Chem-WTRTRT-OPER-COAGULANTS | 480,952.93 | 480,952.93 | 489,547.46 | 489,547.46 |
| 618335-0000 | WT-Chem-WTRTRT-OPER-FLUORIDE | 32,562.50 | 32,562.50 | 29,056.62 | 29,056.62 |
| 618340-0000 | WT-Chem-WTRTRT-OPER-HYPOCHLORI | 239,163.46 | 239,163.46 | 237,960.19 | 237,960.19 |
| 618345-0000 | WT-Chem-WTRTRT-OPER-POLYPHOSPH | 417,252.05 | 417,252.05 | 355,586.30 | 355,586.30 |
| 618350-0000 | WT-Chem-WTRTRT-OPER-ZINC ORTHO | 183,200.42 | 183,200.42 | 231,757.65 | 231,757.65 |
| 618353-0000 | WT-Chem-WTRTRT-OPER-POLYMER | 183,694.60 | 183,694.60 | 165,322.42 | 165,322.42 |
| 618355-0000 | WT-Chem-WTRTRT-OPER-SODA ASH | 0.00 | 0.00 | .24 | .24 |
| 618360-0000 | WT-Chem-WTRTRT-OPER-PERCOL | 23,155.50 | 23,155.50 | 29,988.00 | 29,988.00 |
| 618363-0000 | WT-Chem-WTRTRT-OPER-SOLAR SALT | 1,096.70 | 1,096.70 | 6,815.11 | 6,815.11 |
| 618365-0000 | WT-Chem-WTRTRT-OPER-LIME | 275,099.49 | 275,099.49 | 233,378.12 | 233,378.12 |
| 618367-0000 | WT-Chem-WTRTRT-OPER-COPPER SUL | 1,020.03 | 1,020.03 | 772.75 | 772.75 |
| 618375-0000 | WT-Chem-WTRTRT-OPER-CARBON | 885,278.45 | 885,278.45 | 801,033.13 | 801,033.13 |
| 618385-0000 | WT-Chem-WTRTRT-OPER-POTAPERM | 25,266.60 | 25,266.60 | 56,866.30 | 56,866.30 |
| 618390-0000 | WT-Chem-WTRTRT-OPER-AMMONIA | 153,703.11 | 153,703.11 | 141,122.82 | 141,122.82 |
| 618395-0000 | WT-Chem-WTRTRT-OPER-MISC Chem | 64,143.73 | 64,143.73 | 67,426.00 | 67,426.00 |
| 718300-0000 | SW-Chem-Pump Oper-GENERAL | 540,800.13 | 540,800.13 | 506,902.91 | 506,902.91 |
| | Total OM CHEMICALS | 6,060,871.48 | 6,060,871.48 | 5,721,765.38 | 5,721,765.38 |
| OM SUPPLIES | OM SUPPLIES | | | | |
| 620100-0000 | WT-Mat&Sup-Source OPER | 53,404.52 | 53,404.52 | 53,562.01 | 53,562.01 |
| 620200-0000 | WT-Mat&Sup-Source MAINT | 7,284.43 | 7,284.43 | 4,229.11 | 4,229.11 |
| 620300-0000 | WT-Mat&Sup-WTRTRT OPER | 451,198.81 | 451,198.81 | 452,508.70 | 452,508.70 |
| 620400-0000 | WT-Mat&Sup-WTRTRT MAINT | 60,107.05 | 60,107.05 | 69,751.40 | 69,751.40 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM SUPPLIES | OM SUPPLIES | | | | |
| 620500-0000 | WT-Mat&Sup-T&D OPER-Gen | 63,708.66 | 63,708.66 | 20,046.87- | 20,046.87- |
| 620501-0000 | WT-Mat&Sup-T&D OPER-Mains | 22,186.72 | 22,186.72 | 46,662.15 | 46,662.15 |
| 620502-0000 | WT-Mat&Sup-T&D OPER-Services | 15,333.64 | 15,333.64 | 19,435.06 | 19,435.06 |
| 620503-0000 | WT-Mat&Sup-T&D OPER-Meters | 0.00 | 0.00 | 700.30 | 700.30 |
| 620504-0000 | WT-Mat&Sup-T&D OPER-Hydrants | 12,032.03 | 12,032.03 | 10,998.32 | 10,998.32 |
| 620506-0000 | WT-Mat&Sup-T&D OP-FRIEGHT | 673.04 | 673.04 | 482.97 | 482.97 |
| 620507-0000 | WT-Mat&Sup-T&D OP-MAINT OF OTH | 101,061.55 | 101,061.55 | 98,389.07 | 98,389.07 |
| 620508-0000 | WT-Mat&Sup-T&D OP-OBSOLETE INV | 30,380.91- | 30,380.91- | 189,132.66 | 189,132.66 |
| 620509-0000 | WT-Mat&Sup-T&D OP-INVENT PRICE | 148.23 | 148.23 | 937.77 | 937.77 |
| 620510-0000 | WT-Mat&Sup-T&D OP-SALT SUPPLY | 1,530.00 | 1,530.00 | 0.00 | 0.00 |
| 620511-0000 | WT-Mat&Sup-T&D OP-BUILDING SUP | 43,487.65 | 43,487.65 | 42,352.42 | 42,352.42 |
| 620512-0000 | WT-Mat&Sup-T&D OP-MAINT SUPPLY | 357,963.26 | 357,963.26 | 414,197.46 | 414,197.46 |
| 620513-0000 | WT-Mat&Sup-T&D OP-SAFETY SUPPL | 533,319.63 | 533,319.63 | 673,427.14 | 673,427.14 |
| 620514-0000 | WT-Mat&Sup-T&D OP-TOOL PURCH | 154,376.04 | 154,376.04 | 99,420.30 | 99,420.30 |
| 620600-0000 | WT-Mat&Sup-T&D MAINT-Gen | 45,508.44 | 45,508.44 | 35,904.55 | 35,904.55 |
| 620601-0000 | WT-Mat&Sup-T&D MAINT-Mains | 167,338.02 | 167,338.02 | 135,445.28 | 135,445.28 |
| 620602-0000 | WT-Mat&Sup-T&D MAINT-Services | 97,155.22 | 97,155.22 | 50,848.24 | 50,848.24 |
| 620603-0000 | WT-Mat&Sup-T&D MAINT-Meters | 52,724.41 | 52,724.41 | 58,236.73 | 58,236.73 |
| 620604-0000 | WT-Mat&Sup-T&D MAINT-Hydrants | 33,923.27 | 33,923.27 | 66,367.98 | 66,367.98 |
| 620608-0000 | WT-Mat&Sup-T&DMNT-OBSOLETE INV | 5.28 | 5.28 | 0.00 | 0.00 |
| 620609-0000 | WT-Mat&Sup-T&DMNT-INVENT PRICE | 695.22 | 695.22 | 221.04 | 221.04 |
| 620610-0000 | WT-Mat&Sup-T&DMNT-SALT SUPPLY | 3,726.96 | 3,726.96 | 1,279.95 | 1,279.95 |
| 620611-0000 | WT-Mat&Sup-T&DMNT-BUILDING SUP | 0.00 | 0.00 | 14.80 | 14.80 |
| 620612-0000 | WT-Mat&Sup-T&DMNT-MAINT SUPPLY | 1,039.01 | 1,039.01 | 1,892.03 | 1,892.03 |
| 620613-0000 | WT-Mat&Sup-T&DMNT-SAFETY SUPPL | 3,358.75 | 3,358.75 | 1,592.65 | 1,592.65 |
| 620614-0000 | WT-Mat&Sup-T&DMNT-TOOL PURCH | 30,847.09 | 30,847.09 | 29,068.45 | 29,068.45 |
| 620700-0000 | WT-Mat&Sup-Cust Accts | 85.59 | 85.59 | 248.50 | 248.50 |
| 620800-0000 | WT-Mat&Sup-A & G | 13,581.95 | 13,581.95 | 13,463.46 | 13,463.46 |
| 620801-0000 | WT-Mat&Sup-A&G-Build & Grounds | 43,157.61 | 43,157.61 | 94,642.19 | 94,642.19 |
| 620802-0000 | WT-MAT&SUP-A&G-PAPER | 201.26 | 201.26 | 1,205.40 | 1,205.40 |
| 720200-0000 | SW-Mat&Sup-Collect Maint | 0.00 | 0.00 | 84.63 | 84.63 |
| 720300-0000 | SW-Mat&Sup-Pump Oper | 182,052.70 | 182,052.70 | 144,487.65 | 144,487.65 |
| 720400-0000 | SW-Mat&Sup-Pump Maint | 0.00 | 0.00 | 908.91 | 908.91 |
| 720500-0000 | SW-Mat&Sup-T&D Oper | 0.00 | 0.00 | 708.48 | 708.48 |
| 720512-0000 | SW-Mat&Sup-T&D OP-MAINT SUPPLY | 1,171.08 | 1,171.08 | 4,785.15 | 4,785.15 |
| 720600-0000 | SW-Mat&Sup-T&D Maint | 0.00 | 0.00 | 4,380.21 | 4,380.21 |
| 720612-0000 | SW-Mat&Sup-T&DMNT-MAINT SUPPLY | 11,595.59 | 11,595.59 | 13,610.17 | 13,610.17 |
| | Total OM SUPPLIES | 2,535,601.80 | 2,535,601.80 | 2,815,536.42 | 2,815,536.42 |
| OM OS ENG | OM OS ENGINEER | | | | |
| 631200-0000 | WT-Cont Serv-Eng-Source MAINT | 0.00 | 0.00 | 7,332.26 | 7,332.26 |
| 631600-0000 | WT-Cont Serv-Eng-T&D MAINT | 0.00 | 0.00 | 11,254.47 | 11,254.47 |
| 631800-0000 | WT-Cont Serv-Eng-A & G | 134,793.38 | 134,793.38 | 151,320.48 | 151,320.48 |
| 731800-0000 | SW-Cont Serv-Eng-A&G | 4,100.00 | 4,100.00 | 0.00 | 0.00 |
| | Total OM OS ENGINEER | 138,893.38 | 138,893.38 | 169,907.21 | 169,907.21 |
| OM OS ACCNT | OM OS ACCOUNTING | | | | |
| 632800-0000 | WT-Cont Serv-Acct-A & G | 841,525.14 | 841,525.14 | 695,402.62 | 695,402.62 |
| 732800-0000 | SW-Cont Serv-Acct-A&G | 85,292.30 | 85,292.30 | 69,581.00 | 69,581.00 |
| | Total OM OS ACCOUNTING | 926,817.44 | 926,817.44 | 764,983.62 | 764,983.62 |

GL293 Date 01/20/22 Company 15 - AQUA PENNSYLVANIA INC. USD Page 6
Time 07:13 Income Statement
For Period 1 Through 12 Ending December 31, 2021 Fiscal Year 2021

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM OS LEGAL | OM OS LEGAL | | | | |
| 633800-0000 | WT-Cont Serv-Legl-A & G | 562,108.20 | 562,108.20 | 580,610.31 | 580,610.31 |
| 733800-0000 | SW-Cont Serv-Legal-A&G | 642.00- | 642.00- | 250.34- | 250.34- |
| | Total OM OS LEGAL | 561,466.20 | 561,466.20 | 580,359.97 | 580,359.97 |
| OM MGMT FEES | OM MGMT FEES | | | | |
| 634900-0000 | WT-Corp Mgmt Fees Only | 17,931,542.13 | 17,931,542.13 | 17,813,810.32 | 17,813,810.32 |
| 734900-0000 | SW-Corp Mgmt Fees Only | 1,773,419.27 | 1,773,419.27 | 1,653,087.75 | 1,653,087.75 |
| | Total OM MGMT FEES | 19,704,961.40 | 19,704,961.40 | 19,466,898.07 | 19,466,898.07 |
| OM OS LABTST | OM OS LAB TESTING | | | | |
| 635300-0000 | WT-Cont Serv-Testg-WTTRT OPER | 438,380.74 | 438,380.74 | 287,864.50 | 287,864.50 |
| 635400-0000 | WT-Cont Serv-Testg-WTTRT MAINT | 4,975.00 | 4,975.00 | 2,337.00 | 2,337.00 |
| 735300-0000 | SW-Cont Serv-Test-Pump Oper | 1,660.68 | 1,660.68 | 0.00 | 0.00 |
| 735400-0000 | SW-Cont Serv-Test-Pump Maint | 467,092.75 | 467,092.75 | 459,853.31 | 459,853.31 |
| | Total OM OS LAB TESTING | 912,109.17 | 912,109.17 | 750,054.81 | 750,054.81 |
| OM OS OTHER | OM OS OTHER | | | | |
| 636100-0000 | WT-Cont Serv-Oth-Source OPER | 106,058.61 | 106,058.61 | 78,206.79 | 78,206.79 |
| 636200-0000 | WT-Cont Serv-Oth-Source MAINT | 301,452.97 | 301,452.97 | 223,934.03 | 223,934.03 |
| 636300-0000 | WT-Cont Serv-Oth-WTRTRT OPER | 122,071.37 | 122,071.37 | 47,631.31 | 47,631.31 |
| 636310-0000 | WT-Cont Serv-Oth-Basin-Lag Cln | 707,827.53 | 707,827.53 | 623,107.60 | 623,107.60 |
| 636400-0000 | WT-Cont Serv-Oth-WTRTRT MAINT | 1,407,765.31 | 1,407,765.31 | 1,678,295.27 | 1,678,295.27 |
| 636500-0000 | WT-Cont Serv-Oth-T&D OPER-Gen | 363,515.78 | 363,515.78 | 319,477.28 | 319,477.28 |
| 636501-0000 | WT-Cont Serv-Oth-T&D OPER-Main | 31,995.44 | 31,995.44 | 573.10 | 573.10 |
| 636502-0000 | WT-Cont Serv-Oth-T&D OPER-Serv | 4,334.84 | 4,334.84 | 7,286.84 | 7,286.84 |
| 636503-0000 | WT-Cont Serv-Oth-T&D OPER-Metr | 170,607.05 | 170,607.05 | 186,870.31 | 186,870.31 |
| 636504-0000 | WT-Cont Serv-Oth-T&D OPER-Hyd | 2,695.27 | 2,695.27 | 8,636.78 | 8,636.78 |
| 636600-0000 | WT-Cont Serv-Oth-T&D MAINT-Gen | 1,056,406.33 | 1,056,406.33 | 798,841.38 | 798,841.38 |
| 636601-0000 | WT-Cont Serv-Oth-T&D MAINT-Mai | 191,597.45 | 191,597.45 | 25,550.38 | 25,550.38 |
| 636602-0000 | WT-Cont Serv-Oth-T&D MAINT-Srv | 9,929.70 | 9,929.70 | 12,659.67 | 12,659.67 |
| 636604-0000 | WT-Cont Serv-Oth-T&D MAINT-Hyd | 5,232.00- | 5,232.00- | 51,947.22 | 51,947.22 |
| 636610-0000 | WT-Cont Serv-Oth-Build&Grounds | 1,625,635.04 | 1,625,635.04 | 1,396,116.39 | 1,396,116.39 |
| 636611-0000 | WT-Cont Serv-Grounds Care | 809,970.47 | 809,970.47 | 604,612.39 | 604,612.39 |
| 636620-0000 | WT-Cont Serv-Oth-MAINT&Constr | 115,104.52 | 115,104.52 | 11,528.65- | 11,528.65- |
| 636630-0000 | WT-Cont Serv-Oth-Security | 520,800.72 | 520,800.72 | 550,695.67 | 550,695.67 |
| 636640-0000 | WT-Cont Serv-Oth-Temp Help | 21,955.75 | 21,955.75 | 35,972.75 | 35,972.75 |
| 636700-0000 | WT-Other ACO Direct costs | 757,563.40 | 757,563.40 | 565,928.65 | 565,928.65 |
| 636710-0000 | WT-WorkFlow Processing Fee | 857,164.51 | 857,164.51 | 908,142.56 | 908,142.56 |
| 636720-0000 | WT-WorkFlow Billing Postage | 1,272,949.42 | 1,272,949.42 | 1,322,127.42 | 1,322,127.42 |
| 636730-0000 | WT-ACO Allocation | 4,901,284.03 | 4,901,284.03 | 4,963,579.82 | 4,963,579.82 |
| 636740-0000 | WT-ACO Lockbox Fees | 578,143.74 | 578,143.74 | 609,241.06 | 609,241.06 |
| 636800-0000 | WT-Cont Serv-Oth-A&G | 935,505.64 | 935,505.64 | 816,313.44 | 816,313.44 |
| 636801-0000 | WT-Cont Serv-Oth-CC | 728,872.88 | 728,872.88 | 689,602.00 | 689,602.00 |
| 736200-0000 | SW-Cont Serv-Oth-Collect Maint | 361,521.95 | 361,521.95 | 209,074.75 | 209,074.75 |
| 736300-0000 | SW-Cont Serv-Oth-Pump Oper | 399,965.69 | 399,965.69 | 293,858.19 | 293,858.19 |
| 736400-0000 | SW-Cont Serv-Oth-Pump Maint | 308,744.00 | 308,744.00 | 313,266.58 | 313,266.58 |
| 736500-0000 | SW-Cont Serv-Oth-T&D Oper | 951,374.83 | 951,374.83 | 735,812.81 | 735,812.81 |
| 736600-0000 | SW-Cont Serv-Oth-T&D Maint | 639,743.80 | 639,743.80 | 481,968.82 | 481,968.82 |
| 736610-0000 | SW-Cont Serv-Oth-Build&Grounds | 43,564.37 | 43,564.37 | 37,338.17 | 37,338.17 |
| 736700-0000 | SW-Other ACO Direct costs | 2,241.60 | 2,241.60 | 1,237.08 | 1,237.08 |
| 736710-0000 | SW-WorkFlow Processing Fee | 82,367.80 | 82,367.80 | 87,808.33 | 87,808.33 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM OS OTHER | OM OS OTHER | | | | |
| 736720-0000 | SW-WorkFlow Billing Postage | 125,506.48 | 125,506.48 | 127,607.20 | 127,607.20 |
| 736730-0000 | SW-ACO Allocation | 484,742.37 | 484,742.37 | 461,853.22 | 461,853.22 |
| 736740-0000 | SW-ACO Lockbox Fees | 19,054.31 | 19,054.31 | 13,043.84 | 13,043.84 |
| 736800-0000 | SW-Cont Serv-Oth-A&G | 420,274.89 | 420,274.89 | 485,537.85 | 485,537.85 |
| 736900-0000 | SW-Cont Serv-Oth-Recl WT | 0.00 | 0.00 | 160.00 | 160.00 |
| | Total OM OS OTHER | 21,435,077.86 | 21,435,077.86 | 19,762,388.30 | 19,762,388.30 |
| OM OS CMPSVS | OM OS COMP SVS | | | | |
| 636820-0000 | WT-Cont Serv-Oth-A&G-SFTW MANT | 434,695.50 | 434,695.50 | 306,544.47 | 306,544.47 |
| 736810-0000 | SW-Cont Serv-Oth-A&G-HRDW MANT | 0.00 | 0.00 | 6,387.20 | 6,387.20 |
| 736820-0000 | SW-Cont Serv-Oth-A&G-SFTW MANT | 4,750.00 | 4,750.00 | 7,881.00 | 7,881.00 |
| | Total OM OS COMP SVS | 439,445.50 | 439,445.50 | 320,812.67 | 320,812.67 |
| OM LEASES | OM LEASES | | | | |
| 641100-0000 | WT-Rent Bldg/RP-Source OPER | 504,890.98 | 504,890.98 | 468,419.52 | 468,419.52 |
| 641500-0000 | WT-Rent Bldg/RP-T&D OPER | 41,935.51 | 41,935.51 | 31,025.95 | 31,025.95 |
| 641800-0000 | WT-Rent Bldg/RP-A & G | 5,933.16 | 5,933.16 | 6,463.46 | 6,463.46 |
| 642300-0000 | WT-Rent Equip-WTRTRT OPER | 10,418.23 | 10,418.23 | 5,882.25 | 5,882.25 |
| 642400-0000 | WT-Rent Equip-WTRTRT MAINT | 2,249.72 | 2,249.72 | 0.00 | 0.00 |
| 642800-0000 | WT-Rent Equip-A & G | 27,185.32 | 27,185.32 | 37,676.54 | 37,676.54 |
| 741100-0000 | SW-Rent Bldg/RP-Collect Oper | 37,425.48 | 37,425.48 | 36,498.29 | 36,498.29 |
| 741800-0000 | SW-Rent Bldg/RP-A&G | 74,585.86 | 74,585.86 | 80,790.52 | 80,790.52 |
| | Total OM LEASES | 704,624.26 | 704,624.26 | 666,756.53 | 666,756.53 |
| OM TRANS | OM TRANSPORTATION | | | | |
| 650500-0000 | WT-Trans-T&D OP-GENERAL | 2,471.20 | 2,471.20 | 0.00 | 0.00 |
| 650511-0000 | WT-Trans-T&D OP-OUTSIDE SVC | 205,763.19 | 205,763.19 | 207,568.09 | 207,568.09 |
| 650512-0000 | WT-Trans-T&D OP-CAR ALLOWANC | 0.00 | 0.00 | 189.00 | 189.00 |
| 650513-0000 | WT-Trans-T&D OP-CAR WASH TCK | 2,101.22 | 2,101.22 | 938.39 | 938.39 |
| 650514-0000 | WT-Trans-T&D OP-LICENSES | 126,287.65 | 126,287.65 | 109,052.68 | 109,052.68 |
| 650515-0000 | WT-Trans-T&D OP-LEASE | 119,125.20- | 119,125.20- | 98,171.96- | 98,171.96- |
| 650531-0000 | WT-Trans-T&D OP-DIESEL | 143,879.77 | 143,879.77 | 154,006.34 | 154,006.34 |
| 650532-0000 | WT-Trans-T&D OP-GASOLINE | 1,063,308.66 | 1,063,308.66 | 1,025,141.15 | 1,025,141.15 |
| 650533-0000 | WT-Trans-T&D OP-MOTOR OIL | 50,348.07 | 50,348.07 | 24,150.38 | 24,150.38 |
| 650534-0000 | WT-Trans-T&D OP-CNG Fuel | 62,780.91 | 62,780.91 | 64,598.84 | 64,598.84 |
| 650540-0000 | WT-Trans-T&D OP-PARTS AUTO&MCH | 430,243.92 | 430,243.92 | 434,571.48 | 434,571.48 |
| 650544-0000 | WT-Trans-T&D OP-TIRES | 101,749.64 | 101,749.64 | 95,558.91 | 95,558.91 |
| 650545-0000 | WT-Trans-T&D OP-TOOL PURCHASES | 12,369.14 | 12,369.14 | 49,140.20 | 49,140.20 |
| 650551-0000 | WT-Trans-T&D OP-CLEARING RES | 1,335,654.94- | 1,335,654.94- | 1,174,945.27- | 1,174,945.27- |
| 650555-0000 | WT-Trans-T&D OP-CRASH | 131,126.01 | 131,126.01 | 37,556.99 | 37,556.99 |
| 650611-0000 | WT-Transportation-T&D-Outside | 0.00 | 0.00 | 105.00 | 105.00 |
| 650800-0000 | WT-Trans-A & G | 98,650.57 | 98,650.57 | 63,428.67 | 63,428.67 |
| 750515-0000 | SW-Trans-T&D OP-Lease | 100,299.55 | 100,299.55 | 29,835.37 | 29,835.37 |
| 750532-0000 | SW-Trans-T&D OP Gasoline | 42,125.00 | 42,125.00 | 7,703.39 | 7,703.39 |
| 750540-0000 | SW-Trans-T&D Ops-Parts Auto & | 11,747.00 | 11,747.00 | 2,329.83 | 2,329.83 |
| 750800-0000 | SW-Trans-A&G | 360.50 | 360.50 | 2,971.60 | 2,971.60 |
| | Total OM TRANSPORTATION | 1,130,831.86 | 1,130,831.86 | 1,035,729.08 | 1,035,729.08 |
| OM INSURANCE | OM INSURANCE | | | | |
| 656800-0000 | WT-Ins-Vehicle-A & G | 219,435.23 | 219,435.23 | 253,662.97 | 253,662.97 |
| 657800-0000 | WT-Ins-Gen Liab-A & G | 3,707,853.47 | 3,707,853.47 | 2,896,372.24 | 2,896,372.24 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM INSURANCE | OM INSURANCE | | | | |
| 658800-0000 | WT-Ins-Work Comp-A & G | 1,016,627.70 | 1,016,627.70 | 1,317,881.85 | 1,317,881.85 |
| 659800-0000 | WT-Ins-Other-A & G | 1,374,135.77 | 1,374,135.77 | 1,255,156.26 | 1,255,156.26 |
| 757800-0000 | SW-Ins-Gen Liab-A&G | 106,816.00 | 106,816.00 | 35,639.85 | 35,639.85 |
| 758800-0000 | SW-Ins-Work Comp-A&G | 9,940.00 | 9,940.00 | 5,672.07 | 5,672.07 |
| 759800-0000 | SW-Ins-Other-A&G | 36,084.00 | 36,084.00 | 28,760.08 | 28,760.08 |
| | Total OM INSURANCE | 6,470,892.17 | 6,470,892.17 | 5,793,145.32 | 5,793,145.32 |
| OM OTHER | OM OTHER | | | | |
| 660800-0000 | WT-Advertising-A & G | 175,771.07 | 175,771.07 | 200,124.60 | 200,124.60 |
| 675200-0000 | WT-Misc-SRC MAINT | 674.96 | 674.96 | 55.10 | 55.10 |
| 675300-0000 | WT-Misc-WTRTRT OPER | 46,591.51 | 46,591.51 | 39,747.62 | 39,747.62 |
| 675400-0000 | WT-Misc-WTRTRT MAINT | 46,109.58 | 46,109.58 | 6,794.25 | 6,794.25 |
| 675500-0000 | WT-Misc-T&D OPER | 303.19 | 303.19 | 61.44 | 61.44 |
| 675600-0000 | WT-Misc-T&D MAINT | 5,514.84 | 5,514.84 | 5,709.34 | 5,709.34 |
| 675800-0000 | WT-Misc-A&G | 2,775,115.15 | 2,775,115.15 | 124,202.79 | 124,202.79 |
| 675802-0000 | WT-Misc-A&G-ACT&EVNT 100% D | 262.50 | 262.50 | 1,389.00 | 1,389.00 |
| 675803-0000 | WT-Misc-A&G-Chamber Commerce | 146,840.90 | 146,840.90 | 94,503.50 | 94,503.50 |
| 675804-0000 | WT-Misc-A&G-ACT&EVNT 50% D | 14,560.93 | 14,560.93 | 35,852.57 | 35,852.57 |
| 675805-0000 | WT-Misc-A&G-Civic Org Events | 240.00 | 240.00 | 0.00 | 0.00 |
| 675808-0000 | WT-Misc-A&G-COMM EXP | 409,662.94 | 409,662.94 | 406,198.01 | 406,198.01 |
| 675810-0000 | WT-Misc-A&G-DATA LINES | 781,106.81 | 781,106.81 | 649,439.40 | 649,439.40 |
| 675816-0000 | WT-Misc-A&G-CONTRIB | 0.00 | 0.00 | 119.59 | 119.59 |
| 675819-0000 | WT-Misc-A&G-Office Supplies | 344,795.17 | 344,795.17 | 276,793.64 | 276,793.64 |
| 675820-0000 | WT-Misc-A&G-DIRECTORS | 55.00 | 55.00 | 0.00 | 0.00 |
| 675824-0000 | WT-Misc-A&G-DUES | 516,352.74 | 516,352.74 | 475,180.03 | 475,180.03 |
| 675825-0000 | WT-Misc-A&G-Promotional Items | 43,762.16 | 43,762.16 | 27,005.39 | 27,005.39 |
| 675827-0000 | WT-Misc-A&G-FINES&PENALTIES | 11,110.00 | 11,110.00 | 4,500.00 | 4,500.00 |
| 675828-0000 | WT-Misc-A&G-LIC&PER | 706,095.53 | 706,095.53 | 654,784.82 | 654,784.82 |
| 675830-0000 | WT-Misc-A&G-MAIL&POST | 26,128.33 | 26,128.33 | 24,112.73 | 24,112.73 |
| 675831-0000 | WT-Misc-A&G-MAIL OVERNIGHT | 82,724.06 | 82,724.06 | 85,962.74 | 85,962.74 |
| 675832-0000 | WT-Misc-A&G-MAINT | 160,359.37 | 160,359.37 | 119,265.74 | 119,265.74 |
| 675834-0000 | WT-Misc-A&G-MEALS 100% DED | 57,216.10 | 57,216.10 | 50,408.26 | 50,408.26 |
| 675836-0000 | WT-Misc-A&G-MEALS 50% DED | 101,001.73 | 101,001.73 | 62,847.00 | 62,847.00 |
| 675840-0000 | WT-Misc-A&G-SEMINARS | 34,692.11 | 34,692.11 | 23,770.73 | 23,770.73 |
| 675842-0000 | WT-Misc-A&G-SUBSCRIPT | 24,700.42 | 24,700.42 | 40,675.65 | 40,675.65 |
| 675846-0000 | WT-Misc-A&G-TRV | 21,034.43 | 21,034.43 | 39,702.67 | 39,702.67 |
| 675847-0000 | WT-Misc-A&G-TRV-Auto Mile Reim | 8,343.51- | 8,343.51- | 7,410.52- | 7,410.52- |
| 675848-0000 | WT-Misc-A&G-TRV-RENTAL CAR | 328.20 | 328.20 | 93.17 | 93.17 |
| 675849-0000 | WT-Misc-A&G-TRV-Airplane | 1,644.66 | 1,644.66 | 689.86 | 689.86 |
| 675850-0000 | WT-Misc-A&G-TRV-HOTEL | 27,100.53 | 27,100.53 | 14,352.70 | 14,352.70 |
| 675856-0000 | WT-Misc-A&G-UNIFORMS | 203,838.95 | 203,838.95 | 194,945.99 | 194,945.99 |
| 675857-0000 | WT-Misc-A&G-Bond Trustee Fee | 224,034.72 | 224,034.72 | 164,166.53 | 164,166.53 |
| 675858-0000 | WT-Misc-A&G-Bank Fees | 36.00 | 36.00 | 5,531.56 | 5,531.56 |
| 675859-0000 | WT-Misc-A&G-CO Exp-All Other | 0.00 | 0.00 | 1,000.00 | 1,000.00 |
| 675861-0000 | WT-Misc-A&G-SERVICE CLEARING | 11,160.92- | 11,160.92- | 6,332.92- | 6,332.92- |
| 675862-0000 | WT-Misc-A&G-Interco Billing | 0.00 | 0.00 | 15,175.38 | 15,175.38 |
| 675863-0000 | WT-Misc-A&G-INTRACO CLEARING | 2,591,525.78- | 2,591,525.78- | 1,309,910.04- | 1,309,910.04- |
| 675864-0000 | WT-Misc-A&G-Claims | 230,378.11 | 230,378.11 | 328,001.27 | 328,001.27 |
| 675865-0000 | WT-Misc-A&G-AR/AP Adj | .16- | .16- | .45- | .45- |
| 675866-0000 | WT-Misc-A&G-Utilities | 17,414.41 | 17,414.41 | 18,889.68 | 18,889.68 |
| 675872-0000 | WT-Misc-A&G-Security Comm. | 181,050.16 | 181,050.16 | 191,750.45 | 191,750.45 |

GL293 Date 01/20/22 Company 15 - AQUA PENNSYLVANIA INC. USD Page 9
Time 07:13 Income Statement
For Period 1 Through 12 Ending December 31, 2021 Fiscal Year 2021

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| OM OTHER | OM OTHER | | | | |
| 676210-0000 | WT-Cap OH Credit-Labor | 2,012,872.94- | 2,012,872.94- | 2,158,432.56- | 2,158,432.56- |
| 676220-0000 | WT-Cap OH Credit-Benefits | 7,476,450.12- | 7,476,450.12- | 7,146,181.97- | 7,146,181.97- |
| 676230-0000 | WT-Cap OH Credit-PR Taxes | 1,329,834.33- | 1,329,834.33- | 1,422,096.16- | 1,422,096.16- |
| 676240-0000 | WT-Cap OH Credit-Other | 1,938,993.26- | 1,938,993.26- | 1,917,449.73- | 1,917,449.73- |
| 775300-0000 | SW-Misc-Pump Oper | 200.00 | 200.00 | 300.00 | 300.00 |
| 775400-0000 | SW-Misc-Pump Maint | 1,390.00 | 1,390.00 | 0.00 | 0.00 |
| 775800-0000 | SW-Misc-A&G | 64,001.34 | 64,001.34 | 6,362.51 | 6,362.51 |
| 775805-0000 | SW-Misc-A&G-Civic Org Events | 0.00 | 0.00 | 284.97 | 284.97 |
| 775808-0000 | SW-Misc-A&G-COMM EXP | 118,933.86 | 118,933.86 | 102,305.84 | 102,305.84 |
| 775810-0000 | SW-Misc-A&G-DATA LINES | 37,462.26 | 37,462.26 | 48,252.69 | 48,252.69 |
| 775819-0000 | SW-Misc-A&G-Office Supplies | 8,744.55 | 8,744.55 | 10,671.24 | 10,671.24 |
| 775824-0000 | SW-Misc-A&G-DUES | 140.00 | 140.00 | 1,094.25 | 1,094.25 |
| 775825-0000 | SW-Misc-A&G-Promotional Items | 309.08 | 309.08 | 0.00 | 0.00 |
| 775827-0000 | SW-Misc-A&G-FINES&PENALTIES | 0.00 | 0.00 | 1,555.00 | 1,555.00 |
| 775828-0000 | SW-Misc-A&G-LIC&PER | 42,616.94 | 42,616.94 | 72,203.09 | 72,203.09 |
| 775830-0000 | SW-Misc-A&G-MAIL&POST | 426.01 | 426.01 | 62.31 | 62.31 |
| 775831-0000 | SW-Misc-A&G-MAIL OVERNIGHT | 3,919.26 | 3,919.26 | 2,322.77 | 2,322.77 |
| 775834-0000 | SW-Misc-A&G-MEALS 100% DED | 2,204.72 | 2,204.72 | 513.26 | 513.26 |
| 775836-0000 | SW-Misc-A&G-MEALS 50% DED | 3,414.86 | 3,414.86 | 2,204.42 | 2,204.42 |
| 775840-0000 | SW-Misc-A&G-SEMINARS | 5,353.00 | 5,353.00 | 2,179.50 | 2,179.50 |
| 775842-0000 | SW-Misc-A&G-SUBSCRIPT | 289.65 | 289.65 | 681.14 | 681.14 |
| 775846-0000 | SW-Misc-A&G-TRV | 12.50 | 12.50 | 627.78 | 627.78 |
| 775850-0000 | SW-Misc-A&G-TRV-HOTEL | 1,028.43 | 1,028.43 | 923.76 | 923.76 |
| 775856-0000 | SW-Misc-A&G-UNIFORMS | 3,011.01 | 3,011.01 | 2,333.53 | 2,333.53 |
| 775858-0000 | SW-Misc-A&G-Bank Fees | 0.00 | 0.00 | 858.00 | 858.00 |
| 775860-0000 | SW-Misc-A&G-Payroll Overhead | 63.22 | 63.22 | 809.88 | 809.88 |
| 775865-0000 | SW-Misc-A&G-AR/AP Adj | 0.00 | 0.00 | 37.05 | 37.05 |
| 775866-0000 | SW-Misc-A&G-Utilities | 85,486.23 | 85,486.23 | 105,782.37 | 105,782.37 |
| | Total OM OTHER | 7,571,566.83- | 7,571,566.83- | 9,221,645.79- | 9,221,645.79- |
| OM BAD DEBT | OM BAD DEBT | | | | |
| 670700-0000 | WT-Bad Debt Expense-Cust Accts | 2,961,899.33 | 2,961,899.33 | 1,537,063.46 | 1,537,063.46 |
| 670710-0000 | WT-Recovery of Bad Debt | 444,387.84- | 444,387.84- | 358,322.30- | 358,322.30- |
| 670720-0000 | WT-Bad Debt Reserve Change | 1,875.51 | 1,875.51 | 1,255,823.84 | 1,255,823.84 |
| 770700-0000 | SW-Bad Debt Exp-Cust Accts | 592,296.38 | 592,296.38 | 336,659.05 | 336,659.05 |
| 770710-0000 | SW-Recovery of Bad Debt | 266,132.69- | 266,132.69- | 17,129.59- | 17,129.59- |
| 770720-0000 | SW-Bad Debt Reserve Change | 103,096.31 | 103,096.31 | 67,170.54 | 67,170.54 |
| | Total OM BAD DEBT | 2,948,647.00 | 2,948,647.00 | 2,821,265.00 | 2,821,265.00 |
| NON OPER EXP | NON-OPER EXP | | | | |
| 416000-0000 | Exp-Merch,Job,Contract | 66,284.64 | 66,284.64 | 89,742.21 | 89,742.21 |
| 416010-0000 | Exp-Merch,Job,Contract-WW Bill | 367,668.45 | 367,668.45 | 288,277.42 | 288,277.42 |
| 416020-0000 | Exp-Merch,Job,Contract-Lab Tst | 207.70 | 207.70 | 56.26 | 56.26 |
| 416030-0000 | Exp-Non Oper Contract-Labor-Rg | 1,229.28 | 1,229.28 | 19,618.22 | 19,618.22 |
| 416039-0000 | Exp-Non Oper Contract-Labor-Ot | 531.00 | 531.00 | 1,358.43 | 1,358.43 |
| 426020-0000 | Misc NonUtil Exp-RENTAL PROP | 6,654.48 | 6,654.48 | 4,921.12 | 4,921.12 |
| 426030-0000 | Misc NonUtil Exp-ANTENNAE | 18,154.19 | 18,154.19 | 26,743.65 | 26,743.65 |
| 426040-0000 | Misc NonUtil Exp-DEVELOPER-Rg | 426,978.98 | 426,978.98 | 431,248.04 | 431,248.04 |
| 426049-0000 | Misc NonUtil Exp-DEVELOPER-OT | 73,582.61 | 73,582.61 | 56,120.44 | 56,120.44 |
| 426060-0000 | Misc NonUtil Exp-CHARIT CONTR | 202,298.00 | 202,298.00 | 2,809,317.48 | 2,809,317.48 |
| 426080-0000 | Misc NonUtil Exp-ACQUISITIONS | 2,661,728.10 | 2,661,728.10 | 2,420,198.59 | 2,420,198.59 |

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| NON OPER EXP | NON-OPER EXP | | | | |
| 426090-0000 | Misc NonUtil Exp-NON-CUST REL | 56,342.01 | 56,342.01 | 46,173.97 | 46,173.97 |
| 426100-0000 | Misc NonUtil Exp-Street Lights | 0.00 | 0.00 | 4,450.05 | 4,450.05 |
| 426105-0000 | Misc NonUtil Exp-Garbage | 480.97 | 480.97 | 1,779.51 | 1,779.51 |
| 426110-0000 | Misc NonUtil Exp-Bill Mat&Serv | 42,572.00 | 42,572.00 | 51,512.55 | 51,512.55 |
| 426210-0000 | Misc NonUtil-Acq-Payroll-Rg | 114.04 | 114.04 | 0.00 | 0.00 |
| 426230-0000 | Misc NonUtil-Acq-Prof Services | 0.00 | 0.00 | 400.00- | 400.00- |
| 426310-0000 | Misc NonUtil-N-Cust-Payroll-Rg | 133,180.11 | 133,180.11 | 121,899.83 | 121,899.83 |
| 426320-0000 | Misc NonUtil-N-Cust-Trv & Pers | 47,252.36 | 47,252.36 | 13,290.25 | 13,290.25 |
| 426340-0000 | Misc NonUtil-N-Cust-Act & Evnt | 133,765.60 | 133,765.60 | 143,426.24 | 143,426.24 |
| 426900-0000 | Misc NonUtil Exp-OTHER | 485,439.89 | 485,439.89 | 323,781.07 | 323,781.07 |
| 426930-0000 | Misc NonUtil-Other-Prof Servic | 24,195.26 | 24,195.26 | 27,833.35 | 27,833.35 |
| 426940-0000 | Misc NonUtil-Other-Promo Mat | 174.04 | 174.04 | 0.00 | 0.00 |
| 426950-0000 | Misc NonUtil-Nontax Ded Bus Ex | 253,633.80 | 253,633.80 | 275,123.99 | 275,123.99 |
| | Total NON-OPER EXP | 5,002,467.51 | 5,002,467.51 | 7,156,472.67 | 7,156,472.67 |
| | Total Operations & Maint | 151,655,892.74 | 151,655,892.74 | 138,048,038.78 | 138,048,038.78 |
| DEPRECIATION | DEPRECIATION | | | | |
| 403000-0000 | Deprec Exp-Utility Plant | 103,547,344.68 | 103,547,344.68 | 98,575,631.17 | 98,575,631.17 |
| 403020-0000 | Deprec Exp-Other Phy Prop | 1,264.61 | 1,264.61 | 6,047.21 | 6,047.21 |
| 403200-0000 | Deprec Exp-Utility Plant-SWR | 11,681,968.08 | 11,681,968.08 | 9,677,077.05 | 9,677,077.05 |
| 403220-0000 | Deprec Exp-Other Phy Prop-SWR | 546,617.94 | 546,617.94 | 540,876.40 | 540,876.40 |
| | Total DEPRECIATION | 115,777,195.31 | 115,777,195.31 | 108,799,631.83 | 108,799,631.83 |
| AMORTIZATION | AMORTIZATION | | | | |
| 406000-0000 | Amort-Util Plant Acq Adj | 1,059,733.13- | 1,059,733.13- | 1,063,828.70- | 1,063,828.70- |
| 407301-0000 | Amort-CIAC | 3,270,374.97- | 3,270,374.97- | 3,144,050.49- | 3,144,050.49- |
| 407321-0000 | Amort-CIAC-SWR | 555,433.23- | 555,433.23- | 518,273.97- | 518,273.97- |
| 428000-0000 | Amort-Debt Disc & Expense | 144,549.73 | 144,549.73 | 100,957.30 | 100,957.30 |
| 666800-0000 | WT-Reg Com-Amort Rate Case-A&G | 476,455.68 | 476,455.68 | 476,455.68 | 476,455.68 |
| 766800-0000 | SW-Reg Com-Amort Rate Case-A&G | 22,649.40 | 22,649.40 | 22,649.40 | 22,649.40 |
| | Total AMORTIZATION | 4,241,886.52- | 4,241,886.52- | 4,126,090.78- | 4,126,090.78- |
| OTHER TAXES | OTHER TAXES | | | | |
| 408101-0000 | Assessment-PUC | 2,230,207.00 | 2,230,207.00 | 1,901,502.00 | 1,901,502.00 |
| 408102-0000 | Assessment-Consumer Advocate | 770,222.00 | 770,222.00 | 653,711.00 | 653,711.00 |
| 408103-0000 | Assessment-SBA | 124,035.00 | 124,035.00 | 75,822.00 | 75,822.00 |
| 408105-0000 | Assessment-DPC | 27,263.00 | 27,263.00 | 18,540.00 | 18,540.00 |
| 408110-0000 | Property Taxes | 1,269,618.54 | 1,269,618.54 | 1,223,472.84 | 1,223,472.84 |
| 408121-0000 | Payroll Taxes-FICA | 3,853,626.72 | 3,853,626.72 | 3,860,146.64 | 3,860,146.64 |
| 408122-0000 | Payroll Taxes-FUTA | 27,249.16 | 27,249.16 | 22,361.68 | 22,361.68 |
| 408123-0000 | Payroll Taxes-SUTA | 88,947.51 | 88,947.51 | 228,430.38 | 228,430.38 |
| 408139-0000 | Other Taxes-Misc | 1,772.24 | 1,772.24 | 3,666.60 | 3,666.60 |
| 408204-0000 | Other Taxes-PURTA | 5,272,626.00 | 5,272,626.00 | 4,653,301.78 | 4,653,301.78 |
| | Total OTHER TAXES | 13,665,567.17 | 13,665,567.17 | 12,640,954.92 | 12,640,954.92 |
| | Total Utility Costs & Expenses | 276,856,768.70 | 276,856,768.70 | 255,362,534.75 | 255,362,534.75 |
| | Total Operating Income | 260,545,024.96- | 260,545,024.96- | 256,442,517.71- | 256,442,517.71- |
| OTHR INC EXP | Other Income Expenses | | | | |

GL293 Date 01/20/22 Company 15 - AQUA PENNSYLVANIA INC. USD Page 11
Time 07:13 Income Statement
For Period 1 Through 12 Ending December 31, 2021 Fiscal Year 2021

| Consolidated | | AQUA PENNSYLVANIA INC. | | Consolidated | AQUACHART |
|---|---|---|---|---|---|
| Account Nbr | Description | Period Amount | Year To Date | Last Year Period | Last Year To Date |
| ALL INT EXP | All Interest Expense | | | | |
| INTEREST EXP | INTEREST EXP | | | | |
| 427200-0000 | Interest Expense-Short-Term De | 328,399.32 | 328,399.32 | 542,625.04 | 542,625.04 |
| 427300-0000 | Interest Expense-Long-Term Deb | 72,338,455.88 | 72,338,455.88 | 74,096,893.75 | 74,096,893.75 |
| 427500-0000 | Interest Expense-Other | 215.56 | 215.56 | 297.69 | 297.69 |
| 427600-0000 | Amort-Debt Issuance Costs | 589,671.15 | 589,671.15 | 664,120.99 | 664,120.99 |
| 427700-0000 | Amort-Premium/Disc on Debt | 71,232.00- | 71,232.00- | 71,232.00- | 71,232.00- |
| | Total INTEREST EXP | 73,185,509.91 | 73,185,509.91 | 75,232,705.47 | 75,232,705.47 |
| INTEREST INC | INTEREST INC | | | | |
| 419010-0000 | Interest Inc-Other | 0.00 | 0.00 | 303.14- | 303.14- |
| 419015-0000 | Interest Inc-Banks | 1,498.80- | 1,498.80- | 807.52- | 807.52- |
| 419030-0000 | Interest Inc-Service Lines | 7.64- | 7.64- | 12.35- | 12.35- |
| | Total INTEREST INC | 1,506.44- | 1,506.44- | 1,123.01- | 1,123.01- |
| AFUDC | AFUDC | | | | |
| 420001-0000 | Allow Funds Used During Const- | 2,137,789.46- | 2,137,789.46- | 1,783,108.15- | 1,783,108.15- |
| 420002-0000 | Allow Funds Used During Const- | 6,963,456.31- | 6,963,456.31- | 4,417,856.73- | 4,417,856.73- |
| | Total AFUDC | 9,101,245.77- | 9,101,245.77- | 6,200,964.88- | 6,200,964.88- |
| | Total All Interest Expense | 64,082,757.70 | 64,082,757.70 | 69,030,617.58 | 69,030,617.58 |
| OTHER NET | Other Net | | | | |
| OTHER RETIRE | OTHER COMPONENTS OF NET PERIOD | | | | |
| 404827-0000 | Pension - Non Service Cost | 5,051,262.00- | 5,051,262.00- | 576,600.00- | 576,600.00- |
| 404828-0000 | OPEB - Non Service Cost | 155,338.00- | 155,338.00- | 579,045.00 | 579,045.00 |
| 404829-0000 | Nonqual - Non Service Cost | 235,299.00 | 235,299.00 | 221,286.00 | 221,286.00 |
| | Total Other Compnoents of Net | 4,971,301.00- | 4,971,301.00- | 223,731.00 | 223,731.00 |
| ASSET SALE | ASSET SALE | | | | |
| 414000-0000 | Net (Gain) Loss Utility Prop | 822,352.69- | 822,352.69- | 401,559.39- | 401,559.39- |
| | Total ASSET SALE | 822,352.69- | 822,352.69- | 401,559.39- | 401,559.39- |
| | Total Other Net | 5,793,653.69- | 5,793,653.69- | 177,828.39- | 177,828.39- |
| | Total Other Income Expenses | 58,289,104.01 | 58,289,104.01 | 68,852,789.19 | 68,852,789.19 |
| | Total Net Icome Before Taxes | 202,255,920.95- | 202,255,920.95- | 187,589,728.52- | 187,589,728.52- |
| INCOME TAXES | INCOME TAXES | | | | |
| 409101-0000 | Federal Income Tax | 6,258,129.79 | 6,258,129.79 | 10,715,548.75 | 10,715,548.75 |
| 409111-0000 | State Income Tax | 689,571.64 | 689,571.64 | 5,204,617.19 | 5,204,617.19 |
| 410101-0000 | Deferred Federal Income Taxes | 1,802,198.00- | 1,802,198.00- | 9,502,044.00- | 9,502,044.00- |
| 410111-0000 | Deferred State Income Taxes | 2,705,544.00- | 2,705,544.00- | 6,044,571.00- | 6,044,571.00- |
| 412100-0000 | ITC-Def Future Periods | 253,413.00- | 253,413.00- | 253,413.00- | 253,413.00- |
| | Total INCOME TAXES | 2,186,546.43 | 2,186,546.43 | 120,137.94 | 120,137.94 |
| | Total Net Income | 200,069,374.52- | 200,069,374.52- | 187,469,590.58- | 187,469,590.58- |
| | Total Net Profit | 200,069,374.52- | 200,069,374.52- | 187,469,590.58- | 187,469,590.58- |

GL292 Date: 02/10/22 JOB SUBMISSION PARAMETERS
Time: 09:47

User Name: AQUAAMERICA\pagill
Job Name: PENNABS
Step Nbr: 1

Main

Company: 15
or Company Group:

Year Code:
or
Year: 2021
Period: 12 Period 12

Organization

Accounting Units:

Accounting Unit List:

Level Group:

Individual Reporting

Company: X Level One: Level Two:
Level Three: Level Four: Level Five:

Report Options

| | | |
|---|---|---|
| Chart Depth: | | All |
| Account Detail: | S | Subaccount |
| Suppress Zero Accounts: | Y | Yes |
| Report Sequence: | L | Level |
| Report Currency: | B | Base |
| XBRL Tag: | N | No |

# Balance Sheet



Balance Sheet
For Period 12 Ending December 31, 2021 Fiscal Year 2021

Consolidated — AQUA PENNSYLVANIA INC. — Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| ASSETS | Assets and Other Debits | | | | |
| NET PLANT | Net Plant | | | | |
| NETUTL PLANT | Net Utility Plant | | | | |
| UTIL PLANT | Utility Plant | | | | |
| PPE | PPE | | | | |
| 103000-0000 | Property Held for Future Use | 4,425,555.81 | 4,507,408.12 | 81,852.31- | 1.8- |
| 104000-0000 | Utility Plant Purchased/Sold | 1,500,000.00 | 30,921,923.32 | 29,421,923.32- | 95.1- |
| 106000-0000 | PPE-Unclass Complete Construct | 225,392,806.25 | 167,038,252.31 | 58,354,553.94 | 34.9 |
| 300000-0000 | PPE-Utility Plant in Service | 5,453,368,192.66 | 5,150,479,523.80 | 302,888,668.86 | 5.9 |
| 300001-0000 | PPE-Dedicated Property Estimate | 1,133,898.00 | 4,646,277.07 | 3,512,379.07- | 75.6- |
| | Total PPE | 5,685,820,452.72 | 5,357,593,384.62 | 328,227,068.10 | 6.1 |
| UTIL PLT ACQ | UTIL PLT ACQ ADJ | | | | |
| 114000-0000 | U Plant Acq Adj | 17,827,762.25- | 17,840,762.25- | 13,000.00 | .1- |
| 115000-0000 | Accum Amort Util Plant Acq Adj | 17,325,521.34 | 16,265,788.21 | 1,059,733.13 | 6.5 |
| | Total UTIL PLT ACQ ADJ | 502,240.91- | 1,574,974.04- | 1,072,733.13 | 68.1- |
| | Total Utility Plant | 5,685,318,211.81 | 5,356,018,410.58 | 329,299,801.23 | 6.1 |
| ACCUM DEPR | ACCUM DEPR | | | | |
| 108000-0000 | AD-General | 1,262,084,438.46- | 1,146,869,097.07- | 115,215,341.39- | 10.0 |
| | Total ACCUM DEPR | 1,262,084,438.46- | 1,146,869,097.07- | 115,215,341.39- | 10.0 |
| | Total Net Utility Plant | 4,423,233,773.35 | 4,209,149,313.51 | 214,084,459.84 | 5.1 |
| CWIP | CWIP | | | | |
| 105015-0000 | CWIP-Contributed Property | 39,840,403.35 | 39,429,138.90 | 411,264.45 | 1.0 |
| 105016-0000 | CWIP-Advances | 69,894,268.93 | 55,113,104.30 | 14,781,164.63 | 26.8 |
| 105020-0000 | CWIP-Capital-Payroll-Rg | 176,905,881.98 | 166,114,407.63 | 10,791,474.35 | 6.5 |
| 105029-0000 | CWIP-Capital-Payroll-OT | 42,520,655.67 | 39,538,559.07 | 2,982,096.60 | 7.5 |
| 105030-0000 | CWIP-ACCOUNTS PAYABLE | 3,381,933,790.88 | 3,109,888,305.15 | 272,045,485.73 | 8.7 |
| 105040-0000 | CWIP-INVENTORY | 379,667,499.67 | 346,366,342.75 | 33,301,156.92 | 9.6 |
| 105050-0000 | CWIP-TRANSPORTATION | 27,217,725.91 | 25,882,070.97 | 1,335,654.94 | 5.2 |
| 105060-0000 | CWIP-GENERAL OVERHEAD | 15,881,091.32 | 7,833,416.13 | 8,047,675.19 | 102.7 |
| 105070-0000 | CWIP-PAYROLL OVERHEAD | 165,770,737.52 | 153,179,291.20 | 12,591,446.32 | 8.2 |
| 105080-0000 | CWIP-AFUDC | 11,868,929.76 | 11,868,929.76 | 0.00 | |
| 105081-0000 | CWIP-AFUDC Debt | 26,517,648.69 | 24,389,870.75 | 2,127,777.94 | 8.7 |
| 105085-0000 | CWIP-AFUDC Equity | 31,286,716.99 | 26,342,485.08 | 4,944,231.91 | 18.8 |
| 105090-0000 | CWIP-CLOSING | 4,217,607,302.68- | 3,889,768,986.06- | 327,838,316.62- | 8.4 |
| | Total CWIP | 151,698,047.99 | 116,176,935.63 | 35,521,112.36 | 30.6 |
| | Total Net Plant | 4,574,931,821.34 | 4,325,326,249.14 | 249,605,572.20 | 5.8 |
| OTHER PROP/I | Other Property and Investment | | | | |
| OTHER PPE | OTHER PPE | | | | |
| 121000-0000 | Nonutility Property | 28,846,739.50 | 28,758,975.46 | 87,764.04 | .3 |
| 122000-0000 | Accum Depr/Amort-Nonutil Prop | 5,393,632.06- | 4,845,766.44- | 547,865.62- | 11.3 |
| | Total OTHER PPE | 23,453,107.44 | 23,913,209.02 | 460,101.58- | 1.9- |
| | Total Other Property and Inves | 23,453,107.44 | 23,913,209.02 | 460,101.58- | 1.9- |
| CURRENT | Current and Accrued Assets | | | | |
| CASH IN BANK | CASH IN BANK | | | | |
| 131200-0000 | Cash | 0.00 | 5,002,000.00 | 5,002,000.00- | 100.0- |

GL292 Date 02/10/22 Time 09:48 | Company 15 - AQUA PENNSYLVANIA INC. USD | Page 2
Balance Sheet
For Period 12 Ending December 31, 2021 Fiscal Year 2021

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| CASH IN BANK | CASH IN BANK | | | | |
| 131211-0000 | Cash-FIDELITY S&L | 0.00 | 112,566.39 | 112,566.39- | 100.0- |
| 131218-0000 | Cash-NAT.CITY-SHENANGO | 45,232.81 | 17,794.46 | 27,438.35 | 154.2 |
| 131230-0000 | Cash-PNC | 2,149,992.65 | 231,197.01 | 1,918,795.64 | 829.9 |
| 131254-0000 | CASH-WAYNE PENNVEST ESCROW | 403,284.70 | 401,839.90 | 1,444.80 | .4 |
| | Total CASH IN BANK | 2,598,510.16 | 5,765,397.76 | 3,166,887.60- | 54.9- |
| WORKING FUND | WORKING FUND | | | | |
| 134000-0000 | Working Funds | 3,053.45 | 3,053.45 | 0.00 | |
| 134010-0000 | Working Funds-OFFICE FUNDS | 14,050.00 | 14,050.00 | 0.00 | |
| | Total WORKING FUND | 17,103.45 | 17,103.45 | 0.00 | |
| CUST A/R | CUST A/R | | | | |
| 141000-0000 | Customer Accounts Receivable | 55,015,007.43 | 50,834,751.37 | 4,180,256.06 | 8.2 |
| 141010-0000 | Customer AR Non CIS | 13,621.37- | 0.00 | 13,621.37- | |
| | Total CUST A/R | 55,001,386.06 | 50,834,751.37 | 4,166,634.69 | 8.2 |
| OTHER AR | OTHER AR | | | | |
| 142000-0000 | Other A/R | 640,039.21 | 814,825.97 | 174,786.76- | 21.5- |
| 142080-0000 | Other A/R-Contract Ops | 93,781.54 | 125,318.61 | 31,537.07- | 25.2- |
| 172000-0000 | Rents Receivable | 900.00 | 600.00 | 300.00 | 50.0 |
| | Total OTHER AR | 734,720.75 | 940,744.58 | 206,023.83- | 21.9- |
| RESERVE UN | RESERVE - UN | | | | |
| 143000-0000 | RESERVE-UNCOLLECTABLE ACCTS | 11,316,506.65- | 10,799,644.79- | 516,861.86- | 4.8 |
| | Total RESERVE - UN | 11,316,506.65- | 10,799,644.79- | 516,861.86- | 4.8 |
| INTERCO | ALL INTERCOMPANY | | | | |
| NONSYSINTCO | NON SYSTEM INTERCOMPANY | | | | |
| 145014-0000 | InterCompany Acct Co 14 - Resource | 28,338,136.02- | 28,338,136.02- | 0.00 | |
| | Total AR AFFILIATES | 28,338,136.02- | 28,338,136.02- | 0.00 | |
| SYSTEMINT | ALL SYSTEM INTER&ZONE | | | | |
| INTERCOMPANY | SYSTEM INTERCOMPANY | | | | |
| 911000-0000 | Sys IntComp Acct Co 10 - Corp | 39,547,577.45- | 9,752,957.45- | 29,794,620.00- | 305.5 |
| 911100-0000 | Sys IntComp Acct Co 11 - Serv | 8,412,291.37- | 6,133,984.84- | 2,278,306.53- | 37.1 |
| 911400-0000 | Sys IntComp Acct Co 14 - Aqua Reso | 0.00 | 7,901.43 | 7,901.43- | 100.0- |
| 911800-0000 | Sys IntComp Acct Co 18 - Cust Serv | 488,189.14- | 578,857.81- | 90,668.67 | 15.7- |
| 911900-0000 | Sys IntComp Acct Co 19 - Aqua Infr | 0.00 | 667.31 | 667.31- | 100.0- |
| 912300-0000 | Sys IntComp Acct Co 23 - OH | 21,955.19 | 35,324.16 | 13,368.97- | 37.8- |
| 912400-0000 | Sys IntComp Acct Co 24 - IL | 11,920.39 | 7,282.79 | 4,637.60 | 63.7 |
| 912500-0000 | Sys IntComp Acct Co 25 - NJ | 7,014.52 | 14,761.51 | 7,746.99- | 52.5- |
| 913100-0000 | Sys IntComp Acct Co 31 - TX | 0.00 | 2,078.66 | 2,078.66- | 100.0- |
| 913200-0000 | Sys IntComp Acct Co 32 - IN | 0.00 | 61.97- | 61.97 | 100.0- |
| 913400-0000 | Sys IntComp Acct Co 34 - VA | 0.00 | 913.62 | 913.62- | 100.0- |
| 913500-0000 | Sys IntComp Acct Co 35 - NC | 0.00 | 6,168.07 | 6,168.07- | 100.0- |
| | Total SYSTEM INTERCOMPANY | 48,407,167.86- | 16,390,764.52- | 32,016,403.34- | 195.3 |
| INTRAZONE | SYSTEM ZONE | | | | |
| 921501-0000 | IntraZone Acct Co 15 Zone 1 | 344,530,210.62- | 332,613,341.14- | 11,916,869.48- | 3.6 |
| 921502-0000 | IntraZone Acct Co 15 Zone 2 | 331,627,390.38 | 318,056,535.42 | 13,570,854.96 | 4.3 |
| 921503-0000 | IntraZone Acct Co 15 Zone 3 | 1,632,954.65 | 1,450,136.83 | 182,817.82 | 12.6 |

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| INTRAZONE | SYSTEM ZONE | | | | |
| 921504-0000 | IntraZone Acct Co 15 Zone 4 | 16,432,494.79 | 15,431,509.56 | 1,000,985.23 | 6.5 |
| 921506-0000 | IntraZone Acct Co 15 Zone 6 | 1,250,387.89 | 1,470,036.76 | 219,648.87- | 14.9- |
| 921507-0000 | IntraZone Acct Co 15 Zone 7 | 54.91- | 54.91- | 0.00 | |
| 921508-0000 | IntraZone Acct Co 15 Zone 8 | 6,412,962.18- | 3,794,822.52- | 2,618,139.66- | 69.0 |
| | Total SYSTEM ZONE | 0.00 | 0.00 | 0.00 | |
| | Total ALL SYSTEM INTER&ZONE | 48,407,167.86- | 16,390,764.52- | 32,016,403.34- | 195.3 |
| | Total ALL INTERCOMPANY | 76,745,303.88- | 44,728,900.54- | 32,016,403.34- | 71.6 |
| MATERIALS AN | MATERIALS AN | | | | |
| 151000-0000 | Plant Material & Supplies | 16,420,957.47 | 6,695,112.19 | 9,725,845.28 | 145.3 |
| | Total MATERIALS AN | 16,420,957.47 | 6,695,112.19 | 9,725,845.28 | 145.3 |
| UNBILLED REV | UNBILLED REV | | | | |
| 173000-0000 | Unbilled-Revenue | 24,431,222.60 | 23,579,553.14 | 851,669.46 | 3.6 |
| 173010-0000 | Unbilled Revenue Non CIS | 2,397,343.07 | 1,598,511.36 | 798,831.71 | 50.0 |
| | Total UNBILLED REV | 26,828,565.67 | 25,178,064.50 | 1,650,501.17 | 6.6 |
| OTHER PREPAY | OTHER PREPAY | | | | |
| 162000-0000 | Other Prepaids | 3,000,000.00 | 3,006,836.49 | 6,836.49- | .2- |
| 162130-0000 | OTHER PPD-REAL ESTATE TAX | 192,121.30 | 71,178.23 | 120,943.07 | 169.9 |
| 162140-0000 | OTHER PPD-PUC ASSESSMENT | 1,191,131.00 | 1,038,493.00 | 152,638.00 | 14.7 |
| 162150-0000 | OTHER PPD-SBA ASSESSMENT | 81,595.00 | 42,415.00 | 39,180.00 | 92.4 |
| 162160-0000 | OTHER PPD-CONS ADVOC ASSMT | 396,882.00 | 373,297.00 | 23,585.00 | 6.3 |
| 162165-0000 | OTHER PPD-DPC ASSESSMENT | 20,871.00 | 6,345.00 | 14,526.00 | 228.9 |
| 162170-0000 | OTHER PPD-AWWA DUES | 10,058.00 | 10,247.00 | 189.00- | 1.8- |
| | Total OTHER PREPAY | 4,892,658.30 | 4,548,811.72 | 343,846.58 | 7.6 |
| | Total Current and Accrued Asse | 18,432,091.33 | 38,451,440.24 | 20,019,348.91- | 52.1- |
| NON CURRENT | Non-Current Assets | | | | |
| UNAMR DB EXP | UMAMORT DEBT EXP | | | | |
| 181000-0000 | Unamortized Debt Expense | 132,556.29 | 120,824.27 | 11,732.02 | 9.7 |
| | Total UMAMORT DEBT EXP | 132,556.29 | 120,824.27 | 11,732.02 | 9.7 |
| RATE CASE | RATE CASE | | | | |
| 186101-0000 | Deferred Rate Case Exp-1 | 985,493.30 | 746,842.42 | 238,650.88 | 32.0 |
| | Total RATE CASE | 985,493.30 | 746,842.42 | 238,650.88 | 32.0 |
| PRELIMINARY | PRELIMINARY | | | | |
| 183010-0000 | PRELIM SURVEY-PAYROLL-Rg | 100,264.93 | 69,935.65 | 30,329.28 | 43.4 |
| 183019-0000 | PRELIM SURVEY-PAYROLL-Ot | 6,103.14 | 2,788.90 | 3,314.24 | 118.8 |
| 183020-0000 | PRELIM SURVEY-ACCTS PAY | 1,953,192.08 | 1,365,135.56 | 588,056.52 | 43.1 |
| 183030-0000 | PRELIM SURVEY-INVENTORY | 31,517.15 | 30,139.65 | 1,377.50 | 4.6 |
| 183050-0000 | PRELIM SURVEY-GEN OVERHEAD | 371.71 | 541.48 | 169.77- | 31.4- |
| 183060-0000 | PRELIM SURVEY-PR OVERHEAD | 0.00 | 228.40 | 228.40- | 100.0- |
| | Total PRELIMINARY | 2,091,449.01 | 1,468,769.64 | 622,679.37 | 42.4 |
| REG ASSETS | REG ASSETS | | | | |
| 186325-0000 | Reg Asset-EXC FUND/DEF-OPEB | 2,500,394.00- | 1,069,083.00- | 1,431,311.00- | 133.9 |
| 186330-0000 | Reg Asset-TAXES(FAS 109) | 823,974,475.20 | 769,670,590.20 | 54,303,885.00 | 7.1 |

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| REG ASSETS | REG ASSETS | | | | |
| 186355-0000 | Reg Asset-AFUDC Gross Up (WIP) | 3,566,308.03 | 2,603,066.35 | 963,241.68 | 37.0 |
| 186366-0000 | Reg Asset-AFUDC Gross Up (InSvc) | 13,007,733.24 | 11,970,073.71 | 1,037,659.53 | 8.7 |
| 186367-0000 | Reg Asset-AFUDC Gross Up (AD) | 1,033,526.69- | 765,715.91- | 267,810.78- | 35.0 |
| 186380-0000 | Reg Asset-PENSION/SERP AML | 684,090.00 | 435,901.00 | 248,189.00 | 56.9 |
| 186381-0000 | Reg Asset-Vacation Balancing Account | 90,618.75 | 456,506.82 | 365,888.07- | 80.1- |
| 186399-0000 | Reg Asset-OTHER | 770,162.77 | 19,102.13- | 789,264.90 | 4131.8- |
| 186400-0000 | Reg Asset-FAS143 | 9,632,480.06 | 9,379,887.56 | 252,592.50 | 2.7 |
| 186520-0000 | Reg Asset-COVID19 Recovery Costs | 5,138,536.48 | 4,726,646.44 | 411,890.04 | 8.7 |
| 186530-0000 | Reg Asset-Twin Lakes | 7,515.00 | 0.00 | 7,515.00 | |
| | Total REG ASSETS | 853,337,998.84 | 797,388,771.04 | 55,949,227.80 | 7.0 |
| RWIP | RWIP | | | | |
| 184010-0000 | RWIP-PAYROLL-Rg | 8,197,639.98 | 8,074,194.42 | 123,445.56 | 1.5 |
| 184019-0000 | RWIP-PAYROLL-Ot | 1,842,359.32 | 1,792,867.78 | 49,491.54 | 2.8 |
| 184020-0000 | RWIP-ACCOUNTS PAYABLE | 36,864,080.53 | 34,352,333.52 | 2,511,747.01 | 7.3 |
| 184030-0000 | RWIP-INVENTORY | 1,757,592.39 | 1,323,621.90 | 433,970.49 | 32.8 |
| 184040-0000 | RWIP-TRANSPORTATION | 162.04- | 162.04- | 0.00 | |
| 184050-0000 | RWIP-GENERAL OVERHEAD | 1,898,013.69 | 1,734,686.46 | 163,327.23 | 9.4 |
| 184060-0000 | RWIP-PAYROLL OVERHEAD | 7,748,057.24 | 7,599,415.88 | 148,641.36 | 2.0 |
| 184070-0000 | RWIP-CASH SALVAGE | 4,413,967.64- | 3,536,170.79- | 877,796.85- | 24.8 |
| 184099-0000 | RWIP-CLOSING | 51,021,558.12- | 48,942,144.27- | 2,079,413.85- | 4.2 |
| | Total RWIP | 2,872,055.35 | 2,398,642.86 | 473,412.49 | 19.7 |
| OTH DEF DBTS | OTHER DEFER DBTS | | | | |
| 186210-0000 | Other Deferred DB-SUSP-AMORTIZ | 175,730.23- | 167,384.75- | 8,345.48- | 5.0 |
| 186270-0000 | Other Deferred DB-SERVICE LINE | 20,535.15 | 11,807.27 | 8,727.88 | 73.9 |
| | Total OTHER DEFER DBTS | 155,195.08- | 155,577.48- | 382.40 | .2- |
| GOODWILL | GOODWILL | | | | |
| 116000-0000 | Good Will-Water | 23,059,854.58 | 24,685,749.96 | 1,625,895.38- | 6.6- |
| 116200-0000 | Good Will-Sewer | 11,243,896.22 | 11,243,896.22 | 0.00 | |
| | Total GOODWILL | 34,303,750.80 | 35,929,646.18 | 1,625,895.38- | 4.5- |
| OPER LEASE | Net Operating Lease Right-of | | | | |
| 185000-0000 | Lease - Land | 8,875,771.46 | 8,875,771.46 | 0.00 | |
| 185001-0000 | Lease - Office Building | 359,702.12 | 240,078.12 | 119,624.00 | 49.8 |
| 185002-0000 | Lease - Office Equipment | 91,472.86 | 91,472.86 | 0.00 | |
| 185300-0000 | Accumulated Lease Amortization | 919,325.88- | 651,648.59- | 267,677.29- | 41.1 |
| | Total Operating Lease right-of | 8,407,620.56 | 8,555,673.85 | 148,053.29- | 1.7- |
| | Total Non-Current Assets | 901,975,729.07 | 846,453,592.78 | 55,522,136.29 | 6.6 |
| | Total Assets and Other Debits | 5,518,792,749.18 | 5,234,144,491.18 | 284,648,258.00 | 5.4 |
| LIABS/EQUITY | Liabilities and Equity Capital | | | | |
| TOT CAPITAL | Total Capitalization | | | | |
| COM STOCK EQ | Equity Capital | | | | |
| COMMON STOCK | COMMON STOCK | | | | |
| 201000-0000 | Common Capital Stock | 110,000.00- | 110,000.00- | 0.00 | |
| | Total COMMON STOCK | 110,000.00- | 110,000.00- | 0.00 | |

GL292 Date 02/10/22 Time 09:48 | Company 15 - AQUA PENNSYLVANIA INC. USD | Page 5
Balance Sheet
For Period 12 Ending December 31, 2021 Fiscal Year 2021

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| CAPITAL SURP | CAPITAL SURP | | | | |
| 211000-0000 | Other Paid-In Capital | 190,078,277.65- | 144,580,200.55- | 45,498,077.10- | 31.5 |
| 211002-0000 | Other Paid-In Cap-PSU | 6,383,256.51- | 5,862,749.73- | 520,506.78- | 8.9 |
| 211003-0000 | Other Paid-In Cap-RSU | 1,300,897.66- | 1,019,212.58- | 281,685.08- | 27.6 |
| 211500-0000 | Other Paid-In Cap-Stock Option Expe | 8,967,817.42- | 8,916,118.59- | 51,698.83- | .6 |
| 211501-0000 | Other Paid-In Cap - Tax on Stock Ba | 1,644,203.90- | 1,644,203.90- | 0.00 | |
| 211600-0000 | Other Paid-In Cap-Restricted Stock | 449,399.37- | 449,399.37- | 0.00 | |
| | Total CAPITAL SURP | 208,823,852.51- | 162,471,884.72- | 46,351,967.79- | 28.5 |
| RE | Retained Earnings | | | | |
| RE PY | RE PY | | | | |
| 215000-0000 | Unapproriated Retained Earning | 1,741,789,771.73- | 1,604,320,181.15- | 137,469,590.58- | 8.6 |
| | Total RE PY | 1,741,789,771.73- | 1,604,320,181.15- | 137,469,590.58- | 8.6 |
| RE CY | RE CY | | | | |
| 215100-0000 | Undistrib Retained Earnings | 200,069,374.52- | 187,469,590.58- | 12,599,783.94- | 6.7 |
| 215101-0000 | Undistributed RE (Manual) | 28,641,299.24 | 22,624,986.04 | 6,016,313.20 | 26.6 |
| | Total RE CY | 171,428,075.28- | 164,844,604.54- | 6,583,470.74- | 4.0 |
| DIVIDEND COM | DIVIDENDS COMMON | | | | |
| 215300-0000 | Dividend Appropriation Common | 0.00 | 50,000,000.00 | 50,000,000.00- | 100.0- |
| | Total DIVIDENDS COMMON | 0.00 | 50,000,000.00 | 50,000,000.00- | 100.0- |
| EARN IN SUBS | EARNINGS IN SUBS | | | | |
| 215200-0000 | EARNINGS OF SUBSIDIARIES | 36,121,805.98- | 30,105,492.78- | 6,016,313.20- | 20.0 |
| | Total EARNINGS IN SUBS | 36,121,805.98- | 30,105,492.78- | 6,016,313.20- | 20.0 |
| REACQ CAPSTK | REACQ CAP STOCK | | | | |
| 216000-0000 | Reacquired Capital Stock | 1,000.00 | 1,000.00 | 0.00 | |
| | Total REACQ CAP STOCK | 1,000.00 | 1,000.00 | 0.00 | |
| | Total Retained Earnings | 1,949,338,652.99- | 1,749,269,278.47- | 200,069,374.52- | 11.4 |
| | Total Equity Capital | 2,158,272,505.50- | 1,911,851,163.19- | 246,421,342.31- | 12.9 |
| LT DEBT | Long-Term Debt | | | | |
| LTD | LTD | | | | |
| 221010-0000 | Long-Term Debt-FMB | 1,784,800,000.00- | 1,785,000,000.00- | 200,000.00 | |
| 224020-0000 | Long-Term Debt-PENNVEST | 23,718,342.64- | 29,050,790.02- | 5,332,447.38 | 18.4- |
| 251000-0000 | Unamortized Bond Premium | 1,645,737.00- | 1,716,969.00- | 71,232.00 | 4.1- |
| | Total LTD | 1,810,164,079.64- | 1,815,767,759.02- | 5,603,679.38 | .3- |
| DEBT IS COST | Unamortized debt issue cost | | | | |
| 225020-0000 | Unamortized debt issue costs - exte | 13,191,787.94 | 13,763,103.53 | 571,315.59- | 4.2- |
| | Total Unamortized debt issue c | 13,191,787.94 | 13,763,103.53 | 571,315.59- | 4.2- |
| | Total Long-Term Debt | 1,796,972,291.70- | 1,802,004,655.49- | 5,032,363.79 | .3- |
| ST DEBT | Short-Term Debt | | | | |
| LOANS PAYBLE | LOANS PAYABLE | | | | |
| 232101-0000 | Loans Payable-REVOLVR-CUR PRTN | 35,000,000.00- | 49,197,904.46- | 14,197,904.46 | 28.9- |
| | Total LOANS PAYABLE | 35,000,000.00- | 49,197,904.46- | 14,197,904.46 | 28.9- |

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| | Total Short-Term Debt | 35,000,000.00- | 49,197,904.46- | 14,197,904.46 | 28.9- |
| | Total Total Capitalization | 3,990,244,797.20- | 3,763,053,723.14- | 227,191,074.06- | 6.0 |
| TOT LIAB | Total Liabilities | | | | |
| CURENT LIAB | Current and Accrued Liabilit | | | | |
| CURRENT PORT | CURRENT PORT | | | | |
| 232510-0000 | Current Portion Ltd-FMB | 0.00 | 5,861,000.00- | 5,861,000.00 | 100.0- |
| 232520-0000 | Current Portion Ltd-PENNVEST | 5,381,796.58- | 5,484,509.72- | 102,713.14 | 1.9- |
| | Total CURRENT PORT | 5,381,796.58- | 11,345,509.72- | 5,963,713.14 | 52.6- |
| AP | AP | | | | |
| 231000-0000 | A/P | 77,320.97 | 4,434,842.52- | 4,512,163.49 | 101.7- |
| 231001-0000 | A/P-Accrued Trade | 615,010.49- | 6,628,690.85- | 6,013,680.36 | 90.7- |
| 231002-0000 | A/P-Accrued Purchased Water | 377,316.29- | 406,778.81- | 29,462.52 | 7.2- |
| 231003-0000 | A/P-Accrued Electric | 642,567.44- | 983,966.38- | 341,398.94 | 34.7- |
| 231006-0000 | A/P-Refunds to Customers | 3,405.27- | 8,294.04- | 4,888.77 | 58.9- |
| 231200-0000 | A/P-Contractors Retainage | 5,175,786.91- | 4,855,283.83- | 320,503.08- | 6.6 |
| 231300-0000 | A/P-Received, Not Invoiced | 24,528,833.40- | 14,430,995.80- | 10,097,837.60- | 70.0 |
| | Total AP | 31,265,598.83- | 31,748,852.23- | 483,253.40 | 1.5- |
| TAX ACC FED | TAXES ACC FED | | | | |
| 236124-0000 | Accrued Tax-Fed-Other | 3,531,351.26 | 9,362,731.05 | 5,831,379.79- | 62.3- |
| | Total TAXES ACC FED | 3,531,351.26 | 9,362,731.05 | 5,831,379.79- | 62.3- |
| TAX ACC STE | TAXES ACC STATE | | | | |
| 236127-0000 | Accrued Tax-ST-CN Income | 422,711.62 | 235,048.70 | 187,662.92 | 79.8 |
| | Total TAXES ACC STATE | 422,711.62 | 235,048.70 | 187,662.92 | 79.8 |
| TAX ACC OTHR | TAXES ACC OTHER | | | | |
| 236111-0000 | Accrued Tax-Oth-PROPERTY | 159,251.00- | 0.00 | 159,251.00- | |
| 236120-0000 | Accrued Tax-PA 1099 W/H | 7,935.32- | 4,217.88- | 3,717.44- | 88.1 |
| 236201-0000 | Accrued Tax-Oth-EMPLOYER FICA | 0.00 | 86,380.44- | 86,380.44 | 100.0- |
| | Total TAXES ACC OTHER | 167,186.32- | 90,598.32- | 76,588.00- | 84.5 |
| INTEREST ACC | INTEREST ACC | | | | |
| 237110-0000 | Accrued Int LTD-FMB | 19,463,050.71- | 19,682,855.12- | 219,804.41 | 1.1- |
| 237120-0000 | Accrued Int LTD-PENNVEST | 58,466.16- | 142,493.89- | 84,027.73 | 59.0- |
| 237250-0000 | Accrued Int-Other-STD | 17,343.49- | 12,437.88- | 4,905.61- | 39.4 |
| | Total INTEREST ACC | 19,538,860.36- | 19,837,786.89- | 298,926.53 | 1.5- |
| OTHR CURLIAB | OTHER CUR LIAB | | | | |
| 241001-0000 | Accrued Liab-OTHER | 2,000,950.43- | 866,593.90- | 1,134,356.53- | 130.9 |
| 241004-0000 | Accrued Liab-ANTENNA LEASES | 679,191.10- | 602,170.72- | 77,020.38- | 12.8 |
| 241006-0000 | Accrued Liab-AUDIT FEES | 412,486.13- | 599,496.00- | 187,009.87 | 31.2- |
| 241008-0000 | Accrued Liab-PAVING MAINS | 137,405.85- | 91,753.90- | 45,651.95- | 49.8 |
| 241011-0000 | Accrued Liab-UNCLAIMED CHECKS | 77,886.65- | 83,235.92- | 5,349.27 | 6.4- |
| 241023-0000 | Accrued Liab-Covid Relief Fund | 351.42- | 0.00 | 351.42- | |
| 243030-0000 | ACCRUED BONUS | 1,307,685.00- | 1,480,000.00- | 172,315.00 | 11.6- |
| 243130-0000 | ACCRUED SALARIES AND WAGES | 1,454,277.72- | 811,234.69- | 643,043.03- | 79.3 |
| 243137-0000 | Accrued Vacation | 90,618.75- | 456,506.82- | 365,888.07 | 80.1- |
| 243140-0000 | PAYROLL CLEARING | 62,666.90 | 53,255.69- | 115,922.59 | 217.7- |

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| OTHR CURLIAB | OTHER CUR LIAB | | | | |
| 261020-0000 | Operating Lease Liability | 266,300.18- | 241,063.11- | 25,237.07- | 10.5 |
| 263002-0000 | NQ Pension Reserve - Current | 1,756.70 | 0.00 | 1,756.70 | |
| 263103-0000 | EMPLOYEE PROFIT SHARING | 837,648.00- | 770,307.00- | 67,341.00- | 8.7 |
| | Total OTHER CUR LIAB | 7,200,377.63- | 6,055,617.75- | 1,144,759.88- | 18.9 |
| | Total Current and Accrued Liab | 59,599,756.84- | 59,480,585.16- | 119,171.68- | .2 |
| DEF NC LIAB | Deferred and Non-Current and | | | | |
| ADV FOR CNST | ADV FOR CONST | | | | |
| 252050-0000 | CAC-WIP Non Cash | 79,050,469.71- | 64,269,305.08- | 14,781,164.63- | 23.0 |
| 252080-0000 | CAC-WIP Cash | 7,232,934.19 | 4,661,879.02 | 2,571,055.17 | 55.2 |
| 252099-0000 | CAC-WIP Closing | 71,817,535.52 | 59,607,426.06 | 12,210,109.46 | 20.5 |
| 252102-0000 | Adv Cust-CASH OTHER | 480,713.48- | 358,663.48- | 122,050.00- | 34.0 |
| 252106-0000 | CAC-Non Unitized | 58,874,190.29- | 50,053,676.73- | 8,820,513.56- | 17.6 |
| 252199-0000 | Adv Cust-Non Cash Dedicated Propert | 1,133,898.00- | 4,646,277.07- | 3,512,379.07 | 75.6- |
| | Total ADV FOR CONST | 60,488,801.77- | 55,058,617.28- | 5,430,184.49- | 9.9 |
| REG LIAB | REG LIAB | | | | |
| 253115-0000 | Reg Liab-Pension/OPEB | 100,878,411.11- | 85,979,289.11- | 14,899,122.00- | 17.3 |
| 253116-0000 | Reg Liab-FAS 109 | 241,703,251.00- | 261,796,433.00- | 20,093,182.00 | 7.7- |
| | Total REG LIAB | 342,581,662.11- | 347,775,722.11- | 5,194,060.00 | 1.5- |
| NC OP LEASE | Non-Current Operating Lease | | | | |
| 285000-0000 | Non-Current Operating Lease | 8,141,320.38- | 8,314,610.74- | 173,290.36 | 2.1- |
| | Total NON-Current Operating Le | 8,141,320.38- | 8,314,610.74- | 173,290.36 | 2.1- |
| LT DEF FIT | LT DEF FIT | | | | |
| 282020-0000 | Deferred FIT Depreciation | 614,954,706.31- | 569,795,144.31- | 45,159,562.00- | 7.9 |
| 283050-0000 | Federal Deferred Tax-Other | 1,370,205.75- | 2,782,573.75- | 1,412,368.00 | 50.8- |
| | Total LT DEF FIT | 616,324,912.06- | 572,577,718.06- | 43,747,194.00- | 7.6 |
| LT DEF SIT | LT DEF SIT | | | | |
| 282030-0000 | State Deferred Tax-Depr | 394,880,983.00- | 369,770,477.00- | 25,110,506.00- | 6.8 |
| 283060-0000 | State Deferred Tax-Other | 48,905,707.41 | 49,937,332.41 | 1,031,625.00- | 2.1- |
| | Total LT DEF SIT | 345,975,275.59- | 319,833,144.59- | 26,142,131.00- | 8.2 |
| UNAMORT ITC | UNAMORT ITC | | | | |
| 255101-0000 | Deferred Taxes - Unamortized ITC (F | 3,614,431.95- | 3,867,844.95- | 253,413.00 | 6.6- |
| | Total UNAMORT ITC | 3,614,431.95- | 3,867,844.95- | 253,413.00 | 6.6- |
| CIAC | CIAC | | | | |
| 271050-0000 | CIAC-WIP NON CASH | 1,875,733.29- | 1,464,468.84- | 411,264.45- | 28.1 |
| 271080-0000 | CIAC-WIP CASH | 2,706,690.85- | 2,233,321.00- | 473,369.85- | 21.2 |
| 271099-0000 | CIAC-WIP CLOSING | 4,582,424.14 | 3,685,889.84 | 896,534.30 | 24.3 |
| 271101-0000 | CIAC-UNITIZED | 216,114,307.63- | 211,828,177.43- | 4,286,130.20- | 2.0 |
| | Total CIAC | 216,114,307.63- | 211,840,077.43- | 4,274,230.20- | 2.0 |
| OTHR NC LIAB | OTHER NCUR LIAB | | | | |
| 253200-0000 | OPEB Reserve - Non Current | 10,748,841.77- | 10,347,248.81- | 401,592.96- | 3.9 |
| 253250-0000 | Pension Reserve - Non Current | 89,698,509.14 | 77,799,387.14 | 11,899,122.00 | 15.3 |
| 253350-0000 | NQ Pension Reserve - Non Current | 505,787.78- | 418,135.61- | 87,652.17- | 21.0 |
| 253420-0000 | Uncertain Tax Position Reserve-Fede | 12,067,622.00- | 11,640,872.00- | 426,750.00- | 3.7 |

Consolidated AQUA PENNSYLVANIA INC. Consolidated

| Account Nbr | Description | Current Year | Previous Year | Change | Percent |
|---|---|---|---|---|---|
| OTHR NC LIAB | OTHER NCUR LIAB | | | | |
| 253421-0000 | Uncertain Tax Position Reserve-Stat | 1,627,403.00- | 3,453,432.00- | 1,826,029.00 | 52.9- |
| | Total OTHER NCUR LIAB | 64,748,854.59 | 51,939,698.72 | 12,809,155.87 | 24.7 |
| | Total Deferred and Non-Current | 1,528,491,856.90- | 1,467,328,036.44- | 61,163,820.46- | 4.2 |
| CIAC ACC AMR | CIAC ACC AMORT | | | | |
| 272000-0000 | Accum Amort of CIAC | 59,543,661.76 | 55,717,853.56 | 3,825,808.20 | 6.9 |
| | Total CIAC ACC AMORT | 59,543,661.76 | 55,717,853.56 | 3,825,808.20 | 6.9 |
| | Total Total Liabilities | 1,528,547,951.98- | 1,471,090,768.04- | 57,457,183.94- | 3.9 |
| | Total Liabilities and Equity C | 5,518,792,749.18- | 5,234,144,491.18- | 284,648,258.00- | 5.4 |

# EXHIBIT CC

Exhibit F1 – Agreement, dated April 28, 1977, between the City of Beaver Falls and Township of Patterson.

A. Paragraph 1 shall be deleted in its entirety and replaced with:

"The Second Party agrees to adopt an Ordinance sufficient to pay for the conveyance, treatment, and associated expenses, and capital costs established under the provisions of Paragraph 2."

B. Paragraph 2 shall be deleted in its entirety and replaced with:

"Aqua Pennsylvania Wastewater, Inc. ("Aqua") will charge the Second Party the bulk rate set forth in Aqua's Tariff approved by the Pennsylvania Public Utility Commission, applicable to the Contributing Municipalities in Beaver Falls service territory for wastewater conveyance and treatment, as amended from time to time."

C. Paragraph 10 shall be deleted in its entirety and replaced with:

"Held for future use."

Exhibit F2 – Cooperation Agreement, dated May 1, 1983, between the Borough of Eastvale and the City of Beaver Falls.

A. Paragraph 6 – The sentence:

"The City and Borough agree to adjust the monthly rental rate annually based on the uniform user rate and the projections of the City's engineer for the operation and maintenance cost of the sanitary sewer system in the Borough of Eastvale for the coming year."

is deleted in its entirety and replaced with:

"Aqua Pennsylvania Wastewater, Inc. ("Aqua") will charge the Borough the bulk rate set forth in Aqua's Tariff approved by the Pennsylvania Public Utility Commission, applicable to the Contributing Municipalities in Beaver Falls service territory for wastewater conveyance and treatment, as amended from time to time."

Exhibit F3 – Agreement, dated November 1998, between the Big Beaver Municipal Authority and the City of Beaver Falls.

A. Section 4.01(a) shall be deleted in its entirety and replaced with:

"Aqua Pennsylvania Wastewater, Inc. ("Aqua") will charge Big Beaver the bulk rate set forth in Aqua's Tariff approved by the Pennsylvania Public Utility Commission, applicable to the Contributing Municipalities in Beaver Falls service territory for wastewater conveyance and treatment, as amended from time to time."

B. Section 5.01 through Section 5.03 shall be deleted in its entirety and replaced with:

"Capital additions and the impact on the bulk rate charged by Aqua to Big Beaver shall be determined by the Pennsylvania Public Utility Commission in future Aqua base rate proceedings."

Exhibit F4 – Agreement, dated January 9, 2003, between North Sewickley Township Sewer Authority and the City of Beaver Falls.

A. Section 4.01(a) shall be deleted in its entirety and replaced with:

"Aqua Pennsylvania Wastewater, Inc. ("Aqua") will charge the Authority the bulk rate set forth in Aqua's Tariff approved by the Pennsylvania Public Utility Commission, applicable to the Contributing Municipalities in Beaver Falls service territory for wastewater conveyance and treatment, as amended from time to time."

B. Section 5.01 through Section 5.03 shall be deleted in its entirety and replaced with:

"Capital additions and the impact on the bulk rate charged by Aqua to the Authority shall be determined by the Pennsylvania Public Utility Commission in future Aqua base rate proceedings."

# EXHIBIT D

# (Public Version)

# City of Beaver Falls

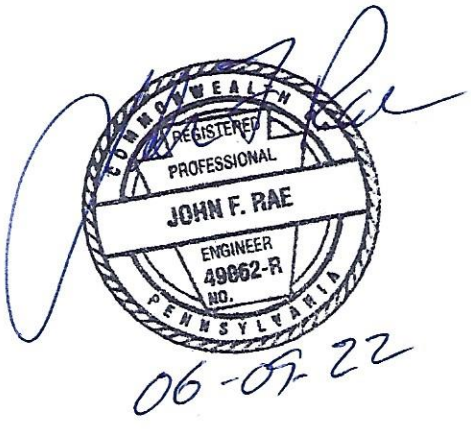
**Beaver County, Pennsylvania**

# ENGINEERS ASSESSMENT of WASTEWATER SYSTEM ASSETS

**DRAFT #1 - November 24, 2021**

**DRAFT #2 – February 1, 2022**

**FINAL – June 9, 2022**




GANNETT FLEMING

**Pittsburgh, Pennsylvania**

## Contents

1.0 Executive Summary ..... 1

2.0 List of Facilities ..... 2

3.0 List of Projects ..... 3

4.0 Methodology ..... 5

5.0 Condition Assessment and Photos ..... 6

6.0 Engineering Support ..... 57

Appendix A – Original Cost of Inventory/Assets

Appendix B – City of Beaver Falls Sewer Maps

# 1.0 Executive Summary

The City of Beaver Falls authorized Gannett Fleming, Inc. on November 5, 2021 to prepare an Act 12 Engineers Assessment Study for sale of its Wastewater System Assets to Aqua, PA. Pennsylvania Act 12 of 2016, amended Chapter 13 of the Pennsylvania Public Utility Code and the Final Implementation Order entered by the Public Utility Commission at Docket No. M-2016-2543193 (collectively, "Act 12") by adding section §1329 Valuation of acquired water and wastewater systems.

The Beaver Falls Wastewater System began initial installation in 1936-1938. The system components covered by this Study consists of gravity separate sanitary sewers and appurtenances within the City of Beaver Falls, one (1) sewage pump station in nearby Eastvale Borough, a sewage force main riding the SR0588 bridge over the Beaver River from Eastvale Borough to Beaver Falls, one (1) wastewater treatment plant (WWTP) and various plant equipment used to operate the WWTP.

An inventory of assets and a determination of original cost of installation as of 2021 is included in Appendix A. The Grand Total Original Cost, as shown on the summary of assets in Appendix A organized by the National Association of Regulatory Utility Commissioners System of Accounts for water and wastewater systems (NARUC account number) = $12,898,487.

A map of the City of Beaver Falls sewers and service area is contained in Appendix B. Photos are contained in the Report Section 5 – Condition Assessment.

## 2.0 List of Facilities:

Based on available records of construction and input from City staff, the following is a list of wastewater facilities:

### 2.1 Sanitary Sewers (See Appendix B):

- Total of 190,442 (36.1 miles) LF of PVC, VCP and CIP-Lined VCP ranging in size from 8-Inch to 24-inch diameter.
- Total of approximately 60,318 LF of service laterals from 3,351 connections.
- Total of 536 brick and 138 concrete manholes.
- Total of approximately 1,400 LF of 8-inch DIP force main connecting the Eastvale Pump Station to the City sewers.
- Total of six meter stations located at the City's boundary with adjacent municipalities along the western edge.

### 2.2 Eastvale Pump Station:

- Gorman-Rupp wet well mounted suction lift pumps installed over a new wet well connected to the original wet well/pump chamber.
- Prefabricated enclosure and packaged controls.
- Onsite emergency power generator (natural gas fueled).

### 2.3 Wastewater Treatment Plant:

- WWTP rated at 4.7 MGD Average Daily Flow (ADF) with primary settling tanks (3), biological contact oxidation towers (2), secondary settling tanks (5), chlorine disinfection tanks (2), anaerobic sludge digesters (2), belt filter press (1), grit separator (1), grease separator (1), various piping, pumps, blowers and controls. Dewatered sludge and process residuals are disposed at a regional landfill.
- Onsite emergency power generator (diesel fuel).
- Operating under NPDES Permit No. PA0026883, effective November 1, 2018 and expires October 31, 2023.

- Constructed under PADEP Part II Sewage Permit No. 0472402 as amended from time to time.

## 3.0 List of Projects:

Based on available records of construction and input from City staff, the following is a list of projects completed by the City:

### 3.1 Sanitary Sewers (See Appendix B):

- 1936-1938 Original VCP gravity sewers and brick manholes installed within the City of Beaver Falls. Sewers ranged in size from 8-inch to 15-inch diameter. Original sewer remaining in service include: 145,990 LF of 8-inch VCP; 4,000 LF of 10-inch VCP; 1,400 LF of 12-inch VCP; 4,200 LF of 15-inchVCP; and 5,100 LF of 8-inch Cured in Place (CIP) Lined VCP.
- 1990 Installed 1,800 LF of 8-inch PVC, 1,700 LF of 15-inch PVC and concrete manholes. The majority of this sewer replaced original sewers. The section from MH 60C to MH 245 eliminated a small pump station.
- 1991 Installed 4,800 LF of 12-inch PVC and concrete manholes to serve West Mayfield Borough and a portion of White Township.
- 1993 Installed 370 LF of 8-inch and 960 LF of 12-inch PVC and concrete manholes to replace original sewers.
- 1996 Replaced and upsized the East Trunk Sewer with 7,700 LF of 18-inch PVC, 11,607 LF of 24-inch PVC and concrete manholes.
- 1998 Replaced 815 LF of 8-inch VCP with 8-inch PVC and installed Cured-in-Place lining of 2,700 LF of 8-inch VCP sewer to rehabilitate and replace original sewers.
- 2008 Cured-in-Place lined 2,100 LF of 8-inch VCP sewer to rehabilitate original sewers.
- 2011 Cured-in-Place lined 300 LF of 8-inch VCP sewer to rehabilitate original sewers.

### 3.2 Eastvale Pump Station:

- 2006 Replacement of the original pump station along with a new force main riding the SR0588 bridge over the Beaver River.

### 3.3 Wastewater Treatment Plant:

- 1936-1938 Original plant consisting of Settling Tanks, Sludge Drying Beds and Anaerobic Digesters/Gas Control Building. Only the Anaerobic Digesters/Gas Control Building and a small portion of the Sludge Drying Beds from the original plant remain in service today.
- 1964 First major plant upgrade/expansion consisting of demolition of the original settling tanks and construction of the "Primary Treatment Plant" with installation of the Main Equipment Building, the Primary Settling Tanks 1-2-3 and the Outfall. All of these facilities remain in service today.
- 1974 Second major plant upgrade/expansion consisting of the construction of the "Secondary Treatment Plant" with installation of the Secondary Pump Station, Oxidation Tower #1, Final Settling Tanks 1-2, Chlorine Contact Tank, new Outfall connecting to the original outfall and the Garage (now known as the tool shop). All of these facilities remain in service today.
- 1996 Third major plant upgrade consisting of the expansion of the Secondary Plant with the installation of the Oxidation Tower #2, the Final Settling Tanks 3-4-5, the Grit Wash and Grease Separator Building, the Aerated Sludge Holding Tank, the Thickened Sludge Storage Tank, the Split Faced Block Garage/Belt Filter Press Building and upgrades to the Secondary Pump Station. All of these facilities remain in service today.
- 2010 Expansion of the Secondary Pump Station Wet Well. This facility remains in service today.
- 2010 Installed the three-bay Equipment Storage Building with Office. This facility remains in service today.

### 3.4 Future Plant:

- To our knowledge, there is no plant held for future use.

## 4.0 Cost Methodology

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and retrieved various records of assets.

A list of inventory/assets was developed of the used and useful utility plant assets (including land and land rights) and any utility plant held for future use that is part of the System Assets. The assets were assigned an account number that conforms to the National Association of Regulatory Utility Commissioners (NARUC) System of Accounts for water and wastewater systems. The List of Inventory/Assets for the City of Beaver Falls wastewater system is shown in Appendix A.

The tables in Appendix A are organized to support the order of the List of Assets summary. Each table includes the following:

- The NARUC Account Number, Asset Description and year installed.
- Quantity, unit and unit price (if applicable) of each asset.
- Original Cost: Values in this column were derived from a found record of the cost at the time of installation.
- Replacement Value Today: If there was not a record of the Original Cost , the Replacement Value Today was derived from Gannett Fleming's opinion of probable cost based on our records from relevant and similar projects. The Replacement Value Today was then trended back to the year of installation using the ENR Construction Cost Index to determine an approximate Original Cost.

## 5.0 Condition Assessment

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and assessed the condition of the assets. Conditions are noted in the section titles.

## 5.1 Sanitary Sewers Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.1.1 Gravity Sewers – Good Condition

The City has diligently pursued routine maintenance, repair, renewal and replacement of the collection system since 1990 as documented in section 3.1. Operations staff reports minimal I&I coming from the City sewers. Plant staff tracks boundary meter flow data and assigns that to the tributary municipalities, then compares that data to the total plant and assigns the difference to the City. The following table summarizes the flow per EDU for the tributary municipalities and the City for several months in 2021.

| 2021 | Dec-20 | JAN | FEB | MAR | APR | MAY | JUN | JUL |
|---|---|---|---|---|---|---|---|---|
| RAIN INCHES | 2.97 | 1.64 | 2.23 | 2.71 | 2.88 | 4.41 | 3.23 | 4.56 |
| EVPS | 5,292,000 | 5,035,000 | 4,648,000 | 5,341,000 | 4,191,000 | 5,875,000 | 3,887,000 | 4,279,000 |
| METER 1 | 6,314,000 | 5,354,000 | 4,193,000 | 5,526,000 | 3,801,000 | 4,666,000 | 2,297,000 | 7,909,000 |
| METER 2 | 5,391,000 | 5,665,000 | 4,991,000 | 6,132,000 | 4,931,000 | 5,764,000 | 3,801,000 | 4,456,000 |
| METER 3 | 3,763,000 | 3,407,000 | 3,917,000 | 6,690,000 | 3,742,000 | 4,363,000 | 3,367,000 | 3,779,000 |
| METER 4 | 2,967,000 | 2,404,000 | 2,317,000 | 2,847,000 | 2,457,000 | 2,446,000 | 1,029,000 | 1,502,000 |
| METER 5 | 2,421,000 | 2,015,000 | 2,533,000 | 3,085,000 | 1,936,000 | 2,237,000 | 1,586,000 | 2,388,000 |
| METER 6 | 4,987,000 | 4,236,000 | 3,312,000 | 5,013,000 | 4,200,000 | 6,747,000 | 3,541,000 | 3,525,000 |
| Trib Total Flow = | 31,135,003 | 28,116,002 | 25,911,002 | 34,634,003 | 25,258,003 | 32,098,004 | 19,508,003 | 27,838,005 |
| Trib EDUs (60 gpcd) = | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 |
| Days/Mo = | 31 | 31 | 28 | 31 | 30 | 31 | 30 | 31 |
| Trib GPD/EDU = | 368 | 332 | 339 | 409 | 308 | 379 | 238 | 329 |
| | | | | | | | | |
| | | | | | | | | |
| BBMA | 1,693,000 | 1,472,000 | 1,382,000 | 1,849,000 | 1,391,000 | 1,955,000 | 1,243,000 | 1,176,000 |
| DALTON | 1,411,600 | 1,957,476 | 1,752,309 | 1,655,059 | 1,448,200 | 1,795,277 | 1,430,887 | 1,332,854 |
| VAL. WASTE | 15,953 | 12,485 | 15,953 | 15,953 | 13,178 | 11,791 | 15,953 | 13,178 |
| TOTAL | 34,255,556 | 31,557,963 | 29,061,264 | 38,154,015 | 28,110,381 | 35,860,072 | 22,197,843 | 30,360,037 |
| PLANT FLOW | 65,290,000 | 67,540,000 | 57,940,000 | 73,750,000 | 57,910,000 | 80,280,000 | 47,660,000 | 53,410,000 |
| CITY OF B.F. | 31,034,444 | 35,982,037 | 28,878,736 | 35,595,985 | 29,799,619 | 44,419,928 | 25,462,157 | 23,049,963 |
| City EDUs (60 gpcd) = | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 |
| Days/Mo = | 31 | 31 | 28 | 31 | 30 | 31 | 30 | 31 |
| City GPD/EDU = | 282 | 327 | 290 | 323 | 280 | 403 | 239 | 209 |

### 5.1.2 Service Sewers – Fair Condition

Per City Ordinance 4044, the customer is responsible for maintenance from their structure to the curb line and the City is responsible for maintenance from the curb line to the main. The City has occasionally assisted customers with issues, such as backwater preventers to stop basement backups.

### 5.1.3 Manholes – Fair Condition

Of the 674 manholes in the City, approximately 80% are brick and 20% are concrete. Operations staff reports minimal I&I from manholes, which indicates they are intact and structurally sound.

### 5.1.4 Meter Stations – Good Condition

The City owns and maintains six (6) boundary meters along the western edge of the City collection system. These meters measure flows contributed by the tributary municipalities. The meters are routinely visited and serviced as needed.

### 5.1.5 Force Main – Good Condition

The City owns and maintains the 8-inch force main from the Eastvale Pump Station, which rides the SR0588 Bridge over the Beaver River and discharges to MH 91. The force main was installed in 2006. There are no known or reported issues with the operation or integrity of the force main.



FIGURE 5.1-1: EASTVALE PUMP STATION FORCE MAIN RIDING THE SR0588 BRIDGE

## 5.2 Eastvale Pump Station Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.2.1 Wet Well – Fair Condition

The Eastvale pump station was upgraded in 2006. The wet well is the original wet well from circa 1993, was determined to be suitable for the expected life of the facility and was not replaced.

### 5.2.2 Pumps and Controls – Good Condition

New wet well mounted, suction lift pumps were installed with the 2006 upgrade. The City routinely checks the pump station and services the pumps as necessary.

### 5.2.3 Enclosure – Good Condition

During the 2006 upgrade, a new enclosure was provided as part of the Gorman-Rupp prepackaged pump station. All electrical and HVAC components are functioning properly.

### 5.2.5 Emergency Power – Good Condition

The emergency generator is natural gas powered. The City performs routine preventative maintenance to keep the generator functioning reliably.

### 5.2.6 Facility Photos



FIGURE 5.2-1: EASTVALE PUMP STATION VICINITY AND SECURITY FENCING



FIGURE 5.2-2: EASTVALE PUMP STATION SITE




FIGURE 5.2-3: EASTVALE PUMP STATION SUCTION LIFT PUMPS



FIGURE 5.2-4: EASTVALE PUMP STATION PUMP CONTROLS




FIGURE 5.2-5: EASTVALE PUMP STATION NATURAL GAS POWERED EMERGENCY GENERATOR

## 5.3 Wastewater Treatment Plant Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.3.1 Headworks-Preliminary Treatment – Fair Condition

The Headworks facility was constructed with the 1964 upgrade. The screening equipment is original, has been maintained and is serving its intended function. The raw sewage / primary settling pumps and electrical were replaced with the 1996 upgrade.



FIGURE 5.3 - 1: HEADWORKS-PRELIMINARY TREATMENT BUILDING



FIGURE 5.3 - 2: MANUAL BAR SCREEN



FIGURE 5.3 - 3: MECHANICAL BAR SCREEN



FIGURE 5.3 - 4: RAW SEWAGE PUMPS

### 5.3.2 Process Pumps and Blowers – Good Condition

The secondary pumps and the process air blowers were replaced with the 1996 upgrade and remain in service today.



FIGURE 5.3 - 5: SECONDARY/PRIMARY EFFLUENT PUMPS



FIGURE 5.3 - 6: PROCESS BLOWERS

### 5.3.3 Primary Settling – Fair Condition

The primary settling tanks were installed with the 1964 upgrade and remain in service today. While there is some evidence of minor seepage along the tank walls, the tanks appear to be providing the intended treatment.



FIGURE 5.3 - 7: PRIMARY SETTLING TANKS-TOP VIEW



FIGURE 5.3 - 8: PRIMARY SETTLING TANKS-SIDE VIEW

### 5.3.4 Secondary Aeration / Oxidation Towers – Good Condition

Oxidation Tower #1 with the brick façade was installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remains in service today. Oxidation Tower #2 with the bolted steel tank was installed as part of the 1996 expansion and remains in service today.



FIGURE 5.3 - 9: OXIDATION TOWER-TOP VIEW

### 5.3.5 Secondary Settling Tanks – Good Condition

Secondary settling tanks 1 and 2 were installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remain in service today. Secondary settling tanks 3-4-5 were installed as part of the 1996 expansion and remain in service today.




FIGURE 5.3 - 10: SECONDARY SETTLING TANKS AND OXIDATION TOWERS

### 5.3.6 Chlorine Disinfection System and Tanks – Good Condition

The chlorine disinfection system, chlorinator and chlorine contact tanks were installed as part of the 1974 upgrade/expansion and remain in service today.




FIGURE 5.3 - 11: CHLORINE SCALES



FIGURE 5.3 - 12: CHLORINATOR



FIGURE 5.3 - 13: CHLORINE CONTACT TANKS-TOP VIEW

### 5.3.7 Aerated Sludge Thickener – Good Condition

The aerated sludge thickening tank was installed as part of the 1996 upgrade/expansion and remains in service today.



FIGURE 5.3 - 14: SLUDGE THICKENING TANK

### 5.3.8 Thickened Sludge Holding Tank– Good Condition

The thickened sludge holding tank was installed as part of the 1996 upgrade/expansion and remains in service today. The air scrubber system shown in Figure 5.3-15 remains in service today.



FIGURE 5.3 - 15: THICKENED SLUDGE TANK AND AIR SCRIBBER - TOP VIEW

### 5.3.9 Sludge Dewatering Building and Belt Filter Press – Good Condition

The sludge dewatering building and belt filter press used for sludge dewatering were installed as part of the 1996 upgrade/expansion and remain in service today.



FIGURE 5.3 - 16: SLUDGE DEWATERING BUILDING AND SLUDGE CAKE ROLLOFF BOX



FIGURE 5.3 - 17: BELT FILTER PRESS

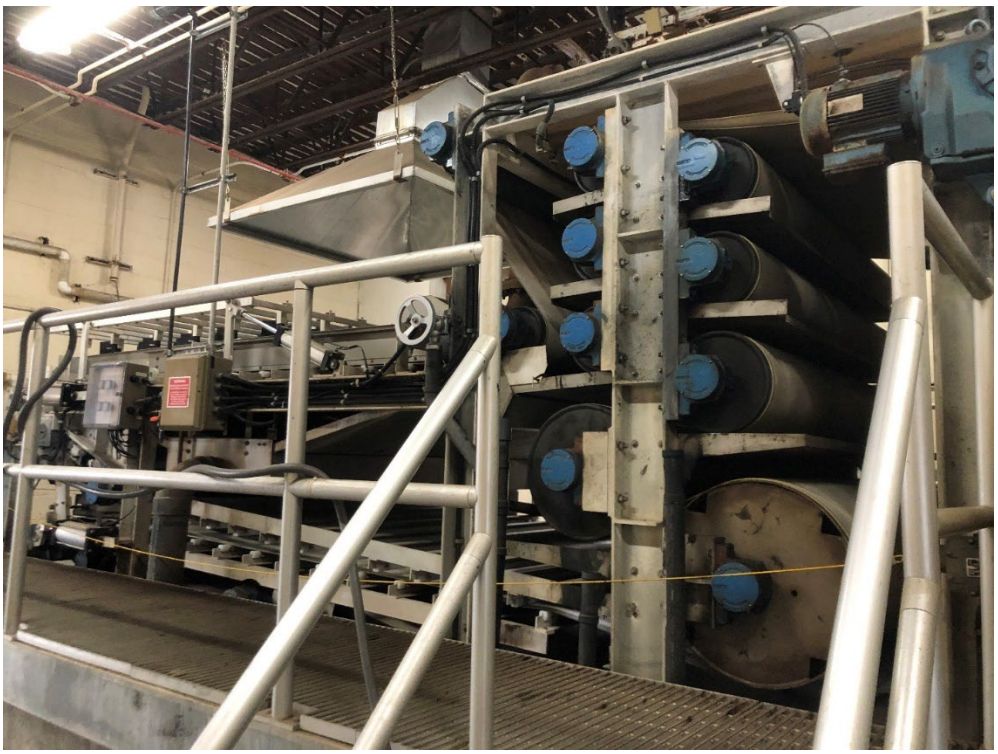


FIGURE 5.3 - 18: BELT FILTER PRESS

### 5.3.10 Residuals Handling, Grit Separator, Oil/Grease Separator – Good Condition

The residuals handling building, grit separator and oil & grease separator equipment were installed as part of the 1996 upgrade/expansion and remain in service today.



FIGURE 5.3 - 19: RESIDUALS HANDLING BUILDING




FIGURE 5.3 - 20: GRIT SEPARATOR EQUIPMENT




FIGURE 5.3 - 21: OIL & GREASE SEPARATOR

### 5.3.11 Anaerobic Digestion – Poor to Fair Condition

The anaerobic digesters, control building and sludge drying beds (4) were installed as part of the original plant constructed in 1936-1938. The digesters and control building remain in service today. Two of the sludge drying beds were demolished in 2010 to make room for the three-bay garage. Two of the sludge drying beds remain but are not necessarily used as part of normal plant operations. Operators report that the beds are only used to store excessive grit received after a heavy rain fall. They then use their front loader to scoop a little bit out at a time and put it in the roll off dumpster. Operators report they do not routinely use the beds for anything else and are not sure if they can draw sludge from the digesters into the bed. New gas meters and heat exchanger were installed as part of the 1996 upgrade.



FIGURE 5.3 - 22: ANAEROBIC DIGESTER – TOP VIEW - FLOATING COVER



FIGURE 5.3 - 23: ANAEROBIC DIGESTER TANKS - SIDE VIEW



FIGURE 5.3 - 24: DIGESTER BUILDING



FIGURE 5.3 - 25: DIGESTER WASTE GAS BURNER



FIGURE 5.3 - 26: REMAINING SLUDGE DRYING BED



FIGURE 5.3 - 27: ANAEROBIC DIGESTER PIPING AND EQUIPMENT




FIGURE 5.3 - 28: ANAEROBIC DIGESTER WASTE GAS METER

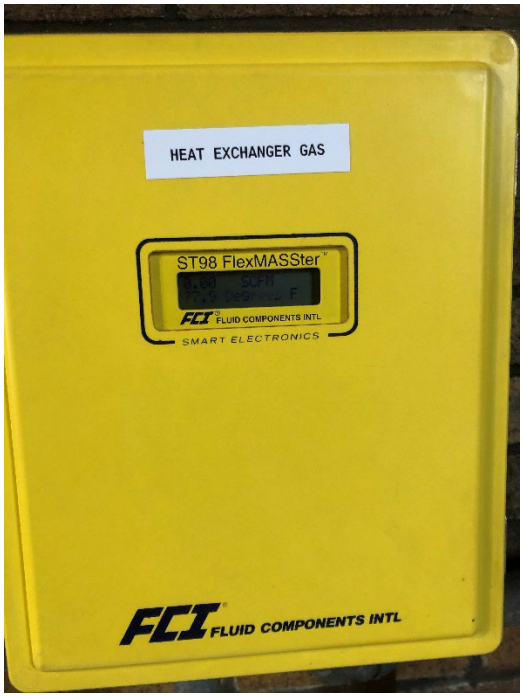



FIGURE 5.3 - 29: ANAEROBIC DIGESTER HEAT EXCHANGER GAS METER

### 5.3.12 Process and Inter-Unit Piping – Good Condition

Process piping was installed during the respective upgrades/expansions and remains in service. Likewise, inter-unit piping that runs between the facilities was installed during the respective upgrades/expansions and remains in service. Inter-unit piping is buried, could not be viewed so condition is assumed good based on discussions with operations staff.

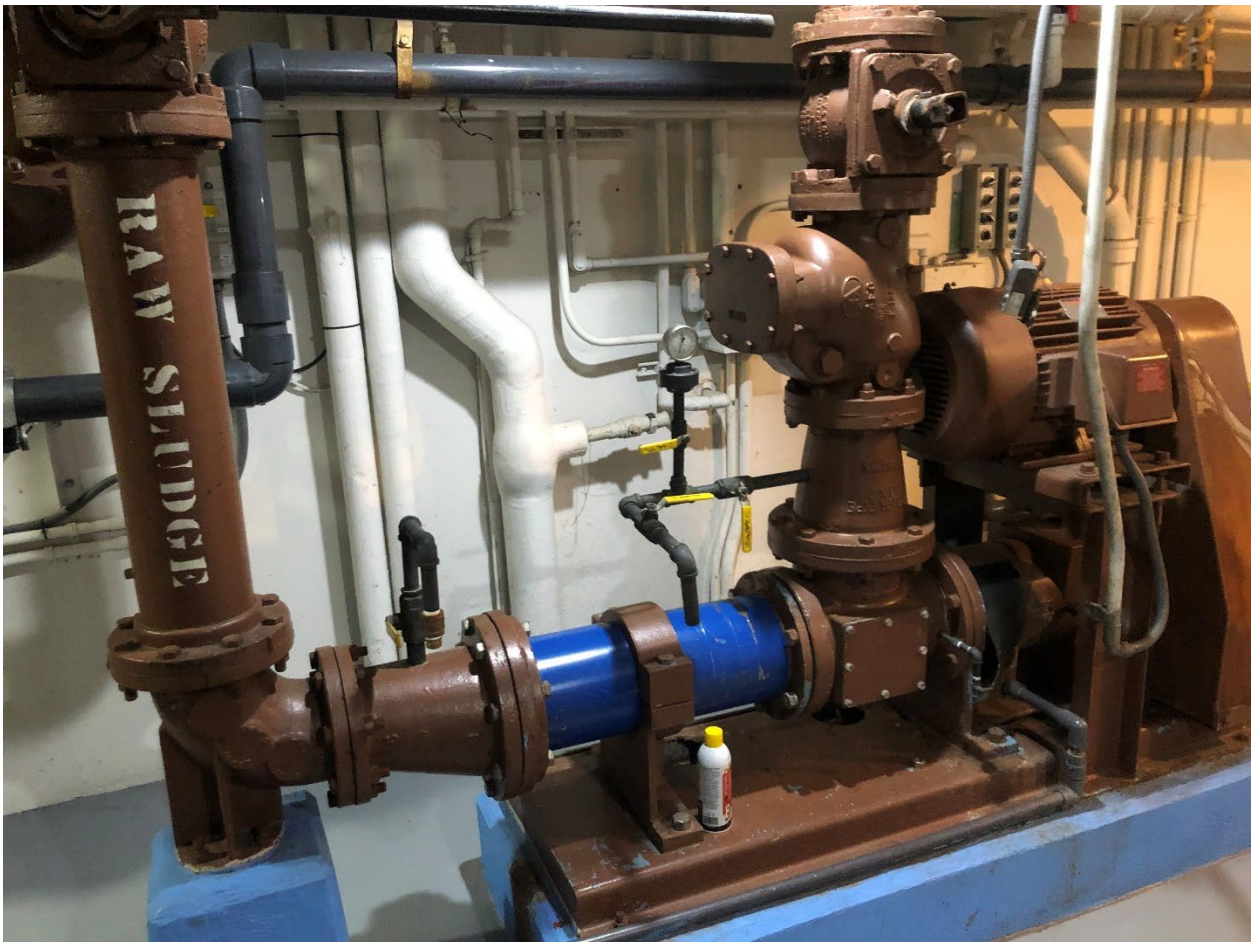



FIGURE 5.3 - 30: SLUDGE TRANSFER PUMPS




FIGURE 5.3 - 31: PRIMARY TANK FEED PIPING

### 5.3.13 Laboratory Equipment – Good Condition

The onsite lab consist of commercial quality casework installed as part of the 1996 upgrade and is used primarily for process control.




FIGURE 5.3 - 32: LAB FUME HOOD



FIGURE 5.3 - 33: LAB CASEWORK AND FUME HOOD

### 5.3.14 Electrical & Instrumentation Facilities – Good Condition

Motor Control Centers, distribution panels, lighting panels, duct banks etc were installed as part of each plant upgrade/expansion to service buildings and equipment being installed with each project.



FIGURE 5.3 - 34: MOTOR CONTROL CENTERS




FIGURE 5.3 - 35: AUTOMATIC TRANSFER SWITCH



FIGURE 5.3 - 36: MOTOR CONTROL CENTER



FIGURE 5.3 - 37: EMERGENCY GENERATOR




FIGURE 5.3 - 38: PLANT FLOW METER

### 5.3.15 HVAC Facilities – Good Condition

Heating, ventilation and air conditioning systems are a combination of electric unit heaters, gas fired unit heaters, roof top AC units, portable AC units, window AC units and a combination heat/AC unit.



FIGURE 5.3 - 39: ELECTRIC UNIT HEATER-GRIT BUILDING



FIGURE 5.3 - 40: ELECTRIC UNIT HEATER OFFICE AREA




FIGURE 5.3 - 41: GAS FIRED UNIT HEATER GARAGE AREA




FIGURE 5.3 - 42: PORTABLE AC UNIT



FIGURE 5.3 - 43: ROOF TOP AC UNIT OFFICE AREA



FIGURE 5.3 - 44: COMBO HEAT-AC UNIT

### 5.3.16 Three Bay Garage – Good Condition

The three bay garage was installed in 2010 as a stand alone project. This building is used to store the various plant vehicle and equipment and includes a climate controlled office space for operations staff.



FIGURE 5.3 - 45: PEMB VEHICLE AND EQUIPMENT STORAGE BUILDING




FIGURE 5.3 - 46: OFFICE SPACE INSIDE THREE BAY GARAGE



FIGURE 5.3 - 47: WORK STATION IN THREE BAY GARAGE OFFICE SPACE



FIGURE 5.3 - 48: WORK STATION INSIDE GARAGE OFFICE SPACE



FIGURE 5.3 - 49: WORK STATION INSIDE GARAGE OFFICE SPACE




FIGURE 5.3 - 50: WORK STATION INSIDE GARAGE OFFICE SPACE

### 5.3.17 Maintenance Garage – Fair Condition

The maintenance garage was installed as part of the 1964 upgrade/expansion and is used to house various tools, welding equipment and machining equipment, all of which remain in service today.



FIGURE 5.3 - 51: MAINTENANCE GARAGE AND TOOL SHOP BUILDING




FIGURE 5.3 - 52: MAINTENANCE TOOLS




FIGURE 5.3 - 53: MAINTENANCE TOOLS



FIGURE 5.3 - 54: MAINTENANCE TOOLS



FIGURE 5.3 - 55: MAINTENANCE TOOLS

### 5.3.18 Vehicles and Garage Equipment – Good Condition

The following photos show equipment typically stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Tables 8 and 10 of the List of Assets.




FIGURE 5.3 - 56: MOWERS AND BOBCAT SKID STEER




FIGURE 5.3 - 57: PORTABLE PUMP




FIGURE 5.3 - 58: BACKHOE




FIGURE 5.3 - 59: 1992 F350 1-TON DUMP




FIGURE 5.3 - 60: 2020 F250 4X4



FIGURE 5.3 - 61: 2014 F150 4X4

### 5.3.19 Miscellaneous Equipment and Tools

The following photos show equipment and tools stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Table 10 of the List of Assets.



FIGURE 5.3 - 62: SHOP EQUIPMENT




FIGURE 5.3 - 63: SHOP EQUIPMENT AND TOOL CHEST



FIGURE 5.3 - 64: SHOP SUPPLIES

## 6.0 Engineering Support

The Engineer will respond to RFIs on this Study from the buyers and seller's UVE consultants as well as RFIs / questions from the PUC process reviews (BI&E, OCA, etc).

END OF REPORT

# APPENDIX A

# Original Cost of Inventory/Assets

# ORGANIZED BY ACCOUNT NUMBER

| ACCOUNT | PROPERTY DESCRIPTION | REFERENCE TABLE | ORIGINAL COST | COMMENTS |
|---|---|---|---|---|
| **353 - Land and Land Rights** | | | | |
| 353.2 | Land & ROW - Collection Sewers | 4 | $ 109.00 | 109 Easements at $1 each |
| 353.3 | Land & ROW - Pumping Station (Eastvale) | 2 | $ 1.00 | 1 Easement at $1 each |
| 353.4 | Land & ROW - Treatment Plant | 1 | $ 36,900.00 | Several lots combined on same deeds |
| | | | **$ 37,010.00** | |
| **354 - Structures and Improvements** | | | | |
| 354.3 | Structures & Imp. - Pumping Station (Eastvale) | 2 | $ 133,168.00 | |
| | | | | |
| 354.4 | Structures & Imp. - WWTP | 1 | $ 4,519,461.75 | |
| | | | **$ 4,652,629.75** | |
| **355 - Power Generation Equipment** | | | | |
| 355.3 | Power Gen. Equip. - Pumping Station | 2 | $ 4,972.78 | |
| 355.4 | Power Gen. Equip. - WWTP | 1 | $ 87,502.00 | |
| | | | **$ 92,474.78** | |
| **360 - Collection Sewers - Force** | | | | |
| | | 3 | **234,542.22** | |
| **361 - Collection Sewers - Gravity** | | | | |
| | | 4 | **$ 3,804,748.05** | |
| **363 - Services to Customers** | | | | |
| | | 5 | **$ 170,292.73** | |
| **364 - Flow Measuring Devices** | | | | |
| | | 6 | **$ 57,104.19** | |
| **371 - Pumping Equipment** | | | | |
| 371.3 | Pumping Equip. - Pumping Station | 2 | $ 236,966.95 | |
| 371.4 | Pumping Equip. - WWTP | 1 | $ 350,796.01 | |
| 371.4 | Pumping Equip. - WWTP Raw Influent Pumping Station | 1 | $ 142,799.00 | |
| | | | **$ 730,561.96** | |
| **380 - Treatment and Disposal Equipment** | | | | |
| 380.4 | Treatment & Disp. - WWTP | 1 | **$ 1,928,800.48** | |
| **381 - Plant Sewers** | | | | |
| 381.4 | Plant Sewers - WWTP | 1 | **$ 721,765.15** | |

# ORGANIZED BY ACCOUNT NUMBER

| ACCOUNT | PROPERTY DESCRIPTION | REFERENCE TABLE | ORIGINAL COST | COMMENTS |
|---|---|---|---|---|
| **382 - Outfall Sewer Lines** | | | | |
| 382.4 | Outfall Sewer Lines - WWTP | 1 | $ 70,212.80 | |
| **389 - Other Plant and Misc Equipment** | | | | |
| 389.4 | Other Plant & Misc. Equip. - WWTP | 1 | $ 27,490.27 | |
| **390 - Office Furniture and Equipment** | | | | |
| 390.7 | Office Furniture & Equip. - General Plant | 7 | 8,606.74 | |
| **391 - Transportation Equipment** | | | | |
| 391.7 | Transportation Equip. - General Plant | 8 | 175,120.82 | |
| | | | | |
| **392 - Stores Equipment** | | | | |
| 392.7 | Stores Equip. - General Plant | 9 | $ 14,999.28 | |
| **393 - Tools, Shop, and Garage Equipment** | | | | |
| 393.7 | Tools, Shop, & Garage Equip. - General Plant | 10 | 104,839.62 | |
| **394 - Laboratory Equipment** | | | | |
| 394 | Laboratory Equip. - General Plant | 11 | $ 53,688.11 | |
| **395 - Power Operated Equipment** | | | | |
| 395.7 | Power Operated Equip. - General Plant | 12 | - | |
| **396 - Communication Equipment** | | | | |
| 396.7 | Communication Equip. - General Plant | 13 | 11,600.00 | |
| **397 - Miscellaneous Equipment** | | | | |
| 397.7 | Misc. Equip. - General Plant | 14 | 2,000.00 | |

**GRAND TOTAL ORIGINAL COST = $ 12,898,486.94**

Check **$ 12,898,486.94**

(1) See Reference Tables for project cost break down and corresponding account numbers per pay item.

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| **353.4** | **Land & ROW - Treatment Plant** | | | | | |
| 353.4 | Parcel 01-001-0100.002 | 1930 | 1 | EA | | |
| 353.4 | Parcel 01-001-0100.003 | 1930 | 1 | EA | | |
| 353.4 | Parcel 01-001-0100.004 - DBV 865, pg 279 | 1964 | 1 | EA | $ 10,800.00 | |
| 353.4 | Parcel 01-001-0100.001- DBV 1005, pg 137 | 1973 | 1 | EA | $ 26,100.00 | |
| 353.4 | Parcel 01-001-0100.007- DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-001-0111.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-002-0100.001 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-002-0101.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| | | | | **SUBTOTAL** | **$ 36,900.00** | |
| | | | **Subtotal** | **Used** | | |
| | | | | | | |
| **354.4** | **Structures & Imp. - WWTP** | | | | | |
| 354.4 | Architect's plans and specifications | 1974 | 1 | LS | $ 150,878.66 | |
| 354.4 | Legal | 1974 | 1 | LS | $ 10,000.00 | |
| 354.4 | Adminstration | 1974 | 1 | LS | $ 3,000.00 | |
| 354.4 | Indirect Costs | 1974 | 1 | LS | $ 8,000.00 | |
| 354.4 | Site | 1974 | 1 | LS | $ 25,000.00 | |
| 354.4 | Architect's plans and specifications | 1996 | 1 | LS | $ 487,083.25 | |
| 354.4 | Legal | 1996 | 1 | LS | $ 26,460.48 | |
| 354.4 | Permits | 1996 | 1 | LS | $ 20,500.00 | |
| 354.4 | Land | 1996 | 1 | LS | $ 10,737.50 | |
| 354.4 | Erosion Control | 1996 | 1 | LS | $ 5,800.00 | |
| 354.4 | Landscaping/Final Grade | 1996 | 1 | LS | $ 14,600.00 | |
| 354.4 | Paving/Subbase | 1996 | 1 | LS | $ 36,000.00 | |
| 354.4 | Ongrade Slab/Sidewalk | 1996 | 1 | LS | $ 17,800.00 | |
| 354.4 | Fences | 1996 | 1 | LS | $ 11,600.00 | |
| 354.4 | Main Equipment Building Original Remaining in Service-Above Grade | 1964 | 1 | LS | $ 30,586.12 | $ 391,800.00 |
| 354.4 | Main Equipment Building Original Remaining in Service-Below Grade | 1964 | 1 | LS | $ 36,456.65 | $ 467,000.00 |
| 354.4 | Power Feed Mains | 1964 | 1 | LS | $ 7,416.24 | $ 95,000.00 |
| 354.4 | Grit Chamber Rebuild CO#1 | 1996 | 1 | LS | $ 5,791.10 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Grit Chamber Painting CO#1 | 1996 | 1 | LS | $ 1,412.82 | |
| 354.4 | Replace Roof Over Existing Bldg CO#3 | 1996 | 1 | LS | $ 39,768.12 | |
| 354.4 | Roof Improvements CO#5 | 1996 | 1 | LS | $ 20,000.00 | |
| 354.4 | Ex. Primary Settling Tank Mech Mods. | 1996 | 1 | LS | $ 11,000.00 | |
| 354.4 | Primary Settling Tanks 1, 2,3 original Remaining in Service | 1964 | 1 | LS | $ 32,006.91 | $ 410,000.00 |
| 354.4 | Ex. Primary Settling Tank General Mods. | 1996 | 1 | LS | $ 20,000.00 | |
| 354.4 | Electrical - Primary Settling Tanks | 1996 | 1 | LS | $ 5,020.00 | |
| 354.4 | Ex Prim Eff Pump Station Gratings/Supports | 1996 | 1 | LS | $ 6,000.00 | |
| 354.4 | Ex Pump Stations Grating & Supports | 1996 | 1 | LS | $ 1,000.00 | |
| 354.4 | Expansion of existing Secondary Pump Station wetwell | 2010 | 1 | LS | $ 146,773.41 | $ 200,000.00 |
| 354.4 | Oxidation Tower 1 - Remaining in Service | 1996 | 1 | LS | $ 136,300.00 | |
| 354.4 | Oxidation Tower 1 - Modification/EPDM | 1996 | 1 | LS | $ 12,095.00 | |
| 354.4 | Oxidation Tower 1 -Brick/Mortar Work | 1996 | 1 | LS | $ 4,800.00 | |
| 354.4 | Ex Ox Tower Stairs/Railings | 1996 | 1 | LS | $ 14,200.00 | |
| 354.4 | Oxidation Tower 2 - Excavate | 1996 | 1 | LS | $ 5,600.00 | |
| 354.4 | Oxidation Tower 2 - Reinforce Steel | 1996 | 1 | LS | $ 26,900.00 | |
| 354.4 | Oxidation Tower 2 - Pipe Encase & Fottomg | 1996 | 1 | LS | $ 8,200.00 | |
| 354.4 | Oxidation Tower 2 - Trough Pour | 1996 | 1 | LS | $ 7,600.00 | |
| 354.4 | Oxidation Tower 2 - Sub-base | 1996 | 1 | LS | $ 6,300.00 | |
| 354.4 | Oxidation Tower 2 - Base slab | 1996 | 1 | LS | $ 41,100.00 | |
| 354.4 | Oxidation Tower 2 - Ring Wall | 1996 | 1 | LS | $ 16,600.00 | |
| 354.4 | Oxidation Tower 2 - Beams | 1996 | 1 | LS | $ 12,600.00 | |
| 354.4 | Oxidation Tower 2 - Vent Walls | 1996 | 1 | LS | $ 5,200.00 | |
| 354.4 | Oxidation Tower 2 - Grout | 1996 | 1 | LS | $ 1,600.00 | |
| 354.4 | Oxidation Tower 2 - Anchor bolts/Tank Plate | 1996 | 1 | LS | $ 4,600.00 | |
| 354.4 | Oxidation Tower 2 - Stair System Piers/Excavate/Reinforce/Pour | 1996 | 1 | LS | $ 8,400.00 | |
| 354.4 | New Ox Tower#2 Grating/frames/ Stairs/Railings | 1996 | 1 | LS | $ 17,500.00 | |
| 354.4 | Ladders Ox Tower CO#3 | 1996 | 1 | LS | $ 1,741.30 | |
| 354.4 | Electrical - Oxidation Towers 1 and 2 | 1996 | 1 | LS | $ 3,220.00 | |
| 354.4 | Recirculation/Distribution Structure | 1996 | 1 | LS | $ 19,000.00 | |
| 354.4 | Manhole "A" | 1996 | 1 | LS | $ 3,700.00 | |
| 354.4 | Recirc/Dist STR. Grating & Supports | 1996 | 1 | LS | $ 4,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Fin. Settling Tanks - Excavate | 1996 | 1 | LS | $ 9,600.00 | |
| 354.4 | Fin. Settling Tanks - Gravel Base | 1996 | 1 | LS | $ 5,600.00 | |
| 354.4 | Fin. Settling Tanks - Slab Reinforcement | 1996 | 1 | LS | $ 21,000.00 | |
| 354.4 | Fin. Settling Tanks - Slab Form & Pour | 1996 | 1 | LS | $ 62,600.00 | |
| 354.4 | Fin. Settling Tanks - Hoppers/Reinforcement | 1996 | 1 | LS | $ 13,000.00 | |
| 354.4 | Fin. Settling Tanks - Hoppers/Form & Pour | 1996 | 1 | LS | $ 21,600.00 | |
| 354.4 | Fin. Settling Tanks - Walls/Reinforcement | 1996 | 1 | LS | $ 24,000.00 | |
| 354.4 | Fin. Settling Tanks - Walls/Form & Pour | 1996 | 1 | LS | $ 74,000.00 | |
| 354.4 | Fin. Settling Tanks - Grout | 1996 | 1 | LS | $ 9,600.00 | |
| 354.4 | Fin. Settling Tanks - Walkways/Form & Pour Embedded Items | 1996 | 1 | LS | $ 13,600.00 | |
| 354.4 | Fin. Settling Tanks - Embedded Items | 1996 | 1 | LS | $ 3,600.00 | |
| 354.4 | Fin. Settling Tanks - Offsite Dirt Handling - All | 1996 | 1 | LS | $ 22,000.00 | |
| 354.4 | Final Sed Tanks-Grating/ Frames/Stairs/Railings | 1996 | 1 | LS | $ 34,000.00 | |
| 354.4 | Ground Stabilization at Final Tanks CO#1 | 1996 | 1 | LS | $ 10,343.30 | |
| 354.4 | Electrical - Final Settling Tanks | 1996 | 1 | LS | $ 9,551.00 | |
| 354.4 | Electrical - Settling Tank Lighting | 1996 | 1 | LS | $ 8,611.00 | |
| 354.4 | Utility Water from Chlorine Tanks to Belt Press Bldg. | 1996 | 1 | LS | $ 13,400.00 | |
| 354.4 | Electrical - Sampler | 1996 | 1 | LS | $ 9,465.00 | |
| 354.4 | Grit Washer/ScumConcentrator/Stairs,Platforms, Railing | 1996 | 1 | LS | $ 4,200.00 | |
| 354.4 | Electrical - Grit Washer | 1996 | 1 | LS | $ 2,265.00 | |
| 354.4 | Aerated Sludge Holding Tank - Excavation | 1996 | 1 | LS | $ 17,600.00 | |
| 354.4 | Aerated Sludge Holding Tank - Gravel Base | 1996 | 1 | LS | $ 9,900.00 | |
| 354.4 | Aerated Sludge Holding Tank - Slab Reinforcement | 1996 | 1 | LS | $ 39,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Slab Form & Pour | 1996 | 1 | LS | $ 49,600.00 | |
| 354.4 | Aerated Sludge Holding Tank - Wall Reinforcement | 1996 | 1 | LS | $ 31,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Wall Form & Pour | 1996 | 1 | LS | $ 77,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Footer Drainage | 1996 | 1 | LS | $ 6,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Grout | 1996 | 1 | LS | $ 11,000.00 | |
| 354.4 | Thickened Sludge/Belt Press - Reinforcement | 1996 | 1 | LS | $ 12,900.00 | |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | $ 36,800.00 | |
| 354.4 | Thickened Sludge/Belt Press - Slab on Decking | 1996 | 1 | LS | $ 12,600.00 | |
| 354.4 | Thickened Sludge/Belt Press - Excavation | 1996 | 1 | LS | $ 6,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Thickened Sludge/Belt Press - Gravel Base | 1996 | 1 | LS | $ 2,800.00 | |
| 354.4 | Thickened Sludge/Belt Press - Slab Reinforcement | 1996 | 1 | LS | $ 18,000.00 | |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | $ 38,600.00 | |
| 354.4 | Thickened Sludge/Belt Press - Sump/Reinforce/Pour | 1996 | 1 | LS | $ 3,100.00 | |
| 354.4 | Thickened Sludge/Belt Press - Wall Reinforcement | 1996 | 1 | LS | $ 12,900.00 | |
| 354.4 | Thickened Sludge/Belt Press - Wall Form & Pour | 1996 | 1 | LS | $ 22,000.00 | |
| 354.4 | Anerobic Digesters 1 & 2 Original Remaining in Service | 1936-1938 | 1 | LS | $ 5,648.47 | $ 300,105.00 |
| 354.4 | Remove Sludge from Digestor #2 CO#3 | 1996 | 1 | LS | $ 29,447.05 | |
| 354.4 | Add Clean/Patch/Paint Interior Wall s of Digestor #2 CO#3 | 1996 | 1 | LS | $ 7,746.40 | |
| 354.4 | Sludge Drying Bed (one) Remaining in Service | 1936-1938 | 1 | LS | $ 2,823.25 | $ 150,000.00 |
| 354.4 | Digester Control Building Remaining in Service | 1936-1938 | 1 | LS | $ 2,992.64 | $ 159,000.00 |
| 354.4 | Belt Press Bldg - Doors & Windows | 1996 | 1 | LS | $ 21,265.00 | |
| 354.4 | Belt Press Bldg- Access Hatch | 1996 | 1 | LS | $ 4,600.00 | |
| 354.4 | Belt Press Bldg - Ceiling | 1996 | 1 | LS | $ 2,600.00 | |
| 354.4 | Belt Press Bldg - HVAC & Gas Lines | 1996 | 1 | LS | $ 26,300.00 | |
| 354.4 | Belt Press Bldg - Roof/Flr Drains and Plumbing | 1996 | 1 | LS | $ 19,400.00 | |
| 354.4 | Belt Prss Bldg - Carpet Paint/Finishers | 1996 | 1 | LS | $ 12,000.00 | |
| 354.4 | Belt Press Bldg - pipe encasement | 1996 | 1 | LS | $ 5,800.00 | |
| 354.4 | Belt Press Bldg - Roof/Flash | 1996 | 1 | LS | $ 34,000.00 | |
| 354.4 | Belt Press Bldg - Concrete Masonry Unit | 1996 | 1 | LS | $ 48,000.00 | |
| 354.4 | Belt Press Bldg - Insulation | 1996 | 1 | LS | $ 4,000.00 | |
| 354.4 | Belt Filter Press Bldg- Walkways/Railings/Support | 1996 | 1 | LS | $ 79,000.00 | |
| 354.4 | Electrical - Belt Filter Press | 1996 | 1 | LS | $ 15,220.00 | |
| 354.4 | Utility Water Booster System | 1996 | 1 | LS | $ 57,800.00 | |
| 354.4 | Electrical - BFP/Garge, Misc. | 1996 | 1 | LS | $ 12,658.00 | |
| 354.4 | Laboratory/Garage - Excavate & Pour | 1996 | 1 | LS | $ 6,600.00 | |
| 354.4 | Laboratory/Garage - Slab Complete | 1996 | 1 | LS | $ 13,600.00 | |
| 354.4 | Electrical - Lab Office | 1996 | 1 | LS | $ 4,177.00 | |
| 354.4 | Electrical - Garage | 1996 | 1 | LS | $ 4,177.00 | |
| 354.4 | Painting | 1996 | 1 | LS | $ 94,600.00 | |
| 354.4 | Electrical Lighting | 1996 | 1 | LS | $ 7,703.00 | |
| 354.4 | Electrical - Entrance Area Lighting | 1996 | 1 | LS | $ 6,931.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Road Between Existing Bldg & Primary Tanks CO#3 | 1996 | 1 | LS | $ 2,384.32 | |
| 354.4 | Replace Existing Handrail CO#3 | 1996 | 1 | LS | $ 36,563.98 | |
| 354.4 | Additional Fence CO#5 | 1996 | 1 | LS | $ 24,926.85 | |
| 354.4 | Electrical - Panel MCP | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Blowers | 1996 | 1 | LS | $ 2,975.00 | |
| 354.4 | Electrical - Breaker Panels - 2 | 1996 | 1 | LS | $ 4,175.00 | |
| 354.4 | Electrical - Transformers | 1996 | 1 | LS | $ 1,555.00 | |
| 354.4 | Electrical - Panel DP-2 | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Square D Breakers - 2 | 1996 | 1 | LS | $ 3,998.00 | |
| 354.4 | Electrical - Main Pump Building Misc. | 1996 | 1 | LS | $ 12,058.00 | |
| 354.4 | Electrical - Panel DP-1 | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Westinghouse Breaker | 1996 | 1 | LS | $ 1,999.00 | |
| 354.4 | Electrical - Duct Banks | 1996 | 1 | LS | $ 11,369.00 | |
| 354.4 | Electrical - ESP System | 1996 | 1 | LS | $ 24,710.00 | |
| 354.4 | Electrical - Interlink RTU | 1996 | 1 | LS | $ 11,097.00 | |
| 354.4 | Electrical Secondary Pump Station Power Feed Mains | 2020 | 1 | LS | $ 69,810.20 | $ 73,000.00 |
| 354.4 | Secondary Pump Station, Garage, Oxidation Tower, Final Settling Tanks 1 & 2 and Chlorine Contact Tanks 1 & 2 original to remain in service | 1974 | 1 | LS | $ 874,793.45 | |
| 354.4 | Three-Bay Metal Vehicle and Equipment Storgae Building with Interior Office Space | 2010 | 1 | LS | $ 376,657.27 | $ 513,250.00 |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 4,519,461.75** | |
| | | | | | | |
| | | | | | | |
| **355.4** | **Power Gen. Equip. - WWTP** | | | | | |
| 355.4 | Electrical - Generator | 1996 | 1 | LS | $ 87,502.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 87,502.00** | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| **371.3** | **Pumping Equip. - WWTP** | | | | | |
| 371.3 | Mission - Grit Pump | 1996 | 1 | EA | $ 10,700.00 | |
| 371.3 | Electrical - Grit Pump | 1996 | 1 | LS | $ 1,910.00 | |
| 371.3 | Flygt Model CT3300 Centrifugal Primary Effluent Pumps | 1996 | 4 | EA | $ 88,000.00 | |
| 371.3 | Ex. Primary Eff. Pump Mods/Control Valve/Mtrs | 1996 | 1 | LS | $ 14,100.00 | |
| 371.3 | Electrical - Primary Pumps | 1996 | 1 | LS | $ 7,641.00 | |
| 371.3 | Install Sewage Sump Simplex system | 1996 | 1 | LS | $ 12,400.00 | |
| 371.3 | Install Sewage Sump Duplex system Zoeller Model #282 | 1996 | 1 | LS | $ 18,900.00 | |
| 371.3 | Electrical - Sump Pumps | 1996 | 1 | LS | $ 1,430.00 | |
| 371.3 | Digester Recirculation Pumps | 1996 | 2 | EA | $ 27,000.00 | |
| 371.3 | Moyno Progressive Cavity Pump, 2000 Series, Model 1G090G1CDQAAA, #AS4702896A, 200GPM, 25', 235RPM, Single Stage, 8 X 8, 7.5HP AC Totally Enclosed Fan Cooled Motor, 1200RPM, Extreme Duty, Unit Base Steel, Complete with piping, connections, wiring and controls. | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 371.3 | PIONEER Self-Priming Pump, Model SBHCP3F-0036DD, #2462, 4 X 4, 3HP with wiring, conrols, piping and connections | 2020 | 1 | LS | $ 2,868.91 | $ 3,000.00 |
| 371.3 | Yale 2-ton capacity spur geared chain hoist with 4 wheel trolley and rail | 2020 | 1 | LS | $ 860.67 | $ 900.00 |
| 371.3 | Moyno Progressive Cavity Primary Sludge Pumps, Model #IHII5GI, 15 HP | 1996 | 2 | EA | $ 32,000.00 | |
| 371.3 | Electrical - Primary Sludge Pumps | 1996 | 1 | LS | $ 3,820.00 | |
| 371.3 | Mission - 4" x 3" x 13" Secondary Sludge Pumps | 1996 | 2 | EA | $ 30,300.00 | |
| 371.3 | Electrical - Secondary Pumps | 1996 | 1 | LS | $ 3,820.00 | |
| 371.3 | Moyno Model #IHII5GICDQAAA - Gravity Belt Thickener Pumps | 1996 | 2 | EA | $ 15,600.00 | |
| 371.3 | Moyno Model IG065GICDQAAA Thickened Sludge Pumps | 1996 | 2 | EA | $ 29,100.00 | |
| 371.3 | Electrical - Sludge Pumps (4) | 1996 | 1 | LS | $ 11,902.00 | |
| 371.3 | Monorail Crane With coffing electric chain hoist and crane rail | 2020 | 1 | LS | $ 1,912.61 | $ 2,000.00 |
| 371.3 | Monorail Crane, 2 ton capacity with Little Mule 2 Ton Capacity Electric Chain Hoist, 4 wheel trolley & 6' tank lift beam | 2020 | 1 | LS | $ 2,677.65 | $ 2,800.00 |
| 371.3 | Wright Safeway 2 Ton Capacity Spur Geared Chain Hoist on 4 Wheel Trolley, complete with Rail and Yale Electric Chain Hoist. | 2020 | 1 | LS | $ 3,251.43 | $ 3,400.00 |
| 371.3 | Flygt Submersible Sewage Pump, Model 3201.180-131011, 3201.180-0380 | 2020 | 1 | LS | $ 23,907.60 | $ 25,000.00 |
| | | | **Subtotal** | **SUBTOTAL** | **$ 350,796.01** | |
| | | | | | | |
| **371.3** | **Raw Sewage Pump Station** | | | | | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 371.3 | Flygt dry pit submersible pumps - Raw | 1996 | 4 | EA | $ 112,400.00 | |
| 371.3 | Concrete Pump Supports Raw Sewage and Prime Sludge Pump | 1996 | 1 | LS | $ 3,900.00 | |
| 371.3 | Core holes and install water seal for pumps | 1996 | 1 | LS | $ 3,600.00 | |
| 371.3 | Chain Hoist filler Plates | 1996 | 1 | LS | $ 3,200.00 | |
| 371.3 | Electrical - Pump Station Misc. | 1996 | 1 | LS | $ 12,058.00 | |
| 371.3 | Electrical - Raw Sewage Pumps | 1996 | 1 | LS | $ 7,641.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 142,799.00** | |
| **380.4** | **Treatment & Disp. - WWTP** | | | | | |
| **380.4** | **Preliminary Treatment Building** | | | | | |
| 380.4 | Fine Screen #1 Remaining in Service | 1964 | 1 | EA | $ 42,311.58 | $ 542,000.00 |
| 380.4 | Fine Screen #2 Remaining in Service | 1964 | 1 | EA | $ 42,311.58 | $ 542,000.00 |
| 380.4 | Install Self Cleaning Wiese-Flo Mechanical Bar Screen & Compactor | 1996 | 1 | LS | $ 56,000.00 | |
| 380.4 | Install Auxiliary Auger for Bar Screen CO#3 | 1996 | 1 | LS | $ 41,342.37 | |
| 380.4 | Install Grit Chamber Equipment | 1996 | 1 | LS | $ 36,000.00 | |
| 380.4 | Worthington Air Compressor | 2020 | 1 | LS | $ 430.34 | $ 450.00 |
| 380.4 | Manning Sampler, Model 6901-DC, #980213AA690102 with refrigerated cabinet base | 2020 | 1 | LS | $ 1,147.56 | $ 1,200.00 |
| 380.4 | Chlorine Gas Monitoring System - Siemens W&T Acute 35 with wiring and controls | 2020 | 1 | LS | $ 3,442.69 | $ 3,600.00 |
| 380.4 | Chlorination System - 2 chlorinators/regulators, 1-Halogen Valve System, 2 - Chlorinators and wiring and controls | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 380.4 | Exhaust Fan, Thru-Wall, 1/3 HP complete with conduit and wiring | 2020 | 1 | LS | $ 143.45 | $ 150.00 |
| 380.4 | ROOTS Connerville Blower, Type FF-Size 610 | 2020 | 1 | LS | $ 1,434.46 | $ 1,500.00 |
| 380.4 | **Primary Settling Tanks 1,2 & 3** | | 3 | EA | | |
| 380.4 | Install Weir/Troughs Ex Prim | 1996 | 1 | LS | $ 36,500.00 | |
| 380.4 | **Oxidation Towers 1** | | | | | |
| 380.4 | Install Media EX tower | 1974 | 1 | LS | $ 155,974.50 | |
| 380.4 | Rotary Distributors | 1974 | 1 | LS | $ 23,907.00 | |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1974 | 1 | LS | $ 2,875.44 | $ 17,067.49 |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 380.4 | **Oxidation Towers 2** | | | | | |
| 380.4 | Install Syn Media New Tower | 1996 | 1 | LS | $ 205,000.00 | |
| 380.4 | Rotary Distributors | 1996 | 1 | LS | $ 65,400.00 | |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1996 | 1 | LS | $ 8,000.00 | |
| 380.4 | **Final Settling Tanks 1 and 2** | | | | | |
| 380.4 | Equipment for Final Settling Tanks 1 & 2 | 1974 | 1 | LS | $ 92,435.00 | |
| 380.4 | **Final Settling Tanks 3, 4 &5** | | | | | |
| 380.4 | Install Fiberglass Troughs/Weirs | 1996 | 1 | LS | $ 36,500.00 | |
| 380.4 | Install Elec and Manual Telescoping Valves | 1996 | 1 | LS | $ 18,000.00 | |
| 380.4 | Sluice Gates | 1996 | 1 | LS | $ 19,000.00 | |
| 380.4 | Install Collectors Final Clarifiers piping | 1996 | 1 | LS | $ 120,000.00 | |
| 380.4 | **Chlorine Contact Tanks 1 & 2 Remaining in Service** | | 2 | EA | | |
| 380.4 | 1-ton cylinder/scale - Remaining in Service | 1996 | 1 | EA | $ 1,640.55 | $ 3,500.00 |
| 380.4 | 150# cylinders and scale - Remaining in Service | 1996 | 4 | EA | $ 1,171.82 | $ 2,500.00 |
| 380.4 | **Anaerobic Digesters 1&2** | | 2 | EA | | |
| 380.4 | Install Digester Meters | 1996 | 1 | LS | $ 11,000.00 | |
| 380.4 | Install Comp Heater & Heat Exchanger (Envirex) | 1996 | 1 | LS | $ 76,000.00 | |
| 380.4 | Duo Deck Conversion | 1996 | 1 | LS | $ 110,000.00 | |
| 380.4 | Install Digester Mixer | 1996 | 1 | LS | $ 48,000.00 | |
| 380.4 | Polytron 2XP Digital Meter | 1996 | 1 | LS | $ 117.18 | $ 250.00 |
| 380.4 | Polysonic Hydra SX40 DFD Flowmeter, Digital Readout | 1996 | 1 | LS | $ 1,218.69 | $ 2,600.00 |
| 380.4 | Siemens Hydra Ranger 200 Flow meter, Digital Readout | 1996 | 1 | LS | $ 890.58 | $ 1,900.00 |
| 380.4 | Maxus Air Compressor, Model EX840100AJ, #10/16/06-00340, 3.2 HP, 60 Gallon Capacity Vertical Tank With Wiring and Controls | 1996 | 1 | LS | $ 257.80 | $ 550.00 |
| 380.4 | **Sludge Holding Tank** | | | | | |
| 380.4 | Sludge Holding Tank aeration system | 1996 | 1 | LS | $ 28,500.00 | |
| 380.4 | Install Blower System | 1996 | 1 | LS | $ 33,600.00 | |
| 380.4 | **Belt Filter Press Building** | | | | | |
| 380.4 | 1.2 meter Roediger Belt Filter Press | 1996 | 1 | LS | $ 165,000.00 | |
| 380.4 | Install Belt Filter Press Conveyors | 1996 | 1 | LS | $ 67,000.00 | |
| 380.4 | Kent Taylor Mag Master Flow Meter, Digital Readout | 1996 | | | $ 374.98 | $ 800.00 |
| 380.4 | Install Polymer Feed & Chlorination Equipment | 1996 | 1 | LS | $ 63,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 380.4 | Floor Drains - Grit Washer | 1996 | 1 | LS | $ 1,500.00 | |
| 380.4 | Install Scum & Grease Floatation/Removal System | 1996 | 1 | LS | $ 47,600.00 | |
| 380.4 | Install Grit Separation Classification System | 1996 | 1 | LS | $ 52,000.00 | |
| 380.4 | Install Sewage Sump Simplex system | 1996 | 1 | LS | $ 12,400.00 | |
| 380.4 | Install Sewage Sump Duplex system | 1996 | 1 | LS | $ 18,900.00 | |
| 380.4 | Install Trickling Filter Tank | 1996 | 1 | LS | $ 89,000.00 | |
| 380.4 | Install submersible Mixer | 1996 | 1 | LS | $ 20,000.00 | |
| 380.4 | Install Odor Control Scrubber System | 1996 | 1 | LS | $ 28,500.00 | |
| 380.4 | Scrubber at Sludge Storage Tank | 1996 | 1 | LS | $ 2,600.00 | |
| 380.4 | Exhaust Hood CO#5 | 1996 | 1 | LS | $ 1,843.84 | |
| 380.4 | PFT Gas Burner | 1996 | 1 | EA | $ 1,124.95 | $ 2,400.00 |
| 380.4 | Equipment for Secondary Pumping Station | 1974 | 1 | LS | $ 29,910.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 1,928,800.48** | |
| **381.4** | **Plant Sewers - WWTP** | | | | | |
| 381.4 | 6" Thickened Sludge Line | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | 24" DIP Oxidation Tower 2 FM | 1996 | 1 | LS | $ 33,500.00 | |
| 381.4 | 24" & 30" DIP Oxidation Tower Effluent | 1996 | 1 | LS | $ 37,100.00 | |
| 381.4 | 16" DIP Oxidation Tower Recirculation | 1996 | 1 | LS | $ 11,000.00 | |
| 381.4 | 24" DIP Overflow | 1996 | 1 | LS | $ 9,700.00 | |
| 381.4 | 24" DIP Final Sed. Tank 3,4&5 Effluent | 1996 | 1 | LS | $ 4,300.00 | |
| 381.4 | 30" DIP Final Sed. Tank Effluent | 1996 | 1 | LS | $ 26,000.00 | |
| 381.4 | 6" Scum Drain/Final Settling Tanks | 1996 | 1 | LS | $ 1,300.00 | |
| 381.4 | 6" DIP Primary Sludge to Sludge Holding Tank | 1996 | 1 | LS | $ 5,200.00 | |
| 381.4 | 6" DIP Primary Sludge from aerated S1 to digesters | 1996 | 1 | LS | $ 7,700.00 | |
| 381.4 | 6" DIP Primary Sludge Well Decant | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | 6" DIP Primary Sludge Pump Suction | 1996 | 1 | LS | $ 2,600.00 | |
| 381.4 | 6" DIP Primary Sludge pump Discharge | 1996 | 1 | LS | $ 4,200.00 | |
| 381.4 | 6" DIP Secondary Sludge Discharge | 1996 | 1 | LS | $ 6,300.00 | |
| 381.4 | 8" DIP Secondary Sludge Suction | 1996 | 1 | LS | $ 8,300.00 | |
| 381.4 | Ex. 8" DIP Tank Drain | 1996 | 1 | LS | $ 9,000.00 | |
| 381.4 | 8" DIP Tank Drain | 1996 | 1 | LS | $ 11,100.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | 6" & 4" DIP Oxidation Tower FM drain | 1996 | 1 | LS | $ 3,400.00 | |
| 381.4 | 4" DIP Grit Slurry Discharge | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | 8" DIP Utility Water Service | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Scum Concentrator/Grit Washer Drains | 1996 | 1 | LS | $ 4,750.00 | |
| 381.4 | Scum Concentrator frm existing line | 1996 | 1 | LS | $ 2,106.00 | |
| 381.4 | 8" PVC Storm Sewer | 1996 | 1 | LS | $ 4,400.00 | |
| 381.4 | 6" PVC Storm Sewer | 1996 | 1 | LS | $ 2,700.00 | |
| 381.4 | 4" , 3", 2" PVC Utility Water | 1996 | 1 | LS | $ 8,600.00 | |
| 381.4 | 2" PVC Potable Water | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Scum Drain to Final Tank Drain | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Belt Filter Press Feed Pump Suction | 1996 | 1 | LS | $ 7,700.00 | |
| 381.4 | Belt Filter Press Feed Discharge | 1996 | 1 | LS | $ 6,000.00 | |
| 381.4 | Belt Filter Press Filtrate | 1996 | 1 | LS | $ 3,100.00 | |
| 381.4 | Thickened Sludge Pump suction | 1996 | 1 | LS | $ 1,450.00 | |
| 381.4 | Drain, 6" DIP Primary Sludge tank drain & 10" DIP drain | 1996 | 1 | LS | $ 9,500.00 | |
| 381.4 | Digester Sludge frm Ex to Belt Press Pumps | 1996 | 1 | LS | $ 3,700.00 | |
| 381.4 | Grit Pump Suction/Discharge | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Grit Washer Overflow | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Scum Conc. Influent | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Scum Conc. Drain | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Scum Conc. Effluent | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Replacement Drain | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Secondary Sludge to Sludge Holding Tank | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Primary Effluent Pump Suction | 1996 | 1 | LS | $ 9,100.00 | |
| 381.4 | Primary Effluent Pump Discharge | 1996 | 1 | LS | $ 16,000.00 | |
| 381.4 | Manhole A | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Sludge Recirc Pumps Suction | 1996 | 1 | LS | $ 1,800.00 | |
| 381.4 | Sludge Recirc Pumps Discharge | 1996 | 1 | LS | $ 2,900.00 | |
| 381.4 | Thickened/Primary Sludge (Dwg 53) | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Aerated Sludge Blowers Intakes | 1996 | 1 | LS | $ 7,300.00 | |
| 381.4 | Aerated Sludge Blowers Discharge | 1996 | 1 | LS | $ 3,600.00 | |
| 381.4 | 16 yard Hydrants and Gate Valves | 1996 | 1 | LS | $ 19,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | 27-inch VCP Plant Infl Sewer | 1974 | 300 | LF | $ 10,108.50 | $ 60,000.00 |
| 381.4 | 24-inch DIP Primary Sedimentation Tank Effluent | 1974 | 92 | LF | $ 3,099.94 | $ 18,400.00 |
| 381.4 | 18-inch DIP Oxidation Tower Force Main | 1974 | 178 | LF | $ 5,997.71 | $ 35,600.00 |
| 381.4 | 24-inch DIP Oxidation Tower Effluent | 1974 | 20 | LF | $ 673.90 | $ 4,000.00 |
| 381.4 | 24-inch DIP Overflow | 1974 | 26 | LF | $ 876.07 | $ 5,200.00 |
| 381.4 | 24-inch DIP Final Sedimentation Tanks Effluent | 1974 | 20 | LF | $ 673.90 | $ 4,000.00 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent | 1974 | 266 | LF | $ 8,962.87 | $ 53,200.00 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent Overflow | 1974 | 30 | LF | $ 1,010.85 | $ 6,000.00 |
| 381.4 | 6-inch DIP Primary Sludge Decant | 1974 | 25 | LF | $ 631.78 | $ 3,750.00 |
| 381.4 | 8-inch DIP Secondary Sludge Suction | 1974 | 8 | LF | $ 202.17 | $ 1,200.00 |
| 381.4 | 8-inch DIP Scum Suction | 1974 | 56 | LF | $ 1,415.19 | $ 8,400.00 |
| 381.4 | 8-inch DIP Tank Drain | 1974 | 88 | LF | $ 2,223.87 | $ 13,200.00 |
| 381.4 | 4-inch DIP Force Main Drain | 1974 | 22 | LF | $ 555.97 | $ 3,300.00 |
| 381.4 | 8-inch DIP Digested Sludge Discharge | 1974 | 195 | LF | $ 4,927.89 | $ 29,250.00 |
| 381.4 | 6-inch DIP Scum Discharge | 1974 | 61 | LF | $ 1,541.55 | $ 9,150.00 |
| 381.4 | 2.5-inch PVC Chlorine Solution Discharge | 1974 | 114 | LF | $ 1,920.61 | $ 11,400.00 |
| 381.4 | 10-inch DIP Sewer from Digester Building and Drying Beds | 1936-1938 | 29 | LF | $ 81.87 | $ 4,350.00 |
| 381.4 | 8-inch DIP Sewer from Digester Building and Drying Beds | 1936-1938 | 51 | LF | $ 143.99 | $ 7,650.00 |
| 381.4 | 8-inch DIP Digester Supernatant Drain | 1936-1938 | 5 | LF | $ 14.12 | $ 750.00 |
| 381.4 | 4-inch DIP Sanitary Drain | 1936-1938 | 7 | LF | $ 19.76 | $ 1,050.00 |
| 381.4 | 8-inch DIP Sludge Drying Bed Drain | 1936-1938 | 73 | LF | $ 206.10 | $ 10,950.00 |
| 381.4 | 8-inch DIP Potable Water Main | 1974 | 107 | LF | $ 2,704.02 | $ 16,050.00 |
| 381.4 | 6-inch Potable Water Main | 1974 | 262 | LF | $ 6,621.07 | $ 39,300.00 |
| 381.4 | 4-inch Potable Water Main to Main Equipment Building | 1974 | 110 | LF | $ 2,779.84 | $ 16,500.00 |
| 381.4 | 4-inch Potable Water Main to Primary Effluent Pump Station | 1974 | 301 | LF | $ 7,606.65 | $ 45,150.00 |
| 381.4 | 24-inch DIP Plant Bypass | 1974 | 45 | LF | $ 1,516.27 | $ 9,000.00 |
| 381.4 | 24-inch Primary Tank Bypass | 1974 | 26 | LF | $ 876.07 | $ 5,200.00 |
| 381.4 | 24-inch Abandoned Plant Effluent | 1974 | 19 | LF | $ 640.20 | $ 3,800.00 |
| 381.4 | 24-inch DIP Plant/Primary Tank Bypass | 1974 | 67 | LF | $ 2,257.56 | $ 13,400.00 |
| 381.4 | 24-inch Storm Sewer Line | 1974 | 42 | LF | $ 1,238.29 | $ 7,350.00 |
| 381.4 | 18-inch Storm Sewer Line | 1974 | 18 | LF | $ 454.88 | $ 2,700.00 |
| 381.4 | 8-inch Storm Sewer Line | 1974 | 25 | LF | $ 421.19 | $ 2,500.00 |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | **Plug Valves** | | | | | |
| 381.4 | Raw Sewage Pump Suction | 1996 | 1 | LS | $ 4,500.00 | |
| 381.4 | Raw Pump Sewage Discharge | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Primary Sludge Pump | 1996 | 1 | LS | $ 2,700.00 | |
| 381.4 | Primary Sludge Pump Header | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Primary Sludge Pump Drain | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Primary Sludge Pump Holding Tank | 1996 | 1 | LS | $ 2,400.00 | |
| 381.4 | Primary/Secondary Sludge Connection | 1996 | 1 | LS | $ 1,700.00 | |
| 381.4 | Grit Pump (6") | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Grit Pump (3") | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Scum/Ex Concentrator Feed | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Scum/Drain | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Scum Cone/Influent | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Scum Cone/Drain | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Secondary Sludge Pump | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Secondary Sludge/Header | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Secondary Sludge/Line | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Effluent Pump/Suction | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Effluent Pump/Discharge | 1996 | 1 | LS | $ 8,000.00 | |
| 381.4 | Oxidation Twr Force Mn | 1996 | 1 | LS | $ 9,000.00 | |
| 381.4 | Ox Twr Force Main Drain | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Final Tank Drain-off | 1996 | 1 | LS | $ 8,500.00 | |
| 381.4 | Utility Water | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | $ 3,700.00 | |
| 381.4 | Belt Press Feed Header | 1996 | 1 | LS | $ 2,600.00 | |
| 381.4 | Heat Exchanger Sludge Recirc | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Overflow Supernatent at Digester | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Digested Sludge (8") | 1996 | 1 | LS | $ 2,100.00 | |
| 381.4 | Digested Sludge (6") | 1996 | 1 | LS | $ 1,800.00 | |
| 381.4 | Pumping Station: 14-inch DIP eccentric plug valve | 1974 | 1 | EA | $ 842.37 | $ 5,000.00 |
| 381.4 | **Check Valves** | | | | | |
| 381.4 | Raw Sewage Pump Discharge | 1996 | 1 | LS | $ 4,700.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | Primary Sludge Pump Discharge | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Secondary Sludge Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Primary Effluent Pumps | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Thickened Sludge Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Recirculated Pumps | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | Air Cushioned Check Valves | 1974 | 1 | LS | $ 2,228.00 | |
| 381.4 | **Air Check Valves** | | | | | |
| 381.4 | Blower Discharges | 1996 | 1 | LS | $ 2,500.00 | |
| 381.4 | **Mud Valves** | | | | | |
| 381.4 | Final Tank Scum Box | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Chlorine Tank Drains | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Utility Water | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Aeration Sludge Hldg Tank | 1996 | 1 | LS | $ 4,500.00 | |
| 381.4 | **Butterfly Valves** | | | | | |
| 381.4 | Ox Twr Recycle Line | 1996 | 1 | LS | $ 6,200.00 | |
| 381.4 | **Hydrostatic PRV's** | | | | | |
| 381.4 | Final Tanks | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | **Gate Valves** | | | | | |
| 381.4 | Final Tank Drains | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Sludge Drain-Off From Final Tanks | 1996 | 1 | LS | $ 4,200.00 | |
| | Pumping Station- Gate Valve | 1974 | 1 | EA | $ 842.37 | $ 5,000.00 |
| 381.4 | **Butterfly Air Line Valves** | | | | | |
| 381.4 | Blower Intakes | 1996 | 1 | LS | $ 2,100.00 | |
| 381.4 | Blower Discharge | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Air Header at Sludge Tank | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Reinsulate pipe at Digester Control Bldg CO#1 | 1996 | 1 | LS | $ 4,092.50 | |
| 381.4 | Gas Line CO#2 | 1996 | 1 | LS | $ 6,367.59 | |
| 381.4 | Water Line CO#2 | 1996 | 1 | LS | $ 5,827.66 | |
| 381.4 | Decant Line CO#2 | 1996 | 1 | LS | $ 1,940.27 | |
| 381.4 | Replace 24" Pipe From Primary Tanks CO#3 | 1996 | 1 | LS | $ 11,429.52 | |
| 381.4 | Piping to Provide Water for Mech Screen CO#3 | 1996 | 1 | LS | $ 9,544.15 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | Sampler Valves CO#5 | 1996 | 1 | LS | $ 8,933.43 | |
| 381.4 | Pumping Station: 20-inch DIP | 1974 | 11 | LF | $ 148.26 | $ 880.00 |
| 381.4 | Pumping Station: 18-inch C.I. | 1974 | 3 | LF | $ 37.91 | $ 225.00 |
| 381.4 | Pumping Station: 14-inch DIP | 1974 | 2 | LF | $ 23.59 | $ 140.00 |
| 381.4 | Control Building: 4-inch sludge feed line | 1974 | 1 | LF | $ 8.42 | $ 50.00 |
| 381.4 | Primary Sedimentation Tank: 2.5-inch chlorine feed line | 1974 | 67 | LF | $ 282.20 | $ 1,675.00 |
| 381.4 | Chlorine Contact Tank: 8-inch DIP drain | 1974 | 18 | LF | $ 303.25 | $ 1,800.00 |
| 381.4 | Secondary Pump Station Process Piping, Chlorine Tanks, Final Settling Tanks 1 & 2, Oxidation Tower No. 1 Exterior Piping | 1974 | 1 | LS | $ 71,673.00 | |
| 381.4 | Sluice Gates | 1974 | 1 | LS | $ 21,995.00 | |
| 381.4 | Misc. Sewage Treatment Plant Equipment | 1974 | 1 | LS | $ 13,335.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 721,765.15** | |
| **382.4** | **Outfall Sewer Lines - WWTP** | | | | | |
| 382.4 | 24-inch DIP | 1936-38 | 827 | LF | $ 70,212.80 | $ 149,794.51 |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 70,212.80** | |
| **389.4** | **Other Plant & Misc. Equip. - WWTP** | | | | | |
| 389.4 | Asbestos Abatement | 1996 | 1 | LS | $ 12,490.27 | |
| 389.4 | Asbestos Abatement | 2021 | 1 | LS | $ 15,000.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 27,490.27** | |

**Column Total = Column Totals = $ 7,885,727.46**

## TABLE 2 - PUMPING STATION

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| **353.3** | **Land & ROW** | | | | | | |
| 353.3 | Land & ROW - Pumping Station | | 1 | EA | $ 1.00 | $ 1.00 | |
| | | | | | | | |
| **354.3** | **Structures & Imp. - Pumping Station** | | | | | | |
| 354.3 | Trash Basket and Hoist Assembly | 2006 | 1 | LS | $ 6,468.00 | $ 6,468.00 | |
| 354.3 | 12-inch Drain in front of PS | 2006 | 1 | LS | $ 6,125.00 | $ 6,125.00 | |
| 354.3 | Pump Station Pit Conversion | 2006 | 1 | LS | $ 4,500.00 | $ 4,500.00 | |
| 354.3 | Sandblasting/Painting of Pump Station Wet Well | 2006 | 1 | LS | $ 18,200.00 | $ 18,200.00 | |
| 354.3 | 16" SDR 35 PVC | 2006 | 10 | LF | $ 300.00 | $ 3,000.00 | |
| 354.3 | 16" SDR 35 PVC 45° elbow | 2006 | 1 | EA | $ 650.00 | $ 650.00 | |
| 354.3 | 1" Copper Tube | 2006 | 100 | LF | $ 17.00 | $ 1,700.00 | |
| 354.3 | Water Service Connection | 2006 | 1 | LS | $ 1,000.00 | $ 1,000.00 | |
| 354.3 | Yard Hydrants, Lockable | 2006 | 1 | EA | $ 375.00 | $ 375.00 | |
| 354.3 | Natural Gas Service | 2006 | 1 | LS | $ 1,000.00 | $ 1,000.00 | |
| 354.3 | 1-1/2 " Gas Line | 2006 | 100 | LF | $ 25.00 | $ 2,500.00 | |
| 354.3 | Fencing | 2006 | 150 | LF | $ 75.00 | $ 11,250.00 | |
| 354.3 | Site Preparation | 2006 | 1 | LS | $ 5,000.00 | $ 5,000.00 | |
| 354.3 | Bituminous Pavement/Driveway Restoration | 2006 | 60 | LF | $ 55.00 | $ 3,300.00 | |
| 354.3 | Final Seeding, grading, mulching | 2006 | 1 | LS | $ 2,500.00 | $ 2,500.00 | |
| 354.3 | Portable Bypass Pump System | 2006 | 1 | LS | $ 42,000.00 | $ 42,000.00 | |
| 354.3 | Bypass pumping | 2006 | 60 | Days | $ 325.00 | $ 19,500.00 | |
| 354.3 | Erosion and Sedimentation Control | 2006 | 1 | LS | $ 4,100.00 | $ 4,100.00 | |
| | | | | | | | |
| | | | | **Subtotal** | | **$ 133,168.00** | **$ -** |
| **355.3** | **Power Gen. Equip. - Pumping Station** | | | | | | |
| 355.3 | Kohler Generator 7KW with transfer switch | 2020 | 1 | EA | | $ 4,972.78 | $ 5,200.00 |
| | | | | **Subtotal** | | **$ 4,972.78** | |
| | | | | | | | |

## TABLE 2 - PUMPING STATION

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| **371.3** | **Pumping Equip. - Pumping Station** | | | | | | |
| 371.3 | Gorman Rupp Package Pump Unt consisting of 2-self priming pumps, model T6A3s-B/WWS, #1355279, 15 Hp, belt dirven, backup natural gas engine, 4 cylinder with cntrols, related piping and 1 control panel model D4-11174, JPP No. GR-8103-1, #06-990-AR4 | 2006 | 1 | LS | | $ 221,670.00 | |
| 371.3 | Electrical Service | 2006 | 1 | LS | | $ 12,000.00 | |
| 371.3 | Hach Sigma 950 rain gauge/controller monitor with wiring | 2006 | 1 | LS | | $ 1,680.80 | $ 2,600.00 |
| 371.3 | Mission RTU Unit | 2006 | 1 | EA | | $ 1,292.92 | $ 2,000.00 |
| 371.3 | Stainless Steel Davit Crane | 2006 | 1 | EA | | $ 323.23 | $ 500.00 |
| | | | | **Subtotal** | | **$ 236,966.95** | |
| | | | | | **Column Total =** | **$375,108.73** | |

## TABLE 3 - Collection Sewers - Force

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 360 | 8" Ductile Iron Pipe | 2006 | 600 | LF | $ 44.00 | $ 26,400.00 | |
| 360 | 8" DIP 90 Degree Long Radius Bends | 2006 | 2 | EA | $ 500.00 | $ 1,000.00 | |
| 360 | 8" DIP 45 Degree Bends | 2006 | 4 | EA | $ 480.00 | $ 1,920.00 | |
| 360 | 8" DIP 22.5 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | |
| 360 | 8" DIP 11.25 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | |
| 360 | 8" DI Pipe (with mc-urethane primer) | 2006 | 800 | LF | $ 130.00 | $ 104,000.00 | |
| 360 | 8"x 6" DIP Tee (with mc-urethane primer) | 2006 | 1 | EA | $ 1,500.00 | $ 1,500.00 | |
| 360 | 8"x 8" Cross Fittings (with mc-urethane primer) | 2006 | 2 | EA | $ 1,750.00 | $ 3,500.00 | |
| 360 | Concrete Pedestals | 2006 | 2 | EA | $ 2,800.00 | $ 5,600.00 | |
| 360 | Manhole Connection | 2006 | 1 | EA | $ 1,000.00 | $ 1,000.00 | |
| 360 | Expansion Joints | 2006 | 2 | EA | $ 3,500.00 | $ 7,000.00 | |
| 360 | Pipe Guide Hangers | 2006 | 150 | EA | $ 175.00 | $ 26,250.00 | |
| 360 | Pipe Insulation Assembly | 2006 | 40 | LF | $ 50.00 | $ 2,000.00 | |
| 360 | Painting DIP | 2006 | 1 | LS | $ 37,000.00 | $ 37,000.00 | |
| 360 | Air/Vacuum Breaker Valves | 2006 | 3 | EA | $ 2,600.00 | $ 7,800.00 | |
| 360 | Additional Cost for Deep Bury for Force Main | 2006 | 1 | LS | | $ 7,612.22 | |
| | | | | | | | |
| | | | | | **Column Total =** | **$ 234,542.22** | |

**TABLE 3-FM**

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 10010100006 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10010101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10020200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10030203000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10030303000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020102000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020105000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020713000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020800000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030313000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030314000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030315000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030317000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030318000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030416000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030417000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030419000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030431000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20050107000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 20060300000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060301000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060302000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060303000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060305000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060700000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060702000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060902000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060923000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40020600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40030104000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40030109000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40040103000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50010100001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 05001010000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040308000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040400000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040604000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50050100002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50050200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 50050314000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 05006010000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60020301000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60030702000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60050100000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 06005040000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60060901000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60061402000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60061901000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60070601000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60070602000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70010202000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70010300000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021510001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021510002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021610000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022000000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022002000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022100001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 70022102001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102003 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 07002220000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030101001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030103000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030105000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030108000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030112000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030115000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030123000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030124000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030125000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030126000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030137000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030138000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030250000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030251000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030252000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030253000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030254000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 70030255000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030256000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030257000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030258000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030259000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030260000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030261000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030262000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70041400000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70041900000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70042000000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70042009000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 07004230000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050201000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050203000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050208000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209003 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050500000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| | | | | | **Subtotal** | **$ 109.00** | |

## TABLE 4-GRAVITY

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 361 | 8-inch VCP Sewer | 1936-38 | 145,990 | LF | $ 165.00 | $ 453,382.71 | $ 24,088,350.00 |
| 361 | 8-inch PVC Sewer | 1990 | 1,800 | LF | $ 165.00 | $ 117,215.56 | $ 297,000.00 |
| 361 | 8-inch PVC Sewer | 1993 | 370 | LF | $ 165.00 | $ 26,528.18 | $ 61,050.00 |
| 361 | 8-inch PVC Sewer | 1998 | 815 | LF | $ 165.00 | $ 66,396.83 | $ 134,475.00 |
| 361 | 8-inch CIP Sewer | 1998 | 2,700 | LF | $ 165.00 | $ 219,964.95 | $ 445,500.00 |
| 361 | 8-inch CIP Sewer | 2008 | 2,100 | LF | $ 165.00 | $ 240,153.18 | $ 346,500.00 |
| 361 | 8-inch CIP Sewer | 2011 | 300 | LF | $ 165.00 | $ 37,445.24 | $ 49,500.00 |
| 361 | 10-inch VCP Sewer | 1936-38 | 4,000 | LF | $ 180.00 | $ 13,551.59 | $ 720,000.00 |
| 361 | 12-inch VCP Sewer | 1936-38 | 1,400 | LF | $ 195.00 | $ 5,138.31 | $ 273,000.00 |
| 361 | 12-inch PVC Sewer | 1991 | 4,800 | LF | $ 195.00 | $ 377,447.37 | $ 936,000.00 |
| 361 | 12-inch PVC Sewer | 1993 | 960 | LF | $ 195.00 | $ 81,344.40 | $ 187,200.00 |
| 361 | 15-inch VCP Sewer | 1936-38 | 4,200 | LF | $ 225.00 | $ 17,786.47 | $ 945,000.00 |
| 361 | 15-inch PVC Sewer | 1990 | 1,700 | LF | $ 225.00 | $ 150,959.43 | $ 382,500.00 |
| 361 | 18-inch SDR 35 PVC Sewer | 1996 | 7,700 | LF | | $ 638,937.00 | |
| 361 | 24-inch SDR 35 PVC Sewer | 1996 | 11,607 | LF | | $ 1,036,038.00 | |
| 361 | Brick Manholes | 1936-38 | 536 | EA | $ 5,100.00 | $ 51,450.89 | $ 2,733,600.00 |
| 361 | Concrete Manholes | 1936-38 | 138 | EA | $ 5,100.00 | $ 13,246.68 | $ 703,800.00 |
| 361 | Project Development | 1996 | 1 | LS | | $ 257,761.25 | |
| | | | | | **Subtotal** | **$ 3,804,748.05** | |
| | | | | | | | |
| | | | 190,442 | | **Column Total =** | **$ 3,804,857.05** | |

**TABLE 4-GRAVITY**

## TABLE 5 - Service to Customers

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 363 | 6-inch Sanitary Service Laterals | 1936-38 | 60,318 | LF | $ 150.00 | $ 170,292.73 | $ 9,047,700.00 |
| | | | | | | | |
| | | | | Column Total = | | **$ 170,292.73** | |

## TABLE 5-SERVICE LATERALS

## TABLE 6 - Flow Measuring Device

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 364.3 | Chart Recorder for Flow Meters (Secondary PS) | 2012 | 1 | EA | $ 2,738.00 | |
| 364.3 | Healy-Ruff Co. Depthin feet indicator, #45279-1 with steel tape unit | 2020 | 1 | EA | $ 95.63 | $ 100.00 |
| 364.3 | Endress+Hauser Flow Rate Meter | 2020 | 1 | EA | $ 2,868.91 | $ 3,000.00 |
| 364.3 | Analog Level Meter with Tape | 2020 | 1 | EA | $ 95.63 | $ 100.00 |
| 364.3 | Seimens Sitrans LUT400 Flow Meter Digital Readout | 2020 | 1 | EA | $ 4,494.63 | $ 4,700.00 |
| 364.3 | Echo Flow Hunter II flow and level indicator with Transducer and Wiring | 2020 | 1 | EA | $ 2,486.39 | $ 2,600.00 |
| 364.4 | Electrical Flow Meter | 1996 | 1 | LS | $ 1,555.00 | |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | $ 10,070.00 | |
| 364.4 | Electrical Level Transmitter | 1996 | 1 | LS | $ 4,315.00 | |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | $ 10,070.00 | |
| 364.4 | Electrical Level Transmitter | 1998 | 1 | LS | $ 4,315.00 | |
| 364.4 | Eastvale PS Flow Meters and Chart Recorder | 2006 | 1 | LS | $ 14,000.00 | |
| | | | | **Column Total =** | **$ 57,104.19** | |

## TABLE 7 - Office Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 390.7 | Office Furniture and fixtures - workstations | 2020 | 1 | LS | $ 2,390.76 | $ 2,500.00 |
| 390.7 | Computers, laptops, printers, etc. | 2020 | 1 | LS | $ 4,781.52 | $ 5,000.00 |
| 390.7 | Miscellaneous EDP Equipment, computers, printers | 2020 | 1 | LS | $ 1,434.46 | $ 1,500.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 8,606.74** | |

## TABLE 8 - Transportation Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 391.7 | Ford F250 4x4 Truck, 1,466 miles. | 2020 | EA | 1 | $ 42,707.00 | |
| 391.7 | Ford F150 4x4 Truck, VIN NO. 1FTMF1EM4EKG07810, 36,779 Miles | 2014 | EA | 1 | $ 25,656.00 | |
| 391.7 | Ford F350 1-ton Dump Truck YEAR 1992, VIN No. 1FDKF37GXNNA08298, 90,687Miles, Manual Transmission | 1992 | EA | 1 | $ 29,103.64 | $ 70,000.00 |
| 391.7 | Case Backhoe/Loader Model 580 SUPER L EXTEND-A-HOE, #JJG0195825, 5,828 Hrs, 4 X 4 | 1998 | EA | 1 | $ 49,374.85 | $ 100,000.00 |
| 391.7 | Bobcat Skid Steer Loader, Model 553 C Series, #513012370, 864 Hrs. | 1999 | EA | 1 | $ 20,213.66 | $ 40,000.00 |
| 391.7 | Car Mate Trailer VIN NO. 5A3Y510S12L003959, 5 X 10, 13" Sidewalls | 2002 | EA | 1 | $ 3,217.22 | $ 5,900.00 |
| 391.7 | Mansfield Flatbed Trailer, VIN NO. 1M9BU142X6M620139, 6 X 10 Diamond Plate Deck, Tandem Axle | 2006 | EA | 1 | $ 4,848.45 | $ 7,500.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 175,120.82** | |

## TABLE 9 - Stores Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 392.7 | Misc | 1996 | 1 | LS | $ 2,343.64 | $ 5,000.00 |
| 392.7 | Chlorine Scales | 1996 | 2 | LS | $ 7,030.91 | $ 15,000.00 |
| 392.6 | Lockers | 1996 | 3 | LS | $ 937.45 | $ 2,000.00 |
| 392.8 | Shelving | 1996 | 4 | LS | $ 2,343.64 | $ 5,000.00 |
| 392.9 | Storage bins | 1996 | 5 | LS | $ 2,343.64 | $ 5,000.00 |
| | | | | **Column Total =** | **$ 14,999.28** | |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | Gorman-Rupp Trailer Mounted Pump | 2020 | 1 | EA | $ 17,213.47 | $ 18,000.00 |
| 393.7 | Cub Cadet Zero Turn Mower | 2020 | 1 | EA | $ 4,781.52 | $ 5,000.00 |
| 393.7 | Lawn Tractor, Toro Wheel Horse Model 73542, #000000111, Hydrostatic, 1071 HRS | 2020 | 1 | EA | $ 10,136.82 | $ 10,600.00 |
| 393.7 | Capital Equipment TP300 Industrial Trash Pump, 3", Gas 208 CC Engine | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| | Industrial Plus Industrial Trash Pump, 3", 8HP, Gas Fired | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| 393.7 | Drill Press DELTA ModelL 17-900, #8810 | 2020 | 1 | EA | $ 1,434.46 | $ 1,500.00 |
| 393.7 | Miller MIG Welder, Multimatic 220 | 2020 | 1 | EA | $ 2,868.91 | $ 3,000.00 |
| 393.7 | Lincoln Welder, Gas Fired | 2020 | 1 | EA | $ 1,147.56 | $ 1,200.00 |
| 393.7 | Capital Equipment PW3000 Industrial Pressure Washer | 2020 | 1 | EA | $ 956.30 | $ 1,000.00 |
| 393.7 | Stihl TS800 Cutoff Saw with 16-inch wheel | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | Toro CCR3650 Snow blower 6Hp | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | I-R Air Compressor, Gas Fired T10 Series | 2020 | 1 | EA | $ 669.41 | $ 700.00 |
| 393.7 | Capital Equipment 7500D Portable Generator, Diesel Fired, 10 Hrs | 2020 | 1 | EA | $ 2,103.87 | $ 2,200.00 |
| 393.7 | I-R Portable Air Compressor, Gas Fired, T10 SERIES | 2020 | 1 | EA | $ 286.89 | $ 300.00 |
| 393.7 | Porter Cable Portable Air Compressor, Jet Stream Series, Model CPL55GH810, 55HP Gas Engine, 8 Gallon Tank | 2020 | 1 | EA | $ 812.86 | $ 850.00 |
| 393.7 | BOSCH Brute Electric Demolition Jackhammer with hand truck and tooling | 2020 | 1 | EA | $ 908.49 | $ 950.00 |
| 393.7 | HONDA Portable Generator, 8HP, 4000 Watt | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | Ridgid KOLLMANN K1500 Sectional Sewer Cleaning Machine | 2020 | 1 | EA | $ 2,486.39 | $ 2,600.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | WEN Construction Zone Series Plate Compactor, 212 CC Gas Engine | 2020 | 1 | EA | $ 669.41 | $ 700.00 |
| 393.7 | I-R Air Compressor, Model TS5, #NAR10524662, 5HP, Vertical Tank With Wiring, Control and Hose Reel | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| 393.7 | Shop Crane | 2020 | 1 | EA | $ 239.08 | $ 250.00 |
| 393.7 | VENTUR Electric Truck Bed | 2020 | 1 | EA | $ 286.89 | $ 300.00 |
| 393.7 | Rotary Automotive Lift, Model DP10AN100BBL, #NEP11E0057, 10,000# Capacity with Wiring and Controls | 2020 | 1 | EA | $ 3,538.33 | $ 3,700.00 |
| 393.7 | Western Snowplow Model ProPlow$60390, 8' with mount | 2020 | 1 | EA | $ 3,442.69 | $ 3,600.00 |
| 393.7 | Minor Equipment - shelves, fire ext., time clock, vacuum, floor machine, valet, spare motors, lockers, fans, etc. | 2020 | 1 | LS | $ 4,781.52 | $ 5,000.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 114.76 | $ 120.00 |
| 393.7 | Fairbanks Morse, No. 27 Platform Scale, Twin Beams, 4 x 5 Platform with Mettler Toledo Digital Readout | 2020 | 1 | LS | $ 1,147.56 | $ 1,200.00 |
| 393.7 | Minor Equipment consisting of fire extinguisher and shelving | 2020 | 1 | LS | $ 382.52 | $ 400.00 |
| 393.7 | Minor Equipment - Fire extinguisher , ladder, etc. | 2020 | 1 | LS | $ 143.45 | $ 150.00 |
| 393.7 | Minor Equipment - Trucks, chairs, Fire extinguisher , etc. | 2020 | 1 | LS | $ 248.64 | $ 260.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 114.76 | $ 120.00 |
| 393.7 | Minor Equipment yard tools, cabinets, vacuum, shelf/Cabinet, respirators | 2020 | 1 | LS | $ 1,530.09 | $ 1,600.00 |
| 393.7 | Confined Space Set complete with tripod and lift | 2020 | 1 | LS | $ 1,912.61 | $ 2,000.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | Kellogg-America Air Compressor, single stage, 5HP with vertical 60 gallong capacity Tank, complete with piping, connectins, wiring and controls | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Continental Shop Press Model HV100, #10776, 30 ton capacity, hydraulic | 2020 | 1 | LS | $ 478.15 | $ 500.00 |
| 393.7 | Minor equipment consisting of hand tools, power tools, jack, racks, fire extinguisher, etc. | 2020 | 1 | LS | $ 2,773.28 | $ 2,900.00 |
| 393.7 | Rigid 535 Pipe Threader with tooling | 2020 | 1 | LS | $ 2,295.13 | $ 2,400.00 |
| 393.7 | Steel shop table, 8 x 5 with Jib Crane, Vise and Pipe Vise | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Proto tool chest, 4x2x5 1/2 with hand tools | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 393.7 | Lincoln Idealarc 250 Welder | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Jet Drill Press Model JDP-20MF, #14046692 | 2020 | 1 | LS | $ 812.86 | $ 850.00 |
| 393.7 | Jet Horizontal Band Saw, Model HBS-916W, #414468 | 2020 | 1 | LS | $ 2,773.28 | $ 2,900.00 |
| 393.7 | Minor Equipment - Fire extinguisher , fan, pump, etc. | 2020 | 1 | LS | $ 286.89 | $ 300.00 |
| 393.7 | Minor Equipment - Desk, Chair, File, Bookcase, Vaccum, Fire extinguisher , air conditioner, etc. | 2020 | 1 | LS | $ 1,721.35 | $ 1,800.00 |
| 393.7 | Minor equipment consisting of ladder, yard tools and fire extinguisher, etc. | 2020 | 1 | LS | $ 172.13 | $ 180.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Devicefor Primary Settling Tanks | 2020 | 1 | LS | $ 573.78 | $ 600.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device ffor Final Settling Tanks 1 & 2 | 2020 | 1 | LS | $ 382.52 | $ 400.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for Final Settling Tanks 3, 4 and 5 | 2020 | 1 | LS | $ 573.78 | $ 600.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for chlorine tanks | 2020 | 1 | LS | $ 382.52 | $ 400.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| | | | | | | Replacement |
|---|---|---|---|---|---|---|
| NARUC | | | | | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Today |
| 393.7 | Minor equipment consisting of battery chargers. Drum pumps, airless painter, counters, sprayers, ladders, pressure washer, space heaters, air compressor, hand and power tools, hand trucks, fire extinguishers, shop lights, jacks, refrigerators, chain saw, leaf blowers, string trimmers, utility cart, sandblaster, yard tools, files credenza, chairs, vacuum, safety cabinets | 2020 | 1 | LS | $ 7,650.43 | $ 8,000.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 104,839.62** | |

## TABLE 11 - Laboratory Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 394 | Orio Ph/ RDO/DO meter | 1996 | 1 | LS | $ 1,171.82 | $ 2,500.00 |
| 394 | Glassware | 1996 | 1 | LS | $ 937.45 | $ 2,000.00 |
| 394 | Refrigerator | 1996 | 1 | LS | $ 468.73 | $ 1,000.00 |
| 394 | Manning effluent composite sampler | 2021 | 1 | LS | $ 6,581.00 | $ 6,581.00 |
| 394 | Process Control Equipment | 1996 | 1 | LS | $ 4,687.27 | $ 10,000.00 |
| 394 | Lab Equip & Furniture | 1996 | 1 | LS | $ 39,841.83 | $ 85,000.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 53,688.11** | |

## TABLE 12 - Power Operated Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 395.7 | See Table 10 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | Column Total = | | $ - | |

## TABLE 13 - Communication Equipment

| | | | | | | | Replacement |
|---|---|---|---|---|---|---|---|
| NARUC | | | | | Unit | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Cost | Today |
| 396.7 | iPhone XR's | 2021 | 2 | EA | $ 500.00 | $ 1,000.00 | |
| 396.7 | iPads (4G) | 2021 | 5 | EA | $ 400.00 | $ 2,000.00 | |
| 396.7 | NEC Master Telephone System With PA, Amplifier and phones | 2020 | 1 | LS | $ 8,600.00 | $ 8,600.00 | |
| | | | Column Total = | | | **$ 11,600.00** | |

## TABLE 14 - Misc. Equipment

| | | | | | | Replacement |
|---|---|---|---|---|---|---|
| NARUC | | | | | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Today |
| 397.9 | Surveillance System - 4-cameras, 2-monitor, 1-controller | 2020 | 1 | LS | $ 1,400.00 | |
| 397.9 | DVR Recorder | 2018 | 2 | LS | $ 600.00 | |
| | | | | | | |
| | | | Column Total = | | **$ 2,000.00** | |

# APPENDIX B

# Appendix B – City of Beaver Falls Sewer Maps

# (No Public version)

# EXHIBIT E

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

# CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

## For Calendar Year: 2021

☒ Permittee is owner and/or operator of a POTW or other sewage treatment facility
☐ Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

## GENERAL INFORMATION

| | | | |
|---|---|---|---|
| Permittee Name: | **Beaver Falls STP** | Permit No.: | **PA0026883** |
| Mailing Address: | **715 15th St.** | Effective Date: | **11/1/2018** |
| City, State, Zip: | **Beaver Falls, PA 15010** | Expiration Date: | **10/31/2023** |
| Contact Person: | **Joseph M. Durish Jr.** | Renewal Due Date: | **5/4/2023** |
| Title: | **Manager** | Municipality: | **City of Beaver Falls** |
| Phone: | **724.561.6511** | County: | **Beaver** |
| Email: | **bfstp@outlook.com** | Consultant Name: | |

## CHAPTER 94 REPORT COMPONENTS

1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))

   **Check the appropriate boxes:**
   ☒ Line graph for flows attached (**Attachment 2**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1**)
   ☐ Section 1 is not applicable (report is for a collection system).

2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))

   **Check the appropriate boxes:**
   ☒ Line graph for organic loads attached (**Attachment 3**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1**)
   ☐ Section 2 is not applicable (report is for a collection system).

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

   **The DEP Chapter 94 spreadsheet was used to determine the projections.**

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

**Check the appropriate boxes:**

☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment** )

☐ List summarizing each extension or project attached (**Attachment** )

☐ Schedules describing how each project will be completed over time and effects attached (**Attachment** )

**Comments:**

**There are eight municipalities that contribute wastewater to the Beaver Falls STP. A questionnaire was sent to each of the municipalities regarding their sewer system for the 2021 operating year. The questionnaires are located at the end of this report. A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 4."**

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

**A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 5."**

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

**Check the appropriate boxes:**

☐ System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

**A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 6."**

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

**Check the appropriate boxes:**

☐ The collection system does not contain pump stations
☒ The collection system does contain pump stations (Number – **13**)
☒ Discussion of condition of each pump station attached (**Attachment 7**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.

b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☒ Industrial waste report as described in 8 a., b. and c. attached (**Attachment 8**)
☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment** )

9. Existing or Projected Overload.

**Check the appropriate boxes:**

☐ This report demonstrates an existing hydraulic overload condition.
☐ This report demonstrates a projected hydraulic overload condition.
☐ This report demonstrates an existing organic overload condition.
☐ This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

☐ Corrective Action Plan attached (**Attachment** )

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

☒ Sewage Sludge Management Inventory attached (**Attachment 9**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

☐ Annual CSO Report attached (**Attachment** )

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

☒ Flow calibration report attached (**Attachment 10**)

## RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

| | |
|---|---|
| **Joseph M. Durish Jr.** | Joseph M Durish Jr |
| Name of Responsible Official | Signature |
| **724.561.6511** | **8/10/2022** |
| Telephone No. | Date |

## PREPARER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

| | |
|---|---|
| **Joseph M. Durish Jr.** | Joseph M Durish Jr |
| Name of Preparer | Signature |
| **724.561.6511** | **8/10/2022** |
| Telephone No. | Date |

**Attachments 1-3**

DEP Chapter 94 Spreadsheet

Line Graph for Flows

Line Graph for Organic Loads

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# PADEP Chapter 94 Spreadshe
## Sewage Treatment Plan

Reporting Year: 2021

Facility Name: Beaver Falls STP

Permit No.: PA0026883

Persons/EDU: 2.5

Existing Hydraulic Design Capacity: 4.8 MGD
Upgrade Planned in Next 5 Years? NO Year:
Future Hydraulic Design Capacity: MGD

Existing Organic Design Capacity: 9,207 lbs BOD5/day
Upgrade Planned in Next 5 Years? NO Year:
Future Organic Design Capacity: lbs BOD5/day

### Monthly Average Flows for Past Five Years (MGD)

| Month | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| January | 3.45 | 3.06 | 3.17 | 2.98 | 2.18 |
| February | 2.32 | 4.87 | 4.2 | 3.06 | 2.07 |
| March | 3.02 | 3.2 | 2.57 | 3.73 | 2.38 |
| April | 3.24 | 4.0 | 2.54 | 2.9 | 1.93 |
| May | 2.67 | 2.2 | 2.64 | 2.17 | 2.59 |
| June | 5.24 | 1.98 | 4.0 | 1.37 | 1.59 |
| July | 2.07 | 1.85 | 2.87 | 1.1 | 1.72 |
| August | 2.55 | 1.85 | 1.62 | 1.3 | 2.14 |
| September | 1.18 | 3.85 | 1.39 | 1.58 | 1.61 |
| October | 1.35 | 2.34 | 2.0 | 1.37 | 2.05 |
| November | 2.88 | 3.69 | 2.14 | 1.58 | 1.66 |
| December | 1.86 | 3.11 | 2.61 | 2.11 | 2.31 |
| Annual Avg | 2.65 | 3 | 2.65 | 2.1 | 2.02 |
| Max 3-Mo Avg | 3.72 | 4.02 | 3.49 | 3.26 | 2.3 |
| Max : Avg Ratio | 1.40 | 1.34 | 1.32 | 1.55 | 1.14 |
| Existing EDUs | 7,107.4 | 7,056.4 | 7,025.2 | 7,149.2 | 7,022.0 |
| Flow/EDU (GPD) | 372.9 | 425.1 | 377.2 | 293.7 | 287.7 |
| Flow/Capita (GPD) | 149.1 | 170.1 | 150.9 | 117.5 | 115.1 |
| **Exist. Overload?** | NO | NO | NO | NO | NO |

### Monthly Average BOD5 Loads for Past Five Years (lbs/day)

| Month | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| January | 2,762 | 3,161 | 3,252 | 2,454 | 4,217 |
| February | 2,537 | 6,660 | 4,509 | 3,102 | 4,003 |
| March | 2,853 | 4,086 | 3,627 | 4,159 | 3,419 |
| April | 2,965 | 4,289 | 2,384 | 3,949 | 6,215 |
| May | 2,771 | 4,359 | 3,950 | 4,234 | 3,904 |
| June | 2,492 | 4,006 | 3,807 | 3,068 | 2,273 |
| July | 2,753 | 2,909 | 2,887 | 2,441 | 3,032 |
| August | 2,283 | 4,454 | 3,783 | 3,548 | 4,623 |
| September | 2,565 | 4,033 | 2,402 | 4,378 | 6,225 |
| October | 2,013 | 3,429 | 3,177 | 2,904 | 4,711 |
| November | 3,188 | 3,454 | 2,951 | 2,090 | 5,700 |
| December | 2,745 | 3,965 | 2,840 | 3,655 | 3,377 |
| Annual Avg | 2,661 | 4,067 | 3,297 | 3,332 | 4,308 |
| Max Mo Avg | 3,188 | 6,660 | 4,509 | 4,378 | 6,225 |
| Max : Avg Ratio | 1.20 | 1.64 | 1.37 | 1.31 | 1.44 |
| Existing EDUs | 7,107 | 7,056 | 7,025 | 7,149 | 7,022 |
| Load/EDU | 0.374 | 0.576 | 0.469 | 0.466 | 0.614 |
| Load/Capita | 0.150 | 0.231 | 0.188 | 0.186 | 0.245 |
| **Exist. Overload?** | NO | NO | NO | NO | NO |

### Projected Flows for Next Five Years (MGD)

| | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|
| New EDUs | 36.0 | 34.0 | 36.0 | 38.0 | 39.0 |
| New EDU Flow | 0.0126 | 0.0119 | 0.0126 | 0.0134 | 0.0137 |
| Proj. Annual Avg | 2.5 | 2.5119 | 2.5245 | 2.5379 | 2.5516 |
| Proj. Max 3-Mo Avg | 3.38 | 3.39 | 3.41 | 3.43 | 3.45 |
| **Proj. Overload?** | NO | NO | NO | NO | NO |

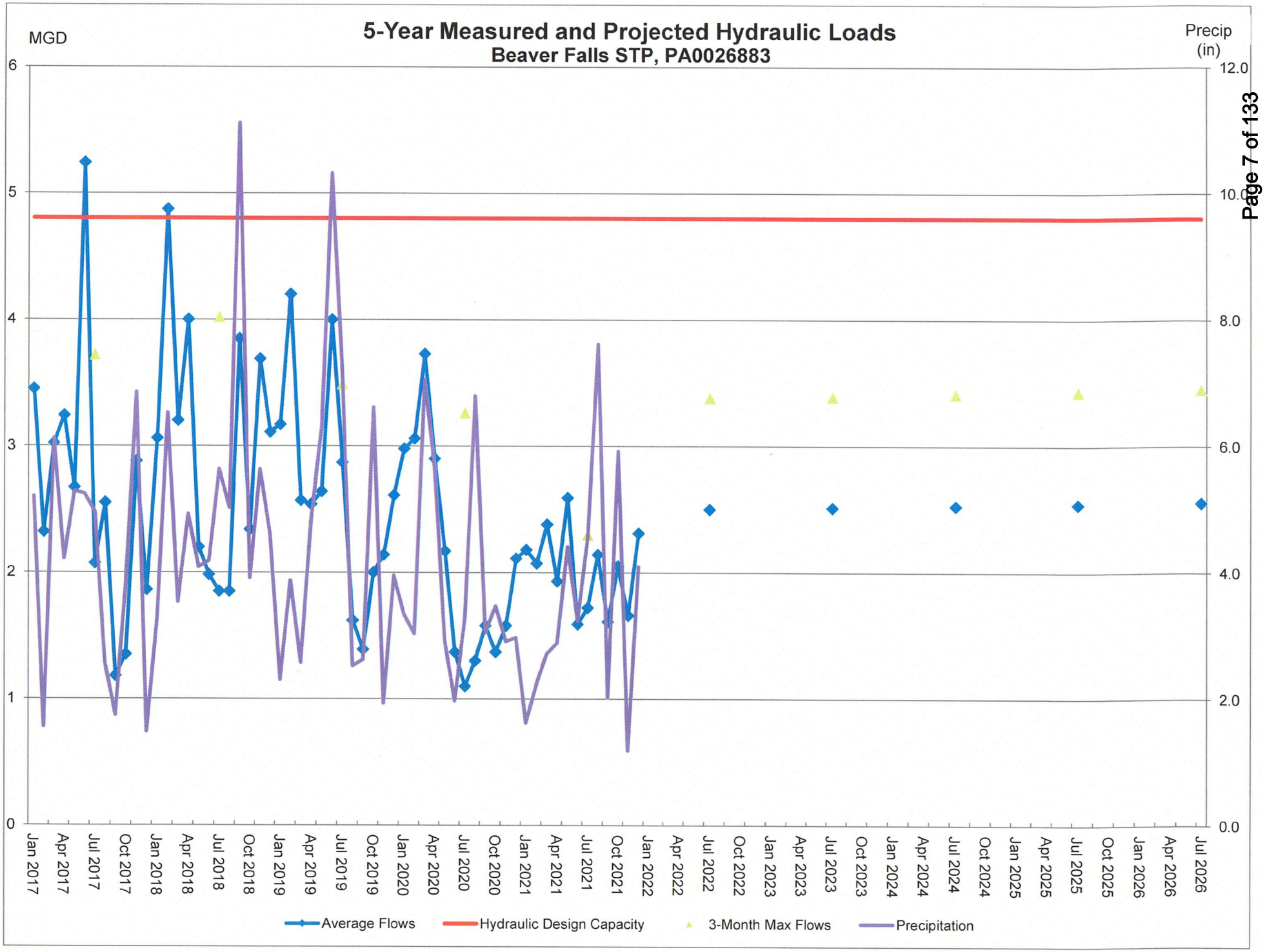
### Projected BOD5 Loads for Next Five Years (lbs/day)

| | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|
| New EDUs | 36 | 34 | 36 | 38 | 39 |
| New EDU Load | 17.998 | 16.998 | 17.998 | 18.997 | 19.497 |
| Proj. Annual Avg | 3,551 | 3,568 | 3,586 | 3,605 | 3,625 |
| Proj. Max Avg | 4,945 | 4,968 | 4,993 | 5,020 | 5,047 |
| **Proj. Overload?** | NO | NO | NO | NO | NO |

**Show Precipitation Data on Hydraulic Graph?**

### Total Monthly Precipitation for Past Five Years (Inches)

| Month | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| January | 5.2 | 3.26 | 2.3 | 3.34 | 1.62 |
| February | 1.56 | 6.52 | 3.87 | 3.03 | 2.23 |
| March | 6.12 | 3.53 | 2.57 | 7.05 | 2.71 |
| April | 4.21 | 4.92 | 4.83 | 5.65 | 2.88 |
| May | 5.28 | 4.08 | 6.3 | 2.92 | 4.41 |
| June | 5.24 | 4.18 | 10.32 | 1.97 | 3.23 |
| July | 4.95 | 5.63 | 7.09 | 3.29 | 4.56 |
| August | 2.55 | 5.02 | 2.52 | 6.79 | 7.61 |
| September | 1.74 | 11.11 | 2.62 | 3.05 | 2.02 |
| October | 3.85 | 3.91 | 6.61 | 3.47 | 5.92 |
| November | 6.85 | 5.63 | 1.93 | 2.91 | 1.18 |
| December | 1.48 | 4.6 | 3.95 | 2.97 | 4.09 |


5-Year Measured and Projected Hydraulic Loads
Beaver Falls STP, PA0026883
MGD
Precip (in)
6
5
4
3
2
1
0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan 2017
Apr 2017
Jul 2017
Oct 2017
Jan 2018
Apr 2018
Jul 2018
Oct 2018
Jan 2019
Apr 2019
Jul 2019
Oct 2019
Jan 2020
Apr 2020
Jul 2020
Oct 2020
Jan 2021
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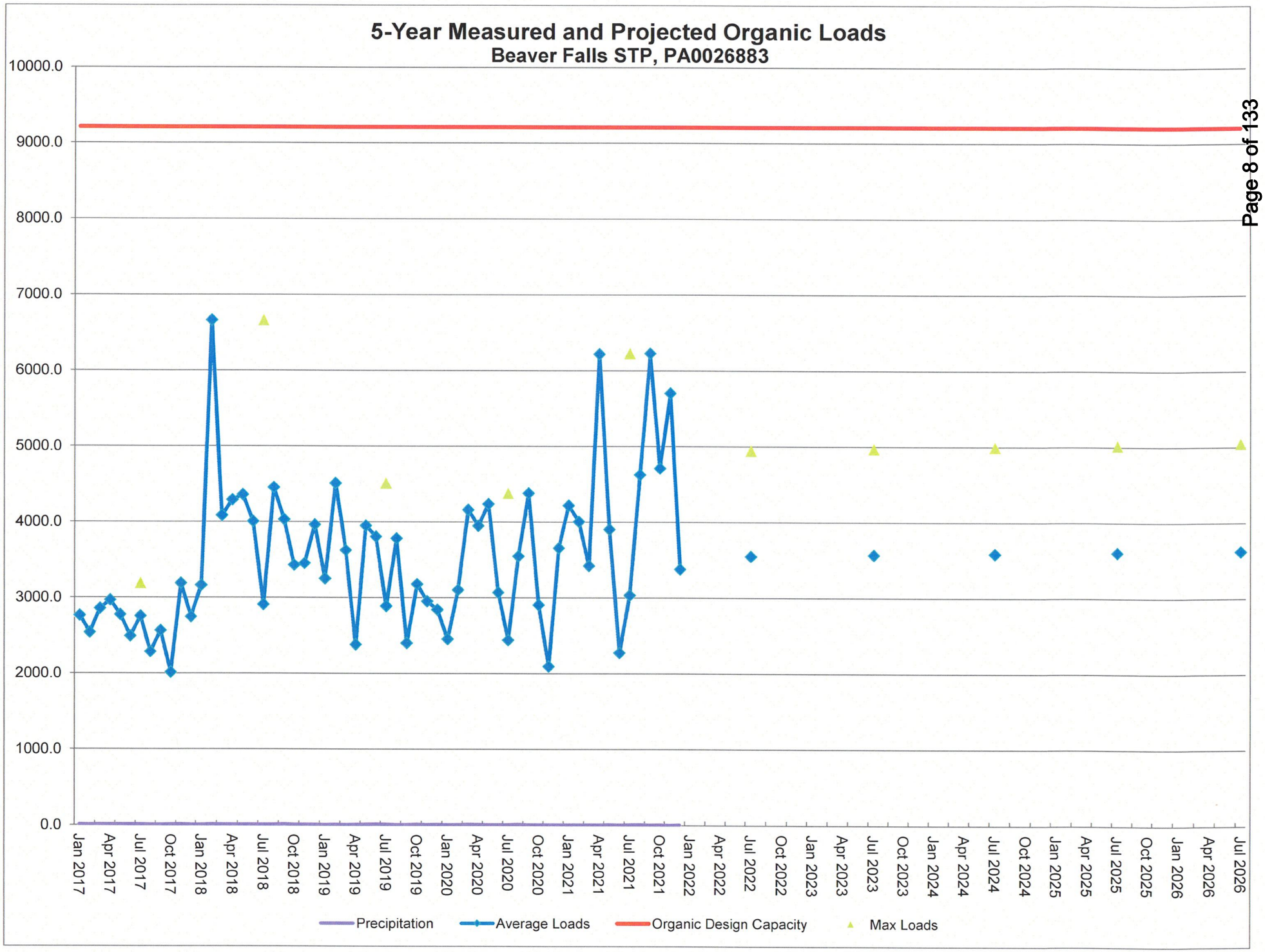
Oct 2021
Jan 2022
Apr 2022
Jul 2022
Oct 2022
Jan 2023
Apr 2023
Jul 2023
Oct 2023
Jan 2024
Apr 2024
Jul 2024
Oct 2024
Jan 2025
Apr 2025
Jul 2025
Oct 2025
Jan 2026
Apr 2026
Jul 2026
Average Flows
Hydraulic Design Capacity
3-Month Max Flows
Precipitation


5-Year Measured and Projected Organic Loads
Beaver Falls STP, PA0026883
10000.0
9000.0
8000.0
7000.0
6000.0
5000.0
4000.0
3000.0
2000.0
1000.0
0.0
Jan 2017
Apr 2017
Jul 2017
Oct 2017
Jan 2018
Apr 2018
Jul 2018
Oct 2018
Jan 2019
Apr 2019
Jul 2019
Oct 2019
Jan 2020
Apr 2020
Jul 2020
Oct 2020
Jan 2021
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Jan 2023
Apr 2023
Jul 2023
Oct 2023
Jan 2024
Apr 2024
Jul 2024
Oct 2024
Jan 2025
Apr 2025
Jul 2025
Oct 2025
Jan 2026
Apr 2026
Jul 2026
Precipitation
Average Loads
Organic Design Capacity
Max Loads

# Attachment 4

(25 Pa. Code § 94.12(a)(4))

**Beaver Falls**: None.

**Eastvale**: No 2021 sanitary sewer extensions were built and none are planned.

**White Township**: No sewer extensions or improvements were constructed or proposed in 2021.

**West Mayfield**: None.

**Patterson Township**: No sewer extensions or improvements were constructed or proposed in 2021.

**Patterson Heights:** No sewer lines were constructed in 2021.

**Big Beaver Municipal Authority:** There were no new sewer extensions to the Big Beaver Sanitary Sewer System in 2021.

**North Sewickley Township Sewer Authority:** There were 13 new connections to the Beaver Falls system in 2021.

# Attachment 5

(25 Pa. Code § 94.12(a)(5))

The Beaver Falls STP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Plant personnel monitor the sewer system from different meters at various locations throughout the system. They also perform a monthly preventative maintenance routine and service the meters when a problem occurs. Each municipality is responsible for their own collection system. They perform the maintenance, repair and rehabilitation as needed. The municipalities filled out a questionnaire regarding their own system.

**Beaver Falls:** The BFDPW jetted/cleaned approximately 10,500 feet of sanitary line in 2021. BFDPW conducted 219 property dye tests. BFDPW jet clean sanitary lines on a regular basis. BFDPW replaced five manhole frames and covers. BFDPW contracted Buffalini plumbing to repair customer tap and install a cleanout, contracted Miller Plumbing to replace 10' of 4" cleanouts and replace 4' of 8" plus customer tap.

**Eastvale:** Visual inspections of sanitary sewers is performed on an as-needed basis. There were no special activities conducted in 2021. The Borough contacts the City of Beaver Falls (Street Department) to perform repairs or maintenance to the sanitary sewer collection system on an as-needed basis. When the City of Beaver Falls performs repairs or maintenance, they bring their own equipment.

**White Township:** Visually inspect sanitary sewer manholes and lines weekly. CCTV inspection through subcontractors when required. Smoke and dye testing is being completed as part of the Corrective Action Plan. Two full time maintenance staff (Public Works Foreman and Laborer). One 5-ton dump truck. One backhoe, one skid steer, 3", 6", and 9" rod type root cutters, one trash pump,

**West Mayfield:** In the process of relining sewer lines. We are planning to add a manhole at the North end of Ann St.

**Patterson Township:** CCTV inspection through subcontractors when required. Flow metering through subcontractors when required. Smoke and dye testing through subcontractors when required. There are two full time maintenance staff (Public Works Foreman and laborer). One is wastewater collection system certified. Equipment used: two 1-ton dump trucks, one backhoe, 3" rod type root cutter, Honda trash pump, one skidster, and one ¾ ton Ford pickup truck. The Township maintains an ongoing program of inflow/infiltration (I/I) source identification and removal. Areas suspected of contributing excessive I/I are smoke tested, CCTV inspected, and dye tested using subcontract service. The results of this work are reviewed and corrective action is taken when appropriate.

**Patterson Heights:** All homes transferred (13) in 2021 were dye tested. Relining of the sanitary sewer system is planned pending receipt of a USDA loan and additional ARPA funds.

**Big Beaver Municipal Authority:** The Big Beaver Borough sanitary sewer system program for monitoring, maintenance, repair and rehabilitation at the pump stations consists of regular onsite inspections and routine maintenance and repairs as necessary. Monitoring is done through flow metering utilizing Mission Communications flow tubes at most of the pump stations and future capital improvements will provide monitoring at all pump stations. Routine maintenance is performed by Big Beaver operator, public works personnel or contracted out to private companies. Visual inspections and

repair of observed deficiencies are performed on the collection & conveyance system. There is no sampling performed within Big Beaver Borough Sanitary sewer collection & conveyance system.

**North Sewickley Township Sewer Authority:** Please see their questionnaire at the end of this report.

# Attachment 6

(25 Pa. Code § 94.12(a)(6))

**Beaver Falls:** System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Eastvale:** System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**White Township:** System did experience capacity-related bypassing, SSOs or surcharging during the report year. Their questionnaire explains in further detail.

**West Mayfield**: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Patterson Township:** System did not experience capacity-related bypassing, SSOs or surcharging during the report year. No areas in the Patterson TWP conveyance system are known or expected to have their capacity exceeded.

**Patterson Heights:** System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Big Beaver Municipal Authority:** System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**North Sewickley Township Sewer Authority:** This is a separate sanitary sewer and does not contain any Combined Sewer Overflows. In March 2020, three manholes in the vicinity of the Bennett Run Lift Station were bolted down to as an interim measure to prevent manhole bypassing. As a result of the Corrective Action Plan between the PA DEP and the City of Beaver Falls, NSTSA is working to identify I&I to reduce inflow. An initial summary memorandum was forwarded to the PA DEP in January 2022 which recommends additional CCTV and manhole physical surveys in a specific sewershed. This work is scheduled to be completed in 2022.

# Attachment 7

(25 Pa. Code § 94.12(a)(7))

There are 13 wastewater pumping stations tributary to the Beaver Falls STP. The following table lists each pumping station and a brief description for the 2021 operating year.

| Station | Condition | Max Pumping Rate | Max Flow | Projected 2 year Max Flow |
|---|---|---|---|---|
| Eastvale* | Good | 800 gpm | 1.015 MGD | 1.015 MGD |
| Wallace Run** | Good | 220 gpm | 90,000 gpd | 90,000 gpd |
| College** | Good | 220 gpm | 90,000 gpd | 90,000 gpd |
| Homewood** | Good | 44 gpm | 63,360 gpd | 63,360 gpd |
| Stockman Run** | Good | 250 gpm | 8,000 gpd | 8,000 gpd |
| Eagle Rock** | Good | 30 gpm | 800 gpd | 1,200 gpd |
| Westgate Business Park #1** | Good | 80 gpm | 2,000 gpd | 2,000 gpd |
| Westgate Business Park #2** | Good | 80 gpm | 0 gpd | 0 gpd |
| Bennets Run*** | Good | 450 gpm | 256,320gpd | 262,080 gpd |
| Concord Church*** | Good | 70 gpm | 23,040 gpd | 23,040 gpd |
| Stone Quarry*** | Good | 275 gpm | 82,080 gpd | 83,520 gpd |
| Poplar Lane*** | Good | 175 gpm | 77,760 gpd | 79,200 gpd |
| Collins Road*** | Good | 45 gpm | 10,080 gpd | 10,080 gpd |

Note: Westgate Business Park #2 Pump Station does not have any active sewer taps connected to it, therefore there is no flow.

*Serviced and maintained by the Beaver Falls STP

**Serviced and maintained by the Big Beaver Municipal Authority (BBMA)

***Serviced and maintained by the North Sewickley Township Sewer Authority (NSTSA)

# Attachment 8

(25 Pa. Code § 94.12(a)(8))

There are four industries that discharge industrial process wastewater to the Beaver Falls STP: *McDanel Advanced Ceramic Technologies* (industrial ceramics manufacturing), *Beaver Falls Tubular Products* (steel tube manufacturing), *Valley Waste Service Inc.* (garbage transfer station), and *Dalton Service Company* (hauled in municipal wastes and residual wastes). These industries are required to meet discharge requirements in the *City of Beaver Falls' Sewer Use Ordinance.* Each industry is required to submit a monthly Discharge Monitoring Report to the Beaver Falls STP. Three of the four industries had their permits renewed in 2021. The renewed permits follow the questionnaires at the end of the report. Below is the information for hauled in municipal wastes and hauled in residual wastes from *Dalton Service Company.* All the additional information for each truck load is attached each month in the eDMR.

**DALTON'S HAULED IN WASTES 2021**

| MONTH | Residual GALLONS | Municipal Wastes GALLONS | Monthly Total GALLONS |
|---|---|---|---|
| JANUARY | 1,206,176 | 751,300 | 1,957,476 |
| FEBRUARY | 892,909 | 859,400 | 1,752,309 |
| MARCH | 918,994 | 736,065 | 1,655,059 |
| APRIL | 746,500 | 701,700 | 1,448,200 |
| MAY | 1,079,977 | 715,300 | 1,795,277 |
| JUNE | 820,087 | 610,800 | 1,430,887 |
| JULY | 684,304 | 648,550 | 1,332,854 |
| AUGUST | 777,300 | 650,500 | 1,427,800 |
| SEPTEMBER | 801,600 | 602,300 | 1,403,900 |
| OCTOBER | 665,100 | 715,400 | 1,380,500 |
| NOVEMBER | 642,200 | 515,100 | 1,157,300 |
| DECEMBER | 859,431 | 508,800 | 1,368,231 |
| **YEARLY TOTAL** | 10,094,578 | 8,015,215 | 18,109,793 |

## Attachment 9

Sewage Sludge Management Inventory

# Sludge Estimating Worksheet

*This document is designed as a diagnostic aid in the estimation of sludge quantities produced at a well operated wastewater treatment plant. The calculations are based upon the observations made at hundreds of facilities. The source of the document is the EPA Handbook "Improving POTW Performance Using the Composite Correction Program Approach" EPA-625/6-84-008. This calculation should yield results within +/- 15% of actual production of a well operated facility.*

**Required Information**

| | | |
|---|---|---|
| Monitoring Period | 365 | days |
| Average Daily Flow | 2.02 | MGD |
| $BOD_{inf}$ | 245.4 | mg/L |
| $BOD_{eff}$ | 13 | mg/L |
| Digester Capacity | 370,000 | gallons |
| Waste Sludge Concentration (*if known*) | 45,000 | mg/L |
| % Solids of Sludge Leaving Plant (*as decimal*) | 0.21 | |

**Standardized Rounding Guidelines**

**Average Daily Flow, MGD** – round to three decimal places (x.xxx)

**% Solids of Sludge Leaving the Plant**

– If the % solids is < 10, round to three decimal places (x.xxx)

– If the % solids is > 10, round to two decimal places (x.xx)

**BOD** – round to one decimal place (x.x)

**All other figures** – round to the closest whole number (x)

---

**Step 1:** ***Calculate the pounds of BOD being removed from the plant.***

$(BOD_{inf} - BOD_{eff}) \times$ Average Daily Flow $\times 8.34 = BOD_{removed}$, pounds/day

( 245.4 - 13 ) x 2.02 MGD x 8.34 = 3,915 pounds/day

**Step 2:** ***Convert pounds/day $BOD_{removed}$ to pounds/day TSS removed.***

$BOD_{removed}$ (from Step 1) x TSS/BOD factor (see Table 1) = $TSS_{removed}$, pounds/day

3,915 x 1 = 3,915 pounds/day

**Step 3:** ***Determine sludge feed rate to digesters.***

($TSS_{removed}$ (from Step 2) $\times 10^6$) / (Waste Sludge Concentration (see Table 2 or if known) $\times$ 8.34) = Sludge Feed Rate, gpd

( 3,915 x $10^6$) / ( 45,000 x 8.34) = 10,432 gpd

**Step 4:** ***Determine hydraulic detention time (HDT).***

Digester Capacity / Sludge feed rate (from Step 3) = HDT, days

370,000 / 10,432 = 35.5 days

**Step 5:** ***Estimate volatile solids reduction using HDT*** (see Table 3) = 0.45

# Sludge Estimating Worksheet

**Step 6:** ***Calculate digested solids amount.***

$TSS_{removed}$ (from Step 2) x (1.0 - Volatile Solids Reduction (from Step 5)) = Solids Produced, pounds/day

3,915 x (1.0 - 0.45) = 2,153 pounds/day

**Step 7:** ***Calculate sludge production in dry tons/monitoring period.***

Solids Produced /2000 x Monitoring Period = Solids produced, dry tons/monitoring period

(from Step 6)

2,153 / 2000 x 365 = 393 dry tons/monitoring period

**Step 8**: *Determine (+/-) 15% range of calculated value for dry tons, wet tons and gallons.*

| | | 8a | | 8b | | 8c |
|---|---|---|---|---|---|---|
| **Solids produced, dry tons per monitoring period** (from Step 7) | **Calculate range (+/-) 15%** | **Solids produced, dry tons per monitoring period** | **Convert from dry solids to sludge – divide by % Solids of Sludge leaving plant** | **Sludge, wet tons per monitoring period** | **Convert from wet tons to gallons – divide by pounds per gallon** | **Gallons per monitoring period** |
| 393 | x 1.15 = | ( 452 | / 0.21 ) = | ( 2,152 | x 2000) / 8.34 = | |
| | x 0.85 = | ( 334 | / 0.21 ) = | ( 1,590 | x 2000) / 8.34 = | |

**8a.** If you dispose of both cake and liquid sludge, you may stop the calculation at step 8a. Compare the calculated range of dry tons to the dry tons disposed as reported on the DMR Supplemental Biosolids Report.

**8b.** If you dispose of only cake sludge, you may stop the calculation at column 8b. Compare the calculated range of wet tons of sludge to the wet tons disposed over the monitoring period.

**8c.** If you dispose of only liquid sludge, continue the calculation through column 8c and compare the calculated range of gallons of sludge to the gallons disposed over the monitoring period.

There were 1,782.3 wet tons disposed of in 2021.

# Sludge Estimating Worksheet

| Table 1 | |
|---|---|
| Process Type | TSS sludge / BOD removed |
| Primary Clarification | 1.7 |
| Activated Sludge with Primary Clarification | 0.7 |
| Activated Sludge without Primary Clarification | |
| Conventional | 0.85 |
| Extended Aeration | 0.65 |
| Sequencing Batch Reactors | 0.65 |
| Contact Stabilization | 1 |
| Attached Growth (TF, RBC, ABF) | 1 |

| Table 2 | |
|---|---|
| Sludge Type | Waste Concentrations (mg/L) |
| Primary[1] | 50,000 |
| Activated[1] | |
| Return Sludge / Conventional | 6,000 |
| Return Sludge / Extended Aeration | 7,500 |
| Sequencing Batch Reactors (SBR) | 7,500 |
| Return Sludge / Contact Stabilization | 8,000 |
| Return Sludge / Small plants w/low SOR (< 500 gpd / sq ft) | 10,000 |
| Separate waste hopper in clarifier | 12,000 |
| Primary + Trickling Filter | 45,000 |
| Primary + RBC | 45,000 |
| Primary + ABF | 35,000 |
| Trickling Filter | 30,000 |
| RBC | 30,000 |
| ABF | 12,000 |

[1] If you are calculating waste sludge concentrations at a facility that uses both primary treatment and an activated sludge treatment process, do not average the two figures. Instead, calculate a weighted average by adding the figures together and multiplying by 56.4% (decimal equivalent is 0.564).

| Table 3 | | |
|---|---|---|
| Process Type | Digester HDT (days) | Volatile Solids Reduction (% as decimal) |
| *Aerobic Digesters:* Following Extended Aeration (MCRT > 20 Days) | 10 | 0.10 |
| | 15 | 0.20 |
| | 20 | 0.30 |
| | 30 | 0.35 |
| *Aerobic Digesters:* Following Conventional Activated Sludge (MCRT < 12 Days) | 10 | 0.20 |
| | 15 | 0.35 |
| | 20 | 0.40 |
| *Anaerobic Digesters:* Activated + Primary, and Fixed Film (Supernating Capability Usable) | 20 | 0.25 |
| | 30 | 0.35 |
| | 40 | 0.45 |

**Attachment 10**

Calibration Report (25 Pa. code § 94.13(b))

TIM
TOTAL INSTRUMENT MAINTENANCE
423 Stoneybrook Drive
Elizabeth, PA 15037

# FIELD CALIBRATION CERTIFICATE

NOTE: This is a multi-part form. For legible copies, please press firmly when entering data.

Certificate No CC T.I.M.-2758

**Customer Information:** Ref PO No

Company Joint Sewers Users Beaver Falls

Site Address 715 15th St.

City Beaver State: Falls Zip 15010

**Contact Information:**

Name Jim Durish

Title Supt

Street Address Same as above

City State: Zip

Tel [ ]

**Instrument Data:**

Description Plant Effluent Ultrasonic Flow xmtr

Manufacturer E.P.I. Model No. Flow Hunter II

Serial No. NA Tag No.

**Calibaration Data:**

Units of Measurement

| | | | | |
|---|---|---|---|---|
| 1. | 4-20-M.A.D.C. | 6. | | |
| 2. | | 7. | | |
| 3. | | 8. | | |
| 4. | | 9. | | |
| 5. | | 10. | | |

**Test Equipment:**

1. Fluke 8060A D.V.O.M.
2.
3.
4.
5.

Reference Data:

Ambient temperature (°F): 37 Relative Humidity (%)

The instrumentation described above has been accurately calibrated under ambient conditions in accordance with the Manufacturer's documented procedures and specification. The test equipment used is calibrated and is traceable to the National Institute of Standards and technology.

Calibrated by: Jim Pryfogle 1/22/2021

NAME DATE



10/04

# Customer Service Report

## Total Instrument Maintenance

423 Stoneybrook Drive • Elizabeth, PA 15037
412-384-3818

**TIM**

INVOICE # T.I.M.-2758

| BILL TO ADDRESS | SITE ADDRESS |
|---|---|
| Joint Sewers Users Beaver Falls<br>715 15 St.<br>Beaver Falls, Pa 15010 | W.W.T.P.<br><br>PHONE # _____ / _____ |

REQUESTED SERVICE: Yearly Flow meter calibrations

PO # / SO # 14163
MODEL # SOSF21224
SERIAL #

OTHER

| DESCRIPTION / CAUSE OF PROBLEM: See above | QTY | PART/PRODUCT NUMBER | AMOUNT |
|---|---|---|---|
| CORRECTIVE ACTION / WORK PERFORMED: Cleaned, checked & calibrated the Tower Flow Converter & recorder / totalizer. The Primary, Secondary & BFP flow converters. Also checked the Plant Effluent Ultrasonic Flow Xmtr. Checked outputs & indications at 0-25-50-75 & 100 %. No adjustments needed. | | | |
| | | [A] PARTS TOTAL ➤ | |
| | | LABOR (REG) HRS @ /HR | |
| | | LABOR (O.T.) HRS @ /HR | |
| | | TRAVEL HRS @ /HR | |
| | | [B] LABOR TOTAL ➤ | $ 510 00 |
| | | EXPENSES (TOLLS,ROOMS,MEALS) | |
| | | MILEAGE MILES @ /MILE | |
| | | AIR AND/OR CAR RENTAL | |
| | | [C] EXPENSE TOTAL ➤ | |
| | | [D] SHIPPING CHARGES ➤ | |
| | | TOTAL [A] + [B] + [C] + [D] ➤ | 510 00 |
| FUTURE ACTION/WORK REQUIRED: YES ☐ NO ☒ % COMP 100 | | C. A. CODE [ ] | |
| | | SALES TAX OR TAX ID # [ ] | |
| INVOICE | | COUNTY TAX OR TAX ID # [ ] | |
| TERMS: NET 30 DAYS | | FINAL AMOUNT DUE ➤ | $ 510 00 |

I HEREBY ACCEPT AND APPROVE ALL WORK AS DEFINED ABOVE.

| Pryhulski | Tim Pryhulski | 1/22/24 | Joe Durish Jr. | | 1/22/24 |
|---|---|---|---|---|---|
| TECH (PRINT) | TECH (SIGNATURE) | DATE | CUSTOMER (PRINT) | CUSTOMER (SIGNATURE) | DATE |



10/04

# 2019 Chapter 94 Questionnaire Responses

**City of Beaver Falls**

# 2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Comments:**

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

**Comments:The BFDPW jetted/cleaned approximately 10,500' of sanitary line in 2021. BFDPW conducted219 property dye tests. BFDPW jet clean sanitary lines on a regular basis. BFDPW replaced (5) manhole frames and covers. BFDPW contracted Buffalini plumbing to repair customer tap and install a cleanout, contracted Miller Plumbing to replace 10' of 4" and cleanouts and replace 4' of 8" plus customer tap.**

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

- ☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- ☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

- ☐ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number - )
- ☐ Discussion of condition of each pump station (Attachment)

**Comments:**

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

    a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
    b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
    c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

**Comments:**

6. Discuss any plans to reduce or eliminate the following:
    a. Surface water connections
    b. Downspout connections
    c. Combined sewer flows
        1. Redevelopment areas
        2. Grant related
    d. Infiltration

# 2021 Chapter 94 Questionnaire

(Attach a separate sheet if necessary)

**Comments:When and if any of the following problems are detected, BFDPW corrects the situation swiftly and safely. BFDPW is currently inspecting all residential and commercial roof drains from connections to the system and eliminating those that are.**

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

   **Comments:**

Respondent's Name/Title

Patrick M Burdine, BFDPW Superintendent

Respondent's signature

Date

January 18, 2022

# Eastvale

February 1, 2022

Mr. Aaron Summers
Beaver Falls STP
715 Fifteenth Street
Beaver Falls, PA 15010

**RE: 2021 Chapter 94 Questionnaire**
**Eastvale Borough Sanitary Sewer System Tributary to Beaver Falls**
**WE Project No. 22069**

Dear Mr. Summers:

On behalf of the Borough of Eastvale, I have prepared the following responses to your questions for the Chapter 94 Report.

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**
   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Comments: No 2021 sanitary sewer extensions were built and none are planned.**

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality

CONSULTING ENGINEERS
806 Lincoln Place Beaver Falls, Pennsylvania 15010 Phone 724/847-1696 Fax 724/847-0419
www.widmerengineering.com

assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

**Comments:**

- **Visual inspections of Sanitary Sewers are performed on an as-needed basis.**
- **No special activities were conducted in 2021.**
- **The Borough contacts the City of Beaver Falls (Street Department) to perform repairs or maintenance to the sanitary sewer collection system on an as-needed basis.**
- **When the City of Beaver Falls performs repairs or maintenance they bring their own equipment.**

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments: No capacity-related bypassing, SSOs or surcharging reported during 2021.**

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number - 1)

☐ Discussion of condition of each pump station (Attachment)

**Comments: The Eastvale Pump Station is maintained by the Joint Sewer Users.**

WIDMER ENGINEERING INC

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

**Comments: The Eastvale system doesn't have industrial customers.**

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections
   b. Downspout connections
   c. Combined sewer flows
      1. Redevelopment areas
      2. Grant related
   d. Infiltration

(Attach a separate sheet if necessary)

**Comments: Eastvale doesn't have plans for work of this type.**

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

**Comments: Eastvale Borough has an approximate population of 211 people (based on the 2020 census) with all persons being served by the sanitary sewer system. We**

WIDMER ENGINEERING INC.

**expect the population to remain constant at about 211 people for the next 20 years since the Borough is completely developed and has no room for further development.**

**RESPECTFULLY SUBMITTED ON BEHALF OF THE BOROUGH OF EASTVALE**

Dan A Sell

Daniel A. Sell, P.E.
Borough Engineering Representative

cc: Diane Izzo, Eastvale Borough

22069 - 0001

**White Township**

# 2021 Chapter 94 Questionnaire

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Response:** No sewer extensions or improvements were constructed or proposed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   **Response:**

   a. Define the routine work completed:
      1. Visually inspect sanitary sewer manholes and lines weekly

   b. Describe any special activities:
      1. CCTV inspection through subcontractors when required.
      2. Smoke and dye testing is being completed as part of the Corrective Action Plan.

   c. Number and type of personnel used:
      1. Two full time maintenance staff (Public Works Foreman and Laborer).

   d. Number and type of equipment used:
      1. One 5-ton dump truck.
      2. One backhoe.
      3. One skid steer.
      4. 3", 6", and 9" rod type root cutters.
      5. One trash pump.
      6. One pickup truck.

e. Sampling frequency, quality assurance and data analysis, if any, other than industrial waste sampling:

1. No sampling is performed.

f. Beaver Falls CAP:

1. White Township developed a Corrective Action Plan (CAP) in response to the June 22, 2020 directive from the PADEP pertaining to hydraulic overload conditions in the Beaver Falls conveyance system. The approved CAP includes review of the Township's system mapping, dye testing ordinance, flow monitoring program, night-time flow isolations, overall system evaluation based on the results of the investigation, and tap control plan.
2. System Mapping has been completed and will update as necessary.
3. The dye testing ordinance is provided to the township and is being considered for adoption.
4. A flow monitoring program was completed in 2021.
5. The first round of NFI measurements were completed on March 20, 2021. The second round of NFI measurements were completed on April 2, 2021.
6. A summary memorandum was provided to the PADEP with the January 2022 progress report.
7. CCTV, dye testing, manhole physical surveys, and smoke testing are proposed for 2022.

g. 2022 Sewer Improvements: The Beaver County Commissioners awarded $151,000 for the following project. Construction is anticipated to be completed in 2022 and 2023.

| Project Name | Total Cost |
|---|---|
| App No. 1 – Old Steffin Hill & 11th Ave Sewer Improvements | $177,000.00 |

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

☒ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Response: As discussed in item no. 2f system evaluation is ongoing under the Corrective Action Plan. Repairs will be identified for rehabilitation.**

There is a broken segment of sanitary sewer pipe located near the billboard at the bottom of Steffin Hill Road resulting in a sanitary sewer overflow (SSO). PaDEP is aware of this defect and CCTV work had been completed. This damage is the result of a Verizon utility pole installed in the location of the sewer line. Partial funding to repair/realign this sewer segment has been awarded by Beaver County. Repair to be completed in 2022.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

- ☒ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number - )
- ☐ Discussion of condition of each pump station (Attachment)

**Response: Not Applicable**

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

- ☐ Industrial waste report as described in 5 a., b. and c. (attachment)
- ☐ Industrial pretreatment report as required in an NPDES permit (attachment)

**Response:** Not Applicable

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections

b. Downspout connections
c. Combined sewer flows
    1. Redevelopment areas
    2. Grant related
d. Infiltration

(Attach a separate sheet if necessary)

**Response: Please reference section 2f Corrective Action Plan (CAP).**

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, 2026, and 2027. Attach a separate sheet if necessary.

**Response:** The following table has been provided for population projections.

| Year | Population[(1)] |
|---|---|
| 2021 | 1317 |
| 2022 | 1319 |
| 2023 | 1321 |
| 2024 | 1323 |
| 2025 | 1325 |
| 2026 | 1328 |
| 2027 | 1330 |

**[(1)] Population projection assumes utilization of 1 annual tap or 2.2 persons per household per year. 2021 population based on 2020 census data.**

Respondent's Name/Title: Emily Palmer, PE
Date: 3/7/2022

Respondent's signature

Emily Palmer

## West Mayfield

# 2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Comments: None**

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   **Comments:** In process of relining sewer lines. See list below of relined sites.

   WE are planning to add a manhole at the north end of Ann St.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

X System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:** Sewer lines are old and in need of some repairs. Capacity is only a issue when heavy storms come then water flows out of manhole where lines merges at the tunnel at Ingrich Road mainly due to infiltration.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

☐ The collection system does not contain pump stations

☐ The collection system does contain pump stations (Number - )

☐ Discussion of condition of each pump station (Attachment)

**Comments:** We have no pumping within the borough.

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.

b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. (attachment)

X Industrial pretreatment report as required in an NPDES permit (attachment)

**Comments**: Valley waist pumps sanitary sewage into our system at W4th and 43rd st. manhole

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections
   b. Downspout connections
   c. Combined sewer flow
      1. Redevelopment areas
      2. Grant related
   d. Infiltration

(Attach a separate sheet if necessary)

**Comments:** We plan to line more places in the borough as funds permit

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

**Comments:** All but 10 homes are on the sewer system

Respondent's Name/Title

William C. Heaton Councilmen in charge of sewers

Respondent's signature

Date 2-25-2022

**Patterson Township**

LSSE
Est. 1985 Civil Engineers and Surveyors
846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

Managing Principals:
Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

March 4, 2022

S. O. No. 0251-02

**VIA EMAIL ONLY**
**(bfstp@outlook.com)**

Mr. Joseph M. Durish, Jr., Manager
City of Beaver Falls
Water Pollution Control Plant
715 Fifteenth Street
Beaver Falls, Pennsylvania 15010

**Subject:** **Patterson Township**
**City of Beaver Falls**
**2021 Annual Wasteload Questionnaire**

Dear Mr. Durish:

On behalf of Patterson Township, transmitted herewith is a copy of the subject Wasteload Management information pursuant to your request. It is requested that Beaver Falls submit a copy of the Annual Wasteload Report to Patterson Township upon submittal to the Pennsylvania Department of Environmental Protection such that they can review the City's discussion on the hydraulic overload in the Beaver Falls System.

Should you have any questions, please call Lawrence J. Lennon, Jr., P.E. directly (Ext. 246).

Sincerely,

Jason E. Stanton, P.E.

JES/ven

Enclosure

cc/enc: Christin Milnes, Township Administrator (c.milnes@pattersontwp.com)
Donald R. Inman, Patterson Township Public Works Commissioner (drinman1@verizon.net)
Wyatt D. Dishler, LSSE (wdishler@lsse.com)
Alexandria J. Maloney, LSSE (amaloney@lsse.com)

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# 2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Comments:** No sewer extensions or improvements were constructed or proposed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   **Comments:**

   a. Define the routine work completed:
      1. Inspection of pump stations;
      2. Inspection of flow meters; and
      3. Maintenance of emergency generator at pump station.

   b. Describe any special activities:
      1. CCTV inspection through subcontractors when required;
      2. Flow metering through subcontractors when required;
      3. Smoke and dye testing through subcontractors, required; and
      4. Flow Isolation testing, as required.

   c. Number and type of personnel used:
      1. Two full time maintenance staff (Public Works Foreman and Laborer).
      2. One is wastewater collector systems certified.

   d. Number and type of equipment used:
      1. Two 1-ton dump trucks;
      2. One backhoe;

3. One skid steer;
4. 3″ rod type root cutter;
5. Honda trash pump; and
6. One ¾ ton Ford pickup truck.

e. Sampling frequency, quality assurance and data analysis, if any, other than industrial waste sampling:

1. No sampling is performed.

f. Describe any infiltration/inflow monitoring performed:

- Patterson Township maintains an ongoing program of inflow/infiltration (I/I) source identification and removal. Areas suspected of contributing excessive I/I are smoke tested, CCTV inspected, and dye tested using subcontract services. The results of this work are reviewed and corrective action is taken when appropriate.

g. Beaver Falls CAP:

1. Patterson Township Municipal Authority developed a Corrective Action Plan (CAP) in response to the June 22, 2020 directive from the PADEP pertaining to hydraulic overload conditions in the Beaver Falls conveyance system. The approved CAP includes review of the Township's dye testing ordinance, update of system mapping, flow monitoring program, night-time flow isolations, and overall system evaluation based on the results of the investigation.
   i. Semi-Annual CAP Progress Reports were submitted to PADEP on July 23rd, 2021 and January 21st, 2022.
   ii. System Mapping completed May 2021.
   iii. Flow monitoring and nighttime flow isolation studies completed September 2021, and were analyzed for infiltration and inflow greater than 5,000 GPIMD.
   iv. Manhole physical surveys, dye testing, and CCTV of the identified areas with increasing infiltration/inflow to be completed during the 2022 calendar year as outlined in the Semi-Annual CAP Progress Report.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:** No areas in the Patterson Township conveyance system are known to have their capacity exceeded.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

☒ The collection system does not contain pump stations

X The collection system does contain pump stations (Number - 1 Davidson Drive)

☐ Discussion of condition of each pump station (Attachment)

Wet well and valve pit were replaced in 2012. There are no known operational issues known to exist. There is no known recording flow meters at the Davidson Drive Lift Station.

**Comments:**

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

**Comments:** Not Applicable

6. Discuss any plans to reduce or eliminate the following:

   a. Surface water connections
      - Smoke testing, dye testing, and CCTV inspection. If surface water is detected and located, it is removed.

b. Downspout connections
   - Smoke testing, dye testing, and CCTV inspection. If downspout connection is identified, it will be removed. A dye testing ordinance was passed and is enforced.

c. Combined sewer flows
   - Redevelopment areas
     i. Not Applicable
   - Grant related
     ii. Not Applicable

d. Infiltration
   - Flow isolation areas exceeding 5,000 GPIMD are currently being analyzed. Patterson Township anticipated the completion of CCTV and dye testing efforts during the 2022 calendar year to remove infiltration within the sanitary sewer system.

(Attach a separate sheet if necessary)

**Comments:** None

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

**Comments:** The following table has been provided for population projections.

| Year | Population[1] |
|---|---|
| 2021 | 1870 |
| 2022 | 1875 |
| 2023 | 1879 |
| 2024 | 1883 |
| 2025 | 1888 |
| 2026 | 1894 |

[1] **Population projection assumes utilization of 2 annual taps x 2.16 persons per household (2010 Census Data)**

## Patterson Heights

# 2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 28, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   **Comments:** No sewer lines were constructed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   **Comments:** All homes transferred (13) were dye tested. Relining of the sanitary sewer system is planned pending receipt of a USDA loan and additional ARPA funds.

# 2021 Chapter 94 Questionnaire

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

- ☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- ☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

- ☒ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number - )
- ☐ Discussion of condition of each pump station (Attachment)

**Comments:**

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

    a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
    b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
    c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

**Comments:** To the best of our knowledge, there are no industrial wastes.

6. Discuss any plans to reduce or eliminate the following:
    a. Surface water connections
    b. Downspout connections
    c. Combined sewer flows
        1. Redevelopment areas
        2. Grant related
    d. Infiltration

(Attach a separate sheet if necessary)

**Comments:** The Borough will slip line the entire system as funds permit.

# 2021 Chapter 94 Questionnaire

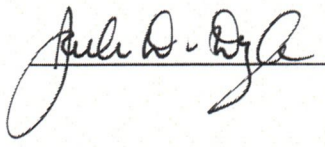
7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, and 2026. Attach a separate sheet if necessary.

   **Comments:** To our knowledge, the entire population if serviced by the system.

Respondent's Name/Title

Jack D. Doyle / Borough Secretary/Treasurer

Respondent's signature



Date

July 14, 2022

# Big Beaver Municipal Authority

# 2021 Chapter 94 Questionnaire

The following information is being sent to you on behalf of Big Beaver Borough regarding the sanitary sewer collection & conveyance system tributary to the Beaver Falls WWTP. This information is being provided for the preparation of the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. The report attempts to provide as much information as possible regarding the Big Beaver Borough sanitary system as follows:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2020), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   **Check the appropriate boxes:**

   ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment** )

   ☐ List summarizing each extension or project attached (**Attachment** )

   ☐ Schedules describing how each project will be completed over time and effects attached (**Attachment** )

   **Comments:**

   **There were no new sewer extensions to the Big Beaver Sanitary Sewer System in 2021.**

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: home dyes tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   **Comments:**

   **The Big Beaver Borough sanitary sewer system program for monitoring, maintenance, repair and rehabilitation at the pump stations consists of regular onsite inspections and routine maintenance and repairs as necessary. Monitoring is done through flow metering utilizing Mission Communications flow tubes at most of the pump stations and future capital improvements will provide monitoring at all pumps stations. Routine maintenance is performed by Big Beaver operator, public works personnel or contracted out to private companies. Visual inspections and repair of observed deficiencies are performed on the collection & conveyance system. There is no sampling performed within the Big Beaver Borough sanitary sewer collection & conveyance system.**

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

**Check the appropriate boxes:**

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

**Through a flow metering program implemented by Beaver Falls, the Big Beaver was identified as having high flows during precipitation events but the Big Beaver system has experienced capacity exceedance and it is not anticipated that there will be any areas of the system in the next five years that will exceed the conveyance capacity. Big Beaver is currently operating under a Corrective Action Plan (CAP) and a Tap Control Plan (TCP) enforced by the Pennsylvania Department of Environmental Protection. Under the CAP, Big Beaver has been monitoring and making necessary repairs and/or correction to the system to reduce the apparent Inflow & Infiltration (I&I) to the system to ultimately reduce the flows that are potentially contributing to hydraulic overloading at the Beaver Falls Treatment Plant.**

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

**Check the appropriate boxes:**

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number – **7**)

☒ Discussion of condition of each pump station attached (**Attachment - See Table Below**)

**Comments:**

| Pump Station Name | Capacity | Current Flow Volume | Projected 2-Year Max. |
|---|---|---|---|
| (1) Wallace Run Pump Station | 220 gpm | | |
| Average Flow Rate | | 50,000 gpd | 55,000 gpd |
| Peak Flow Rate | | 90,000 gpd | 90,000 gpd |
| (2) College Pump Station | 220 gpm | | |
| Average Flow Rate | | 50,000 gpd | 55,000 gpd |
| Peak Flow Rate | | 90,000 gpd | 90,000 gpd |
| (3) Homewood Pump Station | 44 gpm | | |
| Average Flow Rate | | 30,000 gpd | 30,000 gpd |
| Peak Flow Rate | | 65,000 gpd | 65,000 gpd |
| (4) Stockman Run Pump Station | 250 gpm | | |
| Average Flow Rate | | 5,000 gpd | 5,000 gpd |
| Peak Flow Rate | | 8,000 gpd | 8,000 gpd |

| | | | |
|---|---|---|---|
| **(5) Eagle Rock Pump Station** | **30 gpm** | | |
| | **Average Flow Rate** | **800 gpd** | **1200 gpd** |
| | **Peak Flow Rate** | **800 gpd** | **1200 gpd** |
| **(6) Westgate Business Park PS#1** | **80 gpm** | | |
| | **Average Flow Rate** | **1,000 gpd** | **1,000 gpd** |
| | **Peak Flow Rate** | **2,000 gpd** | **2,000 gpd** |
| **(7) Westgate Business Park PS#2** | **80 gpm** | | |
| | **Average Flow Rate** | **0 gpd** | **0 gpd** |
| | **Peak Flow Rate** | **0 gpd** | **0 gpd** |

Big Beaver is assessing the condition of the pump stations under the CAP and will be taking appropriate corrective action as needed.

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below.

   a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.

   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

   c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

☐ Industrial waste report as described in 5 a., b. and c. attached (**Attachment** )

☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment** )

**Comments:**

**Currently there are no industrial waste discharges to the Big Beaver Sanitary Sewer System**

6. Discuss any plans to reduce or eliminate the following:

   a. Surface water connections.

   b. Downspout connections.

   c. Surface water connections.
      1. Redevelopment areas
      2. Grant related

   d. Infiltration.

(Attach a separate sheet if necessary)

**Comments:**

**Under the CAP, Big Beaver has been installing flow meters at all of the pump stations, evaluating the flows to isolate areas of potential I&I, rehabilitating/replacing deficient manholes, performing smoke testing, dye testing and/or CCTV assessments, identifying deficiencies and sources of I&I, making repairs as needed to the system and will continue to monitor the system once all of the corrective action items have been performed and implemented.**

**See attached semi-annual CAP Report to the PADEP for detailed list of progress on the improvements, repairs & rehabilitation that was performed throughout the system.**

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

**Comments:**

| Year | Population | Basis of Projection |
|---|---|---|
| 2021 | 392 | 157 customers x 2.5 persons per edu |
| 2022 | 398 | 159 customers x 2.5 persons per edu |
| 2023 | 398 | 159 customers x 2.5 persons per edu |
| 2024 | 403 | 161 customers x 2.5 persons per edu |
| 2025 | 412 | 165 customers x 2.5 persons per edu |
| 2026 | 425 | 170 customers x 2.5 persons per edu |

Respondent's Name

**Jeffery A. Frye, P.E.**

Respondent's Signature

Michael Baker International

Title: Big Beaver Sanitary System
Engineering Representative

Date: 03/11/2022

Michael Baker
INTERNATIONAL

*We Make a Difference*

January 28, 2022

Mr. Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222

Via E-Mail

Re: Big Beaver Borough
CAP Semi-Annual Report
Big Beaver Borough, Beaver County

Dear Mr. Kriley:

In accordance with the Big Beaver Borough (BBB) Corrective Action Plan (CAP) and to serve as the 2021 Second Semi-Annual Report, I am writing to inform you of the following progress and/or action that BBB has been undertaken in an attempt to achieve compliance under the CAP:

**CAP PROGRESS & ACTIONS**

1. Five (5) pump stations now have flow meters Installed; New installation were performed at the Eagle Rock & Turnpike Pump Stations;
2. Installed or upgraded Missions SCADA system at the Stockman Run, Industrial #1, College & Wallace Run Pump Station;
3. Evaluation of flow data continues as flow meters are put into service to determine areas of potential I&I;
4. Contracted cleaning of Manhole Nos.34 & 36 along S.R. 18 near the PA Turnpike and Manhole No. 50 on S.R. 18;
5. Installed concrete risers on Manhole Nos. 27 & 50A;
6. Grouted frames of Manhole Nos 78 & 91 to eliminate potential source of I&I;
7. Nicely contracting replaced 23 manholes Identified to have severe concrete deterioration from hydrogen sulfide in the line from the College Pump Station to the Wallace Run Pump Station;

8. Installed chemical feed tank & pump to reduce/eliminate hydrogen sulfide at the College Pump Station that has caused manhole deterioration.
9. Installed Seal Guard around the influent pipe of Manhole Nos. 50 & 81 to eliminate a source of I&I;
10. Completed 77 dye tests in Big Beaver Borough and 23 dye tests in Homewood Borough;
11. Owners where deficiencies were noted were notified and appropriate corrective action was performed;
12. BBB Public Works surveyed and inspected 120 manholes.

COVID-19 pandemic restrictions and supply chain shortages continues to plague BBB in obtaining materials and/or equipment to be implemented into the BBB sanitary upgrades and corrective actions to the sanitary system but forward progress continues with regard to CAP compliance. The Corrective Action Plan Schedule and Progress Report has been attached for your review.

Should you have any questions or require any additional information, please do not hesitate to contact me at (412) 375-3229 or via e-mail at jeffery.frye@mbakerintl.com.

Respectfully,
MICHAEL BAKER INTERNATIONAL, INC.

Jeffery A. Frye, P.E.
BBB Sanitary Engineer

Attachment

cc: Big Beaver Borough
Shannon Steele, Esq., BBB Solicitor
Chad Crawford, BBB Director of Public Works

# BIG BEAVER BOROUGH CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality: Big Beaver Borough

County: Beaver

REPORTING PERIOD

FROM 7-1-2021 TO 12-31-2021

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. Install flow meters at all pump stations | Ongoing | January 2021 | March 2021 | Ongoing | 85% | Behind schedule due to COVID-19 restrictions & supply chain issues |
| 2. Evaluation/Analysis of pump station flow data to determine areas of potential I&I | Ongoing | January 2021 | March 2021 | Ongoing | 65% | Due to delay in flow meters supply & installation, the evaluation is ongoing |
| 3. Rehabilitation/Replacement of existing manholes with known deficiencies | March 2021 | May 2021 | June 2021 | January 2022 | 95% | Obtaining quotes for construction & submitting PennDOT HOP |
| 4. Perform smoke testing, dye testing and/or CCTV work in areas of potential I&I | June 2021 | June 2021 | October 2021 | Ongoing | 75% | Dye Test Ordinance enacted by the Borough; Scheduling dye tests to begin August 1St |
| 5. Identify deficiencies and sources of I&I | November 2021 | November 2021 | March 2022 | Ongoing | 25% | |
| 6. Perform necessary repair to system | April 2022 | November 2021 | January 2023 | Ongoing | 25% | Repairs are being made when deficiencies are discovered |
| 7. Monitor system for additional sources of I&I and provide remediation measures | February 2023 | N/A | August 2023 | N/A | 0% | |

TAP ALLOCATION FOR THIS YEAR 20

TAPS UTILIZED THIS REPORTING PERIOD 3

Based on the above information, are you in compliance with the approved schedule? Yes X No ___ If no, attach explanation.

Engineer

Big Beaver Borough Sanitary Engineer 01-28-22

(Signature/Date)

Municipal Official

Director of Public Works 01-28-22

(Signature/Title/Date)

WQA-38B (Rev. 9/26/03)

**North Sewickley Township Sewer Authority**

OPERATING YEAR 2021
NORTH SEWICKLEY TOWNSHIP
SEWER AUTHORITY

# BEAVER FALLS
# MUNICIPAL WASTELOAD MANAGEMENT
# SEWER SYSTEM AND PUMP STATION INFORMATION

| | |
|---|---|
| **Name of Municipality:** | North Sewickley Township Sewer Authority |
| Address: | 893 Mercer Road<br>Beaver Falls, PA 15010 |
| Name of Person Completing Response: | Lisa Crespo |
| Title or Company: | Office & Operations Manager |
| Address: | 893 Mercer Rd.<br>Beaver Falls, PA 15010 |

1. **Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.**

   There were 13 new connections to the Beaver Falls system in 2021.

2. **Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.**

   NSTSA has seven full time employees including an Office and Operations Manager (also a licensed operator), one operator, three labors, and two office staff. The Operations staff performs the following routine maintenance:

   (1) Maintain Operator License and meet all continuing education requirements of PaDEP.
   (2) Operate and maintain the sewage collection and conveyance facilities in good operating condition necessary to maintain compliance with PaDEP Permits.
   (3) Keep good housekeeping of Authority facilities including pump stations.
   (4) Preventative maintenance on existing facilities in accordance with manufacturers' recommendations.
   (5) Advise the Authority Board as to necessary repairs, replacement, and upgrades of the system.
   (6) Test operation of pumps and equipment three times per week. Generators are started once a week for 30 minutes under a full load.
   (7) Replace grinder pump units with Authority spares as necessary.
   (8) NSTSA has local Contractors available in the case of emergency work. They provide equipment and labor as required for repairs which require excavation, bypass pumping or heavy lifting.

(9) The Authority maintains a supply of spare grinder pump cores. The Authority owns an F350 with crane to lift pumps, and a portable generator for grinder pump emergencies and power outages.

(10) Additionally, the Authority maintains a stock of filters and lubricants for its equipment. The authority does not own heavy equipment (i.e. backhoe), or sewer maintenance equipment (i.e. root cutter, flush / jet truck, etc.).

(11) Targeted I/I monitoring or source identification was performed during 2021 in accordance with the Corrective Action Plan including flow monitoring. A summary memorandum of the findings was provided to PADEP with the progress report in January 2022. CCTV is scheduled to be completed in Spring 2022 as recommended by the memo.

(12) KWM Controls calibrated flow meters in 2020 and scheduled for early 2022.

(13) NSTSA inspects its sewage lift stations three to four times per week. The inspection includes a review of flow data, pump status/operation and observation of the wet wells. Minor deficiencies found (i.e. grease on floats, clogged pumps, etc.) are repaired in-house. Major repairs such as pump service, wet well cleaning, electrical work, etc. is performed by outside contractor. The grounds at the lift stations are mowed and treated for weeds by Operators employed by the Authority on a regular basis keeping the facility clean and orderly.

(14) Pump Station grounds are mowed and treat stations for weeds regularly.

(15) All pump stations have Johnson Controls and Tyco Integrated Security Alarms and two employees are on call 24 hours.

(16) Grinder pumps are inspected on an as needed basis. These inspections are typically prompted by user complaints. Each pump has an audible and visual alarm. NSTSA maintains an inventory of spare grinder pumps. A consumer complaint is investigated by the Authority. If the pump is found to be defective it is replaced with a spare unit. The spare is then sent to the supplier for service and returned to spare inventory. If the pump repair is not cost effective, the pump is used for parts or disposed of. 23 Grinder pumps were repaired in 2021.

(17) Various repairs to pump at the Pump Stations were performed. Pump replacements, rail repairs, VFD replacements and main line work continued to be completed in 2019/2020. The transducer at the repaired at the Poplar Lane and Concord Church Lift Station in 2021.

(18) Collection system maintenance (piping and manholes) includes response to customer complaints and visual inspections of manholes.

(19) Interior home inspections are performed at real estate transfer. This is conducted visually and then dye tested and televised if needed. 101 homes tributary to Beaver Falls were inspected upon sale or transfer of real estate from June 30, 2020 to December 31, 2021.

(20) Manholes and lateral site tees are visually inspected during wet weather events to identify sources of inflow and infiltration. Weekly inspections are also performed during routine maintenance of the collection system.

(21) Sewers tributary to the Poplar Lane Lift Station were cleaned in response to odor complaints.

3. **Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration, and other system problems. Attach a separate sheet if necessary.**

This is a separate sanitary sewer and does not contain any Combined Sewer Overflows.

In March 2020, three manholes in the vicinity of the Bennett Run Lift Station were bolted down to as an interim measure to prevent manhole bypassing. As the result of the Corrective Action Plan between the Pennsylvania Department of Environmental Protection and the Beaver Falls Joint Users, NSTSA is working to identify I & I to reduce inflow. An initial summary memorandum was forwarded to the PADEP in January 2022 which

recommends additional CCTV and manhole physical surveys in a specific sewershed. This work is scheduled to be completed in 2022.

4. **Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.**

| NAME | CONDITION | DESIGN CAPACITY (gpm) | PRESENT MAXIMUM FLOW (gpm) | PROJECTED 2- YEAR MAXIMUM FLOW (gpm) |
|---|---|---|---|---|
| Bennetts Run | Good | 450 | 178 | 182 |
| Concord Church | Good | 70 | 16 | 16 |
| Stone Quarry | Good | 275 | 57 | 58 |
| Poplar Lane | Good | 175 | 54 | 55 |
| Collins Rd | Good | 45 | 7 | 7 |

Note: Flow for stations besides Bennetts Run are calculated based on weekly pump run time hours readings. Flow monitoring at Bennett Run Lift Station for Beaver Falls CAP tasks suggests a wet weather peak instantaneous flow component.

5. **If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:**
   - **5.1 A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.**
   - **5.2 A discussion of the permittees or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.**
   - **5.3 A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems by industrial waste dischargers.**

There are no known industrial waste dischargers in the North Sewickley sewer system. North Sewickley Township Ordinance No. 104 was previously forwarded.

6. **Discuss any plans to reduce or eliminate the following:**
   - **6.1 Surface water connections**
   - **6.2 Downspout connections**
   - **6.3 Combined sewer flows**
     - **6.3.1 Redevelopment areas**
     - **6.3.2 Grant related**
     - **6.3.3 Infiltration**

See Item 2 and 3 above.

7. **If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, and 2026. Attach a separate sheet if necessary.**

NSTSA anticipates and additional 30 EDUs per year for the coming 5-year period.

## Renewed Industrial Permits

October 1, 2021

Mr. John Dodsworth, Ph.D.
McDanel Advanced Ceramic Technologies, LLC
510 9th Avenue
Beaver Falls, PA 15010-4700

**Re: Wastewater Discharge Permit for**
**McDanel Advanced Ceramic Technologies, LLC.**
**Permit No. 3-E**

Dear Mr. Dodsworth;

Enclosed, please find a copy of Wastewater Discharge Permit #3-E issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. McDanel is responsible for the proper operation and maintenance of both the Cast Process wastewater outfall (outfall 001) and the Extrusion Process wastewater outfall (outfall 002).

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

**WIDMER ENGINEERING INC.**

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

Cc: Joe Durish Jr., City of Beaver Falls STP Manager

02069\ McDanel Advanced Ceramic Technologies, LLC.\Permit 3-E\0010

Date: April 20, 2022

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

**Re: Wastewater Discharge Permit for McDanel Advanced Ceramic Technologies, LLC., Beaver Falls, PA**

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. 3-E.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

Authorized Representative

CEO
Title

McDANIEL ADVANCED CERAMIC TECHNOLOGIES
Company Name

**AUTHORIZATION TO DISCHARGE UNDER**
**THE CITY OF BEAVER FALLS**
**INDUSTRIAL DISCHARGE PERMIT #3-E**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

McDanel Advanced Ceramic Technologies, LLC
510 9th Avenue
Beaver Falls, PA 15010-4700

is authorized to discharge to the City of Beaver Falls Sanitary Sewer System from the facility located at

510 9th Avenue
City of Beaver Falls
Beaver County, PA

in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE
DATE : January 1, 2022

BY : Joseph M Durish Jr
WPCP Superintendent, City of Beaver Falls

**AUTHORIZATION TO DISCHARGE UNDER**
**THE CITY OF BEAVER FALLS**
**INDUSTRIAL DISCHARGE PERMIT #3-E**

## INDEX

**PART I – EFFLUENT LIMITATIONS**

**PART II - MONITORING REQUIREMENTS**

**PART III - REPORTING REQUIREMENTS**

**PART IV - STANDARD CONDITIONS**

Discharge Permit #3-E
LAT. 40° 44' 49"
LONG. 80° 19' 20"

**PART 1 – EFFLUENT LIMITATIONS**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALLS 001 AND 002:
   Outfall 001: Discharge from the Cast Process Wastewater Treatment System
   Outfall 002: Discharge from the Extrusion Process Wastewater Treatment System

   a. The permittee is authorized to discharge to the Beaver Falls Sewer System during the period from the issued date through the expiration date.
   b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. During the permit effective period, the discharge from the above listed outfalls shall not exceed the following effluent limitations.

| | DISCHARGE LIMITATION (gross unless otherwise indicated) | | | | | MONITORING REQUIREMENTS | |
|---|---|---|---|---|---|---|---|
| | Mass Units lb/day except flow | | | Concentrations (mg/l unless otherwise indicated) | | | |
| DISCHARGE PARAMETER | AVG Monthly | AVG Weekly | Max. Daily | AVG Monthly | Instant Max. | Measurement Frequency | Sample Type |
| • Flow (gallons) | | Monitor and Report | | | | Each batch dump | Calculated by process tank volumes |
| • Total Suspended Solids | | | | 275 | 275 | 2 per month | grab |
| • pH | | Not less than 5.5 nor greater than 10.5 standard units | | | | 2 per month | grab |

Flows greater than 4000 gallons on a single day shall be reported to the treatment plant at (724) 843-7184.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of the discharge pipe before mixing with any other wastewater.

All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

## PART 2 – MONITORING REQUIREMENTS

**A.** From the period beginning on the effective date of the permit until termination the permittee shall monitor the outfalls from the Cast Process wastewater treatment system and the Extrusion Process Wastewater Treatment System for the following parameters, at the indicated frequency:

| Sample Parameters (units) | Measurement Location | Minimum Frequency | Sample Type |
|---|---|---|---|
| Flow (gpd) | | Per batch dump | calculated by process tank volume |
| Suspended Solids | From tank prior to discharge | 2 per month | grab |
| pH | From tank prior to discharge | 2 per month | grab |

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

## PART 3 – REPORTING REQUIREMENTS

### A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

### B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The first report is due on January 8, 2022. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report.

### C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

### D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688, Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

## E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

## PART 4 – STANDARD CONDITIONS

## SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust,

metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the

treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

## SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended by request of the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

## SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

**Permit Requirements vs. Sample Results**

| Cast Process Wastewater Outfall 001 | | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Instantaneous Maximum (mg/L)** | **Monthly Average (mg/L)** | **Concentration (mg/L) Sample Results and Dates** | | | |
| | | | | | | |
| Flow | Report | --- | | | | |
| Suspended Solids | 275 | 275 | | | | |
| pH | 5.5 – 10.5 | 5.5 – 10.5 | | | | |

**Violations Noted**

| Date | Constituent | Concentration |
|---|---|---|
| | | |
| | | |

| Extrusion Roller Process Wastewater Outfall 002 | | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Instantaneous Maximum (mg/L)** | **Monthly Average (mg/L)** | **Concentration (mg/L) Sample Results and Dates** | | | |
| | | | | | | |
| Flow | Report | --- | | | | |
| Suspended Solids | 275 | 275 | | | | |
| pH | 5.5 – 10.5 | 5.5 – 10.5 | | | | |

**Violations Noted**

| Date | Constituent | Concentration |
|---|---|---|
| | | |
| | | |

**FLOW CALCULATIONS:**

**Process Information**

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

WIDMER ENGINEERING INC.

October 15, 2021

Mr. Rob Utley, Plant Manager
Beaver Falls Tubular Products, LLC -- Beaver Falls
(PTC Alliance)
4400 West 3rd Ave.
Beaver Falls, PA 15010

**Re: Wastewater Discharge Permit**
**Beaver Falls Tubular Products, LLC -- Beaver Falls Plant**
**Permit No. 2-G**

Dear Mr. Utley:

Enclosed is a copy of Wastewater Discharge Permit #2-G issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. The permit limits contained therein are based on the latest federal pretreatment requirements of 40 CFR 420 and updated production figures as noted.

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

**WIDMER ENGINEERING INC.**

Dan A Sell

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

cc w/encl: Joe Durish Jr., City of Beaver Falls STP Manager

02069/BF Tubular Products LLC/Permit 2-G/0001

Date: 11-11-21

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

**Re: Wastewater Discharge Permit for**
**Beaver Falls Tubular Products, LLC -- Beaver Falls Plant**

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. #2-G.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

11/18/21
Authorized Representative

Plant Manager
Title

Beaver Falls Tubular Products LLC
Company Name

# AUTHORIZATION TO DISCHARGE UNDER THE CITY OF BEAVER FALLS INDUSTRIAL DISCHARGE PERMIT #2-G

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Beaver Falls Tubular Products, LLC -- Beaver Falls
(PTC Alliance)
4400 West 3th Ave.
Beaver Falls, PA 15010

is authorized to discharge from a facility located at:

West Mayfield
Beaver County, PA

to the City of Beaver Falls Sanitary Sewer System in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE:
January 1, 2022

BY: Joe Drish Jr
WPCP Superintendent, City of Beaver Falls

## PART 1 – EFFLUENT LIMITATIONS

A. During the period of January 1, 2022 to December 31, 2026, the permittee is authorized to discharge process wastewater to the City of Beaver Falls sewer system from the outfall(s) listed below:

| OUTFALL | DESCRIPTION |
|---|---|
| 001 | Outfall to City of Beaver Falls Sanitary Sewer System |

B. During the permit period, the discharge from outfall 001 shall not exceed the following effluent limitations:

| EFFLUENT LIMITATIONS [1] | | |
|---|---|---|
| Parameter | Daily Maximum (mg/L) | Monthly Average (mg/L) |
| Flow (Total Month Flow) | Report (gallons) | Report (gallons) |
| Flow (Average/day) | Report (gpd) | Report (gpd) |
| Flow (Daily Maximum) | Report (gpd) | Report (gpd) |
| Days w/ Water Discharged | Report (d) | Report (d) |
| Chromium, (Cr) [3] | 0.364 | 0.146 |
| Lead (Pb)[2] | 2.0 | 2.0 |
| Nickel (Ni) [3] | 0.328 | 0.110 |
| Zinc (Zn)[2] | 2.0 | 2.0 |
| pH – range (pH units) | 5.5 – 10.5 | 5.5 – 10.5 |
| Steel Production | - | Report (lbs.) |

[1] Limits are based on The City of Beaver Falls Sewer Ordinance Nos. 1688 and 1788.

[2] Limits for lead and zinc are regulated based on 40 CFR 420-Iron and Steel Manufacturing Point Source Category, Subpart I, Section 420.95(a)(4) Sulfuric Acid Pickling for Pipe, Tube and Other Products Pretreatment Standards for Existing Sources. The limits contained in 40 CFR 420.95(a)(4) are production-based limits of pounds per thousand pounds of steel surface created. However, where the City of Beaver Falls' local limits in Ordinance No. 1688 are more restrictive than those calculated using 40 CFR 420.95(a)(4), the City's local limits are used in this permit.

[3] Limits are based on 40 CFR 420-Iron and Steel Manufacturing Point Source Category, Subpart J, Section 420.105(b)(1) Cold Worked Pipe and Tube Mills Pretreatment Standards for Existing Sources. The limits contained in 40 CFR 20.105(b)(1) are production-based limits of pounds per thousand pounds of steel surface created. The limits in the chart are based on 30,091,200 lb. of steel produced and 206,826 gallons of water per year.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

## PART 2 – MONITORING REQUIREMENTS

**A.** During the permit period, the permittee shall perform monthly sampling and analysis at Outfall 001 for the following parameters:

| Sample Parameters |
|---|
| Flow |
| Chromium, (Cr) |
| Lead (Pb) |
| Nickel (Ni) |
| Zinc (Zn) |
| pH |
| Production Rate |

B. Report production rate in pounds of steel for each month.

C. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

D. Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of the discharge pipe before mixing with any other wastewater.

E. For flow reporting, include maximum daily flow (gallons), total monthly flow (gallons), monthly average flow (gallons per day), and number of days when discharge actually occurred.

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## PART 3 – REPORTING REQUIREMENTS

### A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

### B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self-monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report and submitted to the City of Beaver Falls.

### C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

### D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688. Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

## E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the City of Beaver Falls and Widmer Engineering Inc. at the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
City of Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

## PART 4 – STANDARD CONDITIONS

## SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum

limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

## SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended by request of the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

## SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

**Permit Requirements vs Sample Results**

| Outfall 001 | | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Daily Maximum (mg/L)** | **Monthly Average (mg/L)** | **Concentration (mg/L) Sample Results and Dates** | | | |
| Flow (Total Flow, gal)<br>Flow (Monthly Avg)<br>Flow (Daily Maximum)<br>Days w/ Water discharged | Report (gal) | Report (gpd)<br><br>Report (d) | | | | |
| Chromium | 0.364 | 0.146 | | | | |
| Lead | 2.0 | 2.0 | | | | |
| Nickel | 0.328 | 0.110 | | | | |
| Zinc | 2.0 | 2.0 | | | | |
| PH – range (pH units) | 5.5 – 10.5 | 5.5 – 10.5 | | | | |
| Steel Production | - | Report (lbs) | | | | |

**Violations Noted**

| Date | Constituent | Concentration |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**FLOW CALCULATIONS:**

Process Information

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

October 13, 2021

Mr. Doug Vogel, Vice President
Valley Waste Service, Inc.
261 Wallace Run Road
Beaver Falls, PA 15010

**Re: Wastewater Discharge Permit**
**Valley Waste Service Transfer Facility – Chippewa Township**
**Permit No. 5-C**

Dear Mr. Vogel:

Enclosed is a copy of Wastewater Discharge Permit #5-C issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. The permit limits contained therein are based on City of Beaver Falls Ordinance No. 1688 as amended.

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to the "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

**WIDMER ENGINEERING INC.**

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

cc w/encl: Joe Durish Jr., City of Beaver Falls STP Manager

02069/Valley Waste.Permit 5-C/0001

Date: 10/20/21

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

**Re: Wastewater Discharge Permit for Valley Waste Service**
**Chippewa Township Waste Transfer Facility**

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. 5-C.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

Douglas Vogt
Authorized Representative

Vice President
Title

Valley Waste Service, Inc.
Company Name

# AUTHORIZATION TO DISCHARGE UNDER THE CITY OF BEAVER FALLS INDUSTRIAL DISCHARGE PERMIT #5-C

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Valley Waste Service, Inc.
261 Wallace Run Road
Beaver Falls, PA 15010

is authorized to discharge from a facility located at

261 Wallace Run Road
Chippewa Township, Beaver County, PA

to the West Mayfield Sanitary Sewer System tributary to the City of Beaver Falls Water Pollution Control Plant in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions of this permit shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance, or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE:
January 1, 2022

BY : _____
WPCP Superintendent, City of Beaver Falls

## PART 1 – EFFLUENT LIMITATIONS

A. During the effective period of this permit, the permittee is authorized to discharge process wastewater to the City of Beaver Falls sewer system from the outfall(s) listed below:

| OUTFALL | DESCRIPTION |
|---|---|
| 001 | Outfall from the pretreatment tank to the Sanitary Sewer System tributary to the City of Beaver Falls |

B. During the permit period, the discharge from outfall 001 shall not exceed the following effluent limitations:

| EFFLUENT LIMITATIONS [1] | | |
|---|---|---|
| Parameter | Daily Maximum (mg/L) | Monthly Average (mg/L) |
| Flow (Total Flow) | Report (gal) | Report (gal) |
| Total Susp. Solids (TSS) [2] | 275 | 275 |
| Oil & Grease | 100 | 100 |
| 5-day Biochemical Oxygen Demand (BOD5) [2] | 300 | 300 |
| Arsenic (As) | Report | Report |
| Cadmium (Cd) | Report | Report |
| Chromium, total (Cr) | 3.5 | 3.5 |
| Cyanide, total (CN) | 1.0 | 1.0 |
| Copper (Cu) | 2.0 | 2.0 |
| Lead (Pb) | 2.0 | 2.0 |
| Mercury (Hg) | Report | Report |
| Nickel (Ni) | 3.0 | 3.0 |
| Silver (Ag) | 5.0 | 5.0 |
| Zinc (Zn) | 2.0 | 2.0 |
| Phenolic compounds | 1.0 | 1.0 |
| pH – range (pH units) | 5.5 – 10.5 | 5.5 – 10.5 |

[1] Limits are based on The City of Beaver Falls Sewer Ordinance Nos. 1688 and 1788.

[2] Amounts in excess of the limits shown are subject to surcharge fees in accordance with Section X(g) of Ordinance 1688.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

## PART 2 – MONITORING REQUIREMENTS

**A.** During the permit period, the permittee shall perform monthly sampling and analysis at Outfall 001 for the following parameters:

| Sample Parameters |
|---|
| Flow (Total Flow) |
| Total Susp. Solids (TSS) |
| Oil & Grease |
| 5-day Biochemical Oxygen Demand (BOD5) |
| Arsenic (As) |
| Cadmium (Cd) |
| Chromium, total (Cr) |
| Cyanide, total (CN) |
| Copper (Cu) |
| Lead (Pb) |
| Mercury (Hg) |
| Nickel (Ni) |
| Silver (Ag) |
| Zinc (Zn) |
| Phenolic compounds |
| pH – range (pH units) |

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

C. Samples taken in compliance with the monitoring requirements specified above shall be taken from the downstream side of the pretreatment tank baffle wall, which is accessible through the manhole.

D. All samples are grab samples. The detention in the holding tank is sufficient to create a representative composite sample.

## PART 3 – REPORTING REQUIREMENTS

### A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

### B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self-monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report and submitted to the City of Beaver Falls.

### C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

### D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688. Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

## E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the City of Beaver Falls and Widmer Engineering Inc. at the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
City of Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

## PART 4 – STANDARD CONDITIONS

## SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum

limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

## SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended as directed by the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

## SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

**Permit Requirements vs Sample Results**

| Outfall 001 | | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Daily Maximum (mg/L)** | **Monthly Average (mg/L)** | **Concentration (mg/L) Sample Results and Dates (also attach laboratory sheets as backup)** | | | |
| Flow (Total Flow) (1) | Report (gal) | Report (gal) | | | | |
| Total Susp. Solids (TSS) | 275 | 275 | | | | |
| Oil & Grease | 100 | 100 | | | | |
| 5-day Biochemical Oxygen Demand (BOD5) | 300 | 300 | | | | |
| Arsenic (As) | Report | Report | | | | |
| Cadmium (Cd) | Report | Report | | | | |
| Chromium, total (Cr) | 3.5 | 3.5 | | | | |
| Cyanide, total (CN) | 1.0 | 1.0 | | | | |
| Copper (Cu) | 2.0 | 2.0 | | | | |
| Lead (Pb) | 2.0 | 2.0 | | | | |
| Mercury (Hg) | Report | Report | | | | |
| Nickel (Ni) | 3.0 | 3.0 | | | | |
| Silver (Ag) | 5.0 | 5.0 | | | | |
| Zinc (Zn) | 2.0 | 2.0 | | | | |
| Phenolic compounds | 1.0 | 1.0 | | | | |
| pH – range (pH units) | 5.5 – 10.5 | 5.5 – 10.5 | | | | |

(1) NOTE: For flow, report elapsed time (hours) x 60 x 11.56 gpm = gallons

**Violations Noted**

| Date | Constituent | Concentration |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**FLOW and SURCHARGE CALCULATIONS (show below or on a separate sheet):**

BOD Rate per 1000 gallons = 0.00834 P (BOD – 300); where P = 25 cents
TSS Rate per 1000 gallons = 0.00834 B (TSS – 275); where B = 15 cents
Industrial Surcharge Rate = 1 cent per gallon.

Calculate the appropriate surcharges and attach a check for that amount payable to: **Joint Sewer User's Account**.

***Process Information***

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

# EXHIBIT F1

COPY

AGREEMENT

THIS AGREEMENT made and concluded this 28th day of April, 1977, between the CITY OF BEAVER FALLS, a municipal corporation of the Commonwealth of Pennsylvania, and a City of the Third Class, hereinafter called the "First Party" and Township of Patterson a municipal corporation of the Commonwealth of Pennsylvania, hereinafter called the "Second Party."

WHEREAS, First Party has heretofore constructed and is now operating a Sewage Plant and System; and

WHEREAS, the Borough of Patterson Heights, the Borough of West Mayfield, Patterson Township and White Township are presently utilizing the facilities and services of said Sewage Treatment Plant and System; and

WHEREAS, the First Party has adopted an Ordinance No. 1423, dated November 9, 1976, providing for a uniform user's charge; and

WHEREAS, the First Party has adopted a Resolution No. 567, dated November 9, 1976, providing rules and regulations for the use and operation of the Sewer System; and

WHEREAS, the parties desire to enter into an agreement incorporating the provisions of the aforesaid Ordinance and Resolution; and

WHEREAS, the parties desire to enter into a new agreement to take the place of an agreement between the parties, dated December 12, 1967; and

WHEREAS, First Party agrees to continue to make available said Sewage Treatment Plant and System facilities and services to Second Party.

NOW, THEREFORE, IN CONSIDERATION OF the Premises and the undertaking of each party to the other, the parties hereto, each intending to legally bind itself, its successors and its assigns, covenant and agree as follows:

12-21-92 11:18 AM P01

1. The Second Party agrees to adopt an Ordinance which provides for the computation of the charges for sewer usage based on a ratio between operation and maintenance costs and meter reading volume, in accordance with said Ordinance No. 1423, a copy of which is attached hereto.

2. The Second Party agrees to pay to the First Party its proportionate share of the present and future cost and expenses of the operation, maintenance and repair of said Sewage Treatment Plant and System, used in common, based on the formula set forth in the aforesaid Ordinance No. 1423.

3. Before First Party shall permit other municipalities to connect with and utilize said Sanitary Sewer System and Plant, First Party agrees to obtain the consent of the Borough of Patterson Heights, Borough of West Mayfield, Patterson Township and White Township, but such consent shall not be unreasonably withheld.

4. None of the Boroughs or Townships presently connected with and utilizing the facilities of said Sanitary System and Plant shall allow any other municipality, except to the extent such use presently exists, to tap into its sewer system without the permission, in writing, of First Party and the said other Boroughs and Townships.

5. The Sewage Treatment Plant is designed only for the treatment of sanitary sewage and the deposit of any storm drainage, surface or sub-surface drainage into the sewerage system by any of the municipalities is strictly prohibited and shall be immediately terminated upon notice from First Party.

6. Neither party shall permit the discharging of industrial and processed waste water into the sewer system except pursuant to the rules and regulations adopted by the First Party by the aforesaid Resolution No. 567, a copy of which is attached hereto.

7. If the quality of service reflects the use of garbage disposals by any of the users of the plant and sewage system and if this becomes detrimental to the operation of the plant or



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system, they shall be prohibited and be immediately terminated upon notice from First Party.

8. First Party shall render quarterly statements to Second Party at which time Second Party shall make payment within one month of the receipt of said statement.

9. Should any addition, enlargement, revision or renovation of the Sewage Treatment Plant or System be required entirely by an increase of the service furnished to Second Party, the total cost of such addition, enlargement, revision or renovation shall be paid by Second Party.

10. In the event addition, enlargement, revision or renovation of the Sewage Treatment Plant or the Sewer System is required by more than one municipality using the same, the cost thereof shall be paid by the municipalities requiring the same, and in the event addition, enlargement, revision or renovation is required and would be beneficial to all municipalities using the same, the cost thereof shall be borne based on the formula set forth in Ordinance No. 1423, in the year that it is determined by the First Party that an addition, enlargement, revision or renovation is required. In determining whether any addition, enlargement, revision, or renovation is required by any one or more or all of the municipalities using said sanitary sewer system and sewage disposal plant, First Party, upon approval by the Environmental Protection Agency of the Commonwealth of Pennsylvania, or its succèssor, shall be the exclusive judge of this fact.

11. First Party and Second Party agree to maintain and keep their sanitary sewer systems in good repair. First Party through its Professional Engineer, shall have the right to make inspection, at all reasonable times, or the sanitary sewer system of Second Party and if any condition shall exist or be created as a result of which the efficiency or cost of First Party's sanitary Sewer System and Plant is adversely affected, said condition, on thirty (30) days written notice from First Party, shall be corrected.

12. The operation, management, addition, extension, enlargement, revision or renovation of said sewage disposal plant and sanitary sewer system shall be under the exclusive control of First Party. It is agreed that Second Party does not have, nor by the terms of this agreement, does it secure, any ownership in the sanitary sewer system or sewage disposal plant of the First Party, and its rights thereto are as herein defined, that is the right to tap into said system and to make use thereof in accordance with the terms hereof.

13. Second Party covenants and agrees that First Party shall be the sole and exclusive agency to provide sewage treatment and disposal service to residents of Second Party presently using the sewer system, and that Second Party will not engage in the business of providing said service to areas now served by the present sewage system.

14. This agreement shall supersede all previous agreements entered into by the parties hereto with regard to the Sewage Treatment Plant and System of First Party and all said agreements shall be terminated upon the execution of this agreement by the parties hereto.

15. This Agreement is entered into on the part of the First Party by virtue of a Resolution duly adopted on the _____ of _____, 1977, and on the part of the Second Party by virtue of a ~~Resolution~~ Ordinance duly adopted on the 5th day of April, 1977, authorizing the same to be done.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their proper officers, and attached hereto their official seal, by virtue of the above recited corporate action authorizing the same to be done, the day and year first above written.

ATTEST:

s/ Robert D. Yoho

s/ Edward Dixon
Secretary

CITY OF BEAVER FALLS:

BY: s/ Nick M. Camp
Mayor

TOWNSHIP OF PATTERSON

BY: s/David E. Keeton
Chairman



12-21-92 11:18 AM P04

BILL NO. 23

ORDINANCE NO. 1423

AN ORDINANCE amending Section 2 of Ordinance No. 1227, passed February 27, 1967, as amended by Ordinance No. 1288, passed December 22, 1970 entitled "AN ORDINANCE of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and the filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts." By providing for computation of the rate for sewer usage based on a ratio between operation and maintenance costs and meter reading volume:

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, hereinafter sometimes referred to as "City" and it is hereby ordained and enacted by authority of the same as follows:

Section I. Section 2 of Ordinance No. 1227, passed February 27, 1967, entitled "An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts," as amended, is hereby amended to read as follows:

"Section 2 (a) The rate for said sewer usage shall be reviewed annually and computed as follows:

The total anticipated yearly flow, as reflected by the actual total sewage treated at the sewage treatment plant of all users for the preceding year, shall be divided into the total projected cost of operation and maintenance (as approved by City Council) of the City's treatment works for the coming calendar year to determine ratio "R." Ratio "R" is expressed numerically by the following:

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$$R = \frac{\text{Total Projected Operation and Maintenance Costs (\$)}}{\text{Total Sewage Treated (gallons)}}$$

The above rate ratio shall be used exclusively for determination of user charges (based upon each users water meter readings) except when the total users metered flow is less than or greater than the actual total volume of wastewater treated at the City's treatment works for the preceding year. In such case, the difference of the yearly revenues generated by the rate ratio "R" (Revenue = R x Total users metered flows) and the projected total cost of operation and maintenance for the treatment works shall be determined. This difference is labeled herein as "d" and is calculated as follows:

d = (Projected Total Operation and Maintenance Cost, \$)
- (R x Total Users Metered Flows, \$)

To incorporate this cost difference, "d", into each users treatment works charges, a new rate ratio "$R_1$" shall be determined and calculated as follows:

$$R_1 = \frac{d, \$}{\text{Total Users Metered Flows, gallons}}$$

Therefore, the actual user billing rate (\$/gallons recorded by water meter readings), $R_s$, shall be determined by the summation of rate ratios R and $R_1$. The user billing rate, $R_s$, can be expressed mathematically as follows:

$$R_s = R + R_1$$

Section II (b)

1. The rate ratios (R and $R_1$) applied to each users treatment works charges shall be reviewed annually by the City to determine the need to adjust the rate ratios based upon the actual annual operation and maintenance costs incurred by the

City, the actual quantity of wastewater flow treated by the City's treatment works, and the total revenue generated by the existing rate ratios. Upon evaluating the revenues required to meet the projected annual operation and maintenance costs, the rate ratios shall be adjusted periodically as determined necessary by the City to generate suitable funds to meet all operation and maintenance costs of the City's treatment works.

2. Records of all information pertaining to the annual review of the rate ratios and all components utilized to determine said rate ratios shall be maintained on file and open for public review during normal working hours at the City's Municipal Building.

3. The following general items (but not limited to these alone) shall be included in determining the annual operation and maintenance costs associated with the City's treatment works:

(a) Wages and salaries

(b) Materials and supplies

(c) Utility requirements

(d) Repairs - replacement

(e) Administrative

(f) Debt service charges

(g) Reserve fund costs

4. The basis for actually determining the operation and maintenance costs for each of the items detailed above shall be made by the plant superintendent and approved by City Council based upon expenditures incurred for the same items over the past years of operation as well as projected expenditures for the next calendar year of operation.

Section II (c)

1. In instances where an industrial or commercial user consumes large quantities of water for processing, cooling, or heating, and said water is not discharged into the City's sewerage system for treatment, and said user does not desire to pay its sewage treatment fees for that part of water said user consumes but not discharges into the City's sewerage system for treatment, then said industrial or commercial users may install separate water meters for all fixtures which will eventually contribute wastewater to the City's treatment works or said user may install a separate sewage flowmeter (as approved by the City of Beaver Falls) at any and all connection points within the City's sewerage system. Any and all costs (including City inspection costs) to be incurred by the industrial or commercial user shall totally and solely be borne by said user."

Section II. All other provisions of said Ordinance 1227 shall remain in full force and effect.

Section III. All Ordinances or parts thereof inconsistent herewith are hereby repealed.

Section IV. This Ordinance shall become effective the _____ day of _____, 1976.

PASSED FINALLY by the Council of the City of Beaver Falls, this 9th day of November, 1976.

Mayor

ATTEST:

City Clerk

RESOLUTION NO. 567

RESOLUTION adopting rules and regulations for the use and operation of the City's sewer system.

WHEREAS, the Council of the City of Beaver Falls, by Section 8 of Ordinance No. 1227 of the City of Beaver Falls, has reserved the right to adopt, revise and amend rules and regulations for the use and operation of the City's sewer system, and;

WHEREAS, the Council of the City desires to adopt certain rules and regulations for the discharge of industrial and processed wastewater into the City's sewer system;

NOW THEREFORE, be it resolved by the Council of the City of Beaver Falls that the following rules and regulations for the use and operation of the City's sewer system are hereby adopted and made a part of Ordinance 1227, as amended:

1. The discharging of industrial and processed wastewater into the City's sewerage system is strictly prohibited except as provided for herein.

2. In order for the City to consider any industrial user's connection into the City's treatment works, the following information shall be provided in duplicate to the City for evaluation of the proposed industrial wastewater discharge:

(a) Name of Institution.

(b) Address and Desired Location.

(c) Desired Tap-in Location.

(d) Estimated Quantity of Flow - include maximum gallons per minute discharge flowrate.

(e) Description of the process which generated the wastewater.

(f) Amount of sanitary wastes in the industrial wastewater and, if any, in what concentrations.

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(g) A complete chemical analysis of the proposed wastewater discharge providing as a minimum the following: $BOD_5$, COD, SS, D.S., D.O., Chlorine Demand, $NH_3$-N, Total N, $NO_3$-N, oil and grease, pH, $PO_4$-P, phenols, cyanide-total and amenable, mercury-total, temperature, heavy metals, and any other tests which will more appropriately describe the true characteristics of the proposed wastewater discharge.

3. The following conditions shall apply to all industrial wastewater contributors to the City's sewage treatment facilities which are approved by the City:

(a) Any user of the treatment works whose applied loading to the treatment plant exceeds any one of the following criteria shall be classified to the conditions of this program:

$BOD_5$ > 230 mg/l

SS > 220 mg/l

Dissolved Solids (D.S.) > 300 mg/l

Flow > 10% of Average Design Flow of Treatment Works

Delivery Flowrate ≥ 175 GPM

pH - > 8.0 or < 6.0

Phenols - Any Amount

Heavy Metals - Any Amount

Cyanides - Any Amount

(b) Each industrial user of the said treatment works shall be required to pay its share of the total amount of the grant and any grant amendment awarded to the City pursuant to Federal Project No. C-420676-01 divided by the recovery period.

(c) The industrial recovery period is defined as the useful design life of the treatment works (until 1995) or 19 years based upon the treatment plant additions being completed in 1976.

(d) Payments shall be made by the industrial users no less often than annually. The first payment by the said user shall be made not later than one (1) calendar year after such time the user begins using the treatment works.

(e) The industrial user's share of the grant amount shall be based upon the following factors: strength (BOD, Suspended Solids, Dissolved Solids, etc.), volume, and delivery flowrate. These factors shall be proportioned in relation to the existing design parameters allocated for the existing sewage treatment facility. (Since the City presently accepts no industrial wastewater discharges, the actual proportioning of the costs will be determined by the City at the time of proposed industrial tap-in). If throughout the recovery period there is a substantial change in the strength, volume, and/or delivery flowrate characteristics introduced into the treatment works by said industrial user, such user's share shall be adjusted accordingly. As a minimum, an industrial user's share shall be proportional to its flow, in relation to the treatment works flow capacity.

(f) If there is an expansion or upgrading of the treatment works, each existing industrial user's share (at the time of the expansion or upgrading) shall be adjusted accordingly.

(g) The City shall retain 50 percent of the amounts recovered from said industrial user. The remainder, together with any interest earned thereon, shall be returned to the U.S. Treasury on an annual basis.

(h) The City shall use a minimum of 80 percent of the retained amounts, together with interest earned thereon, for any expansion and/or reconstruction which may be required of the treatment works. The City shall obtain the written approval of the retained amounts for any expansion and reconstruction.

The remainder of the retained amounts shall be used as the City sees fit. Pending use, the City shall invest the retained amounts for reconstruction and expansion in: (1) obligations of the U.S. Government; or (2) obligations guaranteed as to principal and interest by the U.S. Government or any agency thereof; or (3) shall deposit such amounts in accounts fully collateralized by obligations of the U.S. Government or obligations fully guaranteed as to principal and interest by the U.S. Government or any agency thereof.

ADOPTED BY COUNCIL OF THE CITY OF BEAVER FALLS, this 9th day of November, 1976

/s/ Nick L. Camp
Mayor

/s/ Robert D. Yoho
City Clerk - Coordinator

# EXHIBIT F2

# COOPERATION AGREEMENT

THIS AGREEMENT dated as of May 1, 1983, by and between The Borough of Eastvale, a Municipal Corporation located in Beaver County, Pennsylvania, hereinafter referred to as the "Borough", and the City of Beaver Falls, a Municipal Corporation located also in Beaver County, Pennsylvania, hereinafter referred to as the "City".

WHEREAS, the Borough has accepted a grant from the United States of America Environmental Protection Agency in the amount of $434,920.00 for the construction of a sanitary sewer collector system in the Borough of Eastvale, and

WHEREAS, the Borough has also accepted a grant from the Beaver County Community Development Agency in the amount of $158,052.00 for the construction of a sanitary sewer collector system in the Borough of Eastvale, and

WHEREAS, the Borough must finance the local share and the highest cumulative deficit in the construction fund to complete the aforesaid sanitary sewer collector system, and

WHEREAS, the Borough's lending bank has required that the City of Beaver Falls guarantee the aforesaid bank loan, and

WHEREAS, the Borough requests that the City assume the operation and maintenance of the aforesaid sanitary sewer collector system after it is constructed,

NOW THEREFORE, in consideration of the mutual covenants contained herein, it is hereby agreed by and between the parties as follows:

1. The Borough agrees to construct a sanitary sewer collector system in accordance with the plans and specifications prepared by the Borough's consulting engineer, Joseph A. Widmer, dated August 24, 1982.

2. The City agrees to guarantee the financing of the local share and the highest cumulative deficit for the construction of the aforesaid wastewater collector system.

3. The Borough agrees that when the construction of the sanitary sewer system is complete, the Borough will execute such documents as are necessary to convey to the City a one-half interest as a joint tenant in the aforesaid sanitary sewer system.

4. The City agrees to assume all responsibility for the operation and maintenance of the sanitary sewer system immediately upon delivery of the Borough's deed for the one-half interest described hereinabove. In connection therewith, the Borough agrees to require the contractor for the aforesaid system to furnish the Borough with a one year maintenance bond covering all repairs to the system during the first year of operation.

5. The Borough hereby agrees to indemnify and save harmless the City from any and all losses which the City may incur or moneys which the City may have to pay as a result of the guarantee of financing contained hereinabove.

6. The Borough shall have the right at all times to establish such tap fees and monthly rental fees as the Borough from time to time deems necessary. However the monthly rental charge shall be set at a rate sufficient to include the uniform user rate charged by the City of Beaver Falls and such additional rates as the City of Beaver Falls

determines necessary to meet the operation and maintenance expenses as described herein. The City and Borough agree to adjust the monthly rental rate annually based on the uniform user rate and the projections of the City's engineer for the operation and maintenance cost of the sanitary sewer system in the Borough of Eastvale for the coming year.

7. Any tap fees from new construction on the system, after the initial construction of the system shall be applied first to the actual cost of the tap fee, secondly to any debt service remaining after the construction, and thirdly to the general revenue fund of the Borough. The City agrees to maintain the moneys received from the Borough of Eastvale for operation and maintenance in a separate account and use this money only for the operation and maintenance of the sanitary sewer system in the Borough of Eastvale. The City further agrees that such account shall be audited each year and a copy of the Audit reports submitted to the Eastvale Borough Council. The City shall at all times have control over the manner and time of billing and collection. The Borough agrees to cooperate fully in any collection matters including the filing of any municipal liens that may be required under existing Pennsylvania Statutes in effect at any time under this Agreement.

8. To the extent this Agreement varies or contradicts any previous agreement entered into between the Borough and the City, this agreement shall control.

9. This Agreement is expressly conditioned on the approval of the following municipalities who are joint users of the City's treatment plant:

(a) Patterson Township

(b) Borough of Patterson Heights

(c) Borough of West Mayfield

(d) White Township

10. The Borough agrees that it will, through its bond attorney, file such certificates as are necessary to exclude this debt from the City's borrowing base under the Local Government Unit Debt Act.

11. The Term of this Agreement with regard to the Guaranty shall be until the debt incurred by the Borough and guaranteed by the City has been paid.

This Agreement is hereby approved and entered into by virtue of an ordinance duly enacted at a regular meeting of the Borough of Eastvale on June 6, 1983, and also by an ordinance duly enacted by the City of Beaver Falls at a regular meeting held on June 29, 1983.

IN WITNESS WHEREOF, the parties have hereunto caused this Agreement to be executed by the proper officers, affixed hereto the official seals, by virtue of the above recited formal action as set forth herein.

ATTEST:

Dorothy E. Sowers

Dorothy E. Sowers, Secretary

BOROUGH OF EASTVALE

By Steve W. Steindam [SEAL]

Steve W. Steindam, President

ATTEST:

Perry C. Wayne, Jr.

Perry C. Wayne, Jr., City Clerk

CITY OF BEAVER FALLS

By Leo J. Hegner [SEAL]

Leo J. Hegner, Mayor

715 Fifteenth Street • Beaver Falls, PA 15010
724/847-2808 • Fax 724/847-4748

August 19, 2008

Ms. Diane Izzo, Secretary
Eastvale Borough
510 2nd Avenue (Eastvale)
Beaver Falls, PA 15010

Dear Ms. Izzo:

This letter is to inform the Borough of Eastvale that Beaver Falls Council rejected the idea of assuming the responsibility of Eastvale's sewer system as presented by Tony Sadaka of Widmer Engineering at the meeting held May 28, 2008. Therefore, Eastvale will remain independent of the city and stay a member of the Joint Sewer Users. A meeting should also be scheduled to discuss a payment plan for the arrears owed to the Joint Sewer Users.

Also, please find enclosed a copy of a letter dated February 15, 2006, informing Eastvale of a rate increase. It is advised that Eastvale immediately raise rates to $2.58 per 1,000 gallons of water with the Beaver Falls Municipal Authority. On January 1, 2009, the rates will increase again from $2.58 to $3.20 per 1,000 gallons of water. The city cannot make any changes on behalf of any Joint Sewer User. Again, it is the responsibility of Eastvale to notify the Municipal Authority.

Upon completion of the items mentioned above, Eastvale will then assume all duties of receiving payment from the Beaver Falls Municipal Authority and making payments due the Joint Sewer Users each quarter.

Sincerely,

Stephen Johnson
City Administrator

George Patterson II
City Solicitor

enclosure

# EXHIBIT F3

# AGREEMENT

This Agreement, made and entered into as of the _____ day of November, 1998

By and Between:

**THE BIG BEAVER MUNICIPAL AUTHORITY,** a municipal authority, organized and operated under the laws of the Commonwealth of Pennsylvania,

*hereinafter referred to as "Big Beaver",*

and

**THE CITY OF BEAVER FALLS**, a Third Class City,

*hereinafter referred to as "Beaver Falls",*

**WHEREAS,** Beaver Falls owns, operates and maintains an existing sewage treatment system and public sewage collection and conveyance system, and

**WHEREAS,** Big Beaver is planning the construction of a public sewage collection and conveyance system for the Route 18 corridor , and

**WHEREAS,** Beaver Falls has agreed to provide treatment at its treatment facility for approximately 300 EDU's of sanitary sewage generated from the areas of the Borough of Big Beaver and the Borough of Homewood which are within the Route 18 Corridor Project, and

**WHEREAS,** Big Beaver desires to convey most of its sanitary sewage to the collection and conveyance system and sewage treatment system of Beaver Falls, and

**NOW, WHEREFORE,** the parties for and in consideration of the foregoing promises and mutual covenants and obligations contained herein and intending to be legally bound, do hereby agree as follows:

## ARTICLE I
## DEFINITIONS

Section 1.01 - Definitions:

In addition to the terms defined elsewhere in this agreement, the following terms, when used in this Agreement, shall have the following meanings:

a. Agreement means this Intermunicipal Sewage Services Agreement as amended or supplemented at the time in question.

b. Consulting Engineer means a person who is engaged into the engineering profession, who is a registered professional engineer under the laws of the Commonwealth of Pennsylvania who is charged with supervising the construction and operation of sewage systems. A "Consulting Engineer" may be employed or retained by any of the parties.

c. Costs. When used with reference to Capital Additions or the Treatment Plant, Costs shall mean expenditures in respect to said Capital Additions or the Treatment Plant which constitute proper items of cost in accordance with generally accepted engineering and accounting practices. In determining Cost of Capital additions or Cost of the Treatment Plant which are to be shared by Beaver Falls and Big Beaver and other Municipal Entities using the Beaver Falls System, there shall first be deducted from total costs all Federal, State and other constitution grants received by Beaver Falls in aid for such construction. The costs may include, but not be limited to, the following items:

(i) Costs and expenses of acquiring, by purchase or condemnation of land, rights-of-way, easements, licenses and any other interests in real property, including amounts of any award or final judgment in or settlement or compromise of any condemnation proceeding, all damages incident to or consequent upon acquisition or construction, payments for restoration of property damaged or destroyed in connection with any construction, and all fees and expenses incidental thereto, including without

limitation, engineering and legal fees and costs of abstracts of title, title insurance, title opinions and title reports;

(ii) Amounts paid to contractors, builders, suppliers, materialmen, workmen and laborers;

(iii) Costs of performance, payment, maintenance or other bonds and premiums for insurance of any type deemed necessary during construction;

(iv) Fees and expenses of engineers and architects for the preparation of studies, tests, surveys, reports, maps, plans and specifications and for supervision and inspection services;

(v) Legal, accounting and auditing expenses incurred for the acquisition, construction and installation of a Capital Facility or any part thereof;

(vi) Expenses incurred in connection with the financing of a Capital Facility in whole or in part, including accounting, auditing, legal and financial advisor fees and expenses, financial and printing charges, bond insurance premiums and charges for other credit enhancement facilities, advertising expenses and the fees and expenses of paying agents, escrow agents and trustees; and

(vii) Capitalized interest on indebtedness during the construction of a Capital Facility.

(d) Fiscal Year means the period of twelve months beginning on January 1, each year.

(e) Operating Expenses means the reasonable, proper and necessary costs of management and operation including, but not limited to, labor, chemicals, utilities, equipment, materials, supplies and ordinary maintenance, repair and replacement of the source of supply, pumping facilities, treatment plant and appurtenances thereto determined in accordance with generally accepted engineering and accounting practices.

(f) Beaver Falls Plant means the sewage treatment plant owned, operated and maintained by Beaver Falls and having on the date of this agreement, an average daily design capacity of 4.8 MGD.

## ARTICLE II
## SERVICE AREA

Section 2.01 - Service Area:

Beaver Falls will accept and Big Beaver will deliver to Beaver Falls' collection system for transmission and treatment by Beaver Falls all sanitary sewage which will emanate from Big Beaver and Homewood in accordance with the current 537 Plan except for approximately thirty two households located in Big Beaver Borough. The area included in the aforesaid 537 Plan is shown on a map marked Exhibit "A". Big Beaver agrees that it will transport only the sanitary sewage originating from the area shown on Exhibit "A" and not from any area of Big Beaver without having obtained the written approval of Beaver Falls.

Section 2.02 - Maintenance of Collection System:

Big Beaver will maintain the sewage collection and conveyance system within its jurisdiction in a state of good repair and operating condition.

## ARTICLE III
## MANNER OF CONNECTION

Big Beaver shall construct such sewers that are necessary to connect to Beaver Fall's existing sewer system at one connection point at an an existing manhole on State Route 18 near the intersection of State Route 551. Said connection shall be made in accordance with quality construction practice as to not interfere with the flows and use of the existing manholes.

## ARTICLE IV
## RATES AND CHARGES

Section 4.01 - Treatment Charge; Rates:

(a) The rate charged to Big Beaver shall be based upon a cost per thousand gallons of water usage conveyed to Beaver Falls by Big Beaver over the monthly period. Said rate shall be reasonable and uniform and shall initially be the same rate as that charged to all other customers of Beaver Falls but may subsequently vary consistent with Articles V and VI. The actual billing procedure between the parties shall be as agreed between the parties from time to time.

(b) Beaver Falls shall notify Big Beaver by letter of any proposed change in the rate at least sixty (60) days prior to the time that said rate shall take effect. Beaver Falls shall include with the notice to Big Beaver, a complete copy of the proposed revised rate schedule for its sanitary sewer customers.

Section 4.02 - Invoices:

Invoices for the amount payable by Big Beaver under this article shall be submitted by Beaver Falls to Big Beaver promptly and said invoices shall be payable within thirty (30) days after the invoice date.

## ARTICLE V
## CAPITAL ADDITIONS

Section 5.01 - General:

Beaver Falls shall have the right to exercise exclusive discretion in determining what capital improvements or expansions to its system are necessary. Big Beaver recognizes that it may be liable for the cost of any system upgraded on a proportional basis. However, unless Big Beaver agrees, it shall not be liable for the cost of any betterment, improvement or addition to the Beaver Falls system which:

(a) Does not improve sanitary sewage service to Big Beaver customers

(b) Is an improvement necesitated by inflow and infiltration in the City of Beaver Falls.

Section 5.02 - Costs to be Charged Proportionally:

In the event that capital additions are required and Big Beaver agrees to said capital addition, the rate to be set shall include the cost of said capital addition including all financing costs and debt service amortization requirements on a proportional basis consistent with prior provisions of this Agreement.

Section 5.03 - Capital Additions Requested by Big Beaver:

In the event that Big Beaver requests that a capital addition be added in order to accommodate its needs, Beaver Falls shall cooperate with Big Beaver and cause said request to be fulfilled if practicable. Beaver Falls shall design and cause said capital addition to be financed, provided that Big Beaver agrees to bear said costs. Big Beaver shall have the option to elect to obtain the financing itself and pay a lump sum to Beaver Falls to complete the project. In the alternative, Big Beaver may elect to have Beaver Falls complete the financing which would be repaid by increasing monthly charges which Big Beaver would pay to Beaver Falls.

## ARTICLE VI
## CONNECTION FEE

Connection Fee:

There shall be no connection fee paid.

## ARTICLE VII
## QUALITY STANDARDS

Section 7.01 - Quality Standards:

All sewage discharged from Big Beaver from the its Collection System into Beaver Falls shall meet reasonable quality standards promulgated by Beaver Falls, provided however, that such standards shall not be more stringent than those standards imposed by any law or regulation of the United States of America or the Commonwealth of Pennsylvania unless Big Beaver consents in writing. Big Beaver shall at all times maintain and enforce rules and regulations governing the composition of sewage discharged into its collection system identical in all material respects to those promulgated by Beaver Falls and will permit only approved waste to be discharged into the Big Beaver Collection System. Before promulgating any changes in its rules or regulations relating to quality standards, and its industrial pretreatment program, Beaver Falls shall give Big Beaver written notice of any such changes at least sixty (60) days before the same are to become effective. If Big Beaver so requests, representatives of Beaver Falls shall discuss said proposed changes with representatives of Big Beaver and will provide such additional information relating to said changes as may reasonably be requested by Big Beaver.

## ARTICLE X
## ARBITRATION

In the event of any dispute between the parties to this Agreement arising out of the interpretation of this Agreement or any matters herein set forth or pertaining to the same, and inability of the parties to amicably adjust the same, then any such dispute shall be settled by arbitration in accordance with the provisions of 42 Pa C.S.A. 7301 et seq., Chapter A, as amended. In any such case, three arbitrators shall be appointed, one by

Beaver Falls, one by Big Beaver and the third by the two so selected, and the decision of the majority thereof shall be binding and conclusive upon the parties. The arbitrators shall not be the Solicitor of any interested party nor the Solicitor of a municipality contracted to transport sewage to Beaver Falls. Upon the refusal of either party to appoint an arbitrator upon ten (10) days' written notice to do so, the other party may apply to the Court of Common Pleas of Beaver County, Pennsylvania, for the appointment of a second arbitrator, and the person so appointed shall for all purposes be deemed to be the arbitrator appointed by such other party; in the event the two arbitrators appointed by the parties or by the Court, as the case may be, shall fail to effect the appointment of a third arbitrator within two weeks following the appointment of the second arbitrator, either party to this Agreement may likewise apply to said Court for the appointment of said third arbitrator. The cost of any such arbitration shall be equally borne by the parties hereto.

In order to be qualified as an arbitrator, the arbitrator must be admitted to practice law in Pennsylvania and must have at least seven years of experience as a Solicitor for a Municipality or a Municipal Authority. They shall be admitted to practice in either Allegheny, Beaver, Butler or Lawrence Counties.

## ARTICLE IX
## MISCELLANEOUS

Section 9.01 - Notices:

All notices required or authorized to be given pursuant to this agreement shall be in writing and shall be sent by certified mail, postage prepaid to the following addresses:

TO BIG BEAVER:

114 Forest Drive
Darlington, PA 16115

TO BEAVER FALLS

City of Beaver Falls
8th Avenue and 15th Street
Beaver Falls, PA 15010

Or to such other addresses as may, from time to time, be furnished to the parties effective upon receipt of the notice thereof as set forth above.

Section 9.02 - Amendments, Waivers and Consents:

Neither this agreement, nor any term hereof may be amended, changed, waived, discharged or terminated orally and this agreement may only be amended in writing, signed by both parties.

Section 9.03 - Entire Agreement and Counterparts:

This agreement constitutes the entire understanding between the parties and shall supersede any and all prior understandings and agreements with respect to the subject matter covered herein

The captions in this agreement are for purposes of reference only and shall not limit or otherwise affect any of the terms thereof. The agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one in the same instrument.

Section 9.04 - No Assignments:

No party may assign or transfer its rights hereunder without the prior written consent of the other parties.

Section 9.05 - Successors and Assigns:

This agreement shall bind the parties hereof and their respective successors and assigns.

## ARTICLE X
## TERMINATION AND EFFECTIVE DATE

This agreement shall become effective when both parties have approved its terms at a public meeting. It shall terminate on December 31, 2011. Either party shall have the right to renegotiate said agreement by making said request in writing within 180 days of December 31, 2011. No renegotiation or termination may occur unless a written notice of at least 180 days is given to the other party. In the event that there is no termination or renegotiation, the agreement shall then be automatically renewed in increments of one year beginning on January 1, 2012.

IN WITNESS WHEREOF, this Agreement has been executed the day and year above first written.

ATTEST:

**BIG BEAVER MUNICIPAL AUTHORITY**

_____
Secretary

By:_____
Chairman

(seal)

ATTEST:

**CITY OF BEAVER FALLS**

_____
Secretary

By:_____
Council President

(seal)

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME**: Big Beaver Borough (Attn: AORO)

Date of Request: 11/30/22 Submitted via: ☑ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini, Esquire (as counsel for the City of Beaver Falls) Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☑ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or records concerning the Borough of Big Beaver's relationship with the City of Beaver Falls as it would relate to the City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU). Additionally, please provide any and all agreements and/or records concerning the Big Beaver Municipal Authority and the City of Beaver Falls as it would relate to City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☑ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☑ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☐ $_____.**

---

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020




Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

## CharLee Rosini

**From:** Secretary <secretary@bigbeaverborough.org>
**Sent:** Wednesday, December 14, 2022 9:49 AM
**To:** CharLee Rosini
**Subject:** FW: Big Beaver Borough - RTK Request dated 11-30-22
**Attachments:** Big Beaver Borough Records.PDF

Good Morning CharLee,

Please see the attached document regarding the Right To Know request received.

Borough of Big Beaver Resolution 8 of 1996
Big Beaver Borough Ordinance 220

Please confirm receipt and let me know if you have any questions.

Thanks,
Jenn

---

**From:** Secretary
**Sent:** Wednesday, December 7, 2022 4:04 PM
**To:** CharLee Rosini <CRosini@gtnlaw.com>
**Subject:** RE: Big Beaver Borough - RTK Request dated 11-30-22

Hi Charlee,

Your Right To Know request is being worked on. I called your office and left a message for you. Due to the nature of the request, the Borough is requesting the 30-day extension on the request.

Please let me know if you have any questions.

Thanks,

Jennifer Gasser
Secretary
Big Beaver Borough
114 Forest Drive
Darlington, PA 16115
Phone: 724-827-8962
Fax: 724-827-2415

***IMPORTANT NOTICE: We have recently made changes to our contact information. Please update your records to this email.*** *This e-mail message is intended to be received only by persons entitled to receive the confidential information it may contain. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system.*

**From:** CharLee Rosini <CRosini@gtnlaw.com>
**Sent:** Wednesday, November 30, 2022 2:07 PM
**To:** Secretary <secretary@bigbeaverborough.org>
**Subject:** Big Beaver Borough - RTK Request dated 11-30-22

Good Afternoon Ms. Gasser:

I hope you are having a nice day so far. Kindly accept the attached Right to Know Request.

Thank you in advance for your assistance with this request.

Best regards,
CharLee Rosini
Associate Attorney
Gaitens, Tucceri & Nicholas, P.C.
519 Court Place
Pittsburgh, PA 15219
T: (412) 391-6920 | F: (412) 391-1189

BOROUGH OF BIG BEAVER

RESOLUTION NO. 08 of 1996

A RESOLUTION OF THE BOROUGH OF BIG BEAVER, OF AND IN THE COUNTY OF BEAVER AND COMMONWEALTH OF PENNSYLVANIA, TO REVISE THE OFFICIAL SEWAGE PLAN OF THE BOROUGH.

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act", as amended, and the Rules and Regulations adopted and promulgated thereunder in Chapter 71 of Title 25 of the Pennsylvania Code, requires municipalities of this Commonwealth to adopt and maintain an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or the creation of environmental health hazards with sewage wastes, and further to revise such Plan whenever it is necessary to meet the sewage disposal needs of the municipality;

WHEREAS, the City of Beaver Falls, the Borough of Big Beaver and the Borough of Homewood did cooperatively commence a study through and by the services of Widmer Engineering, Inc., and by respective Resolutions adopted August 10, 1993 by the City of Beaver Falls, adopted July 12, 1993 by the Borough of Big Beaver, and July 14, 1993 by the Borough of Homewood, did adopt and make part of their respective Official Sewage Plans the BEAVER FALLS AREA REGIONAL SEWAGE FACILITIES PLAN - JUNE 1993;

WHEREAS, the Pennsylvania Department of Environmental Resources, now the Pennsylvania Department of Environmental Protection, required additional studies/evaluations of alternative community sewage collection/treatment systems within and for the Borough of Big Beaver and Borough of Homewood, which included among other possibilities, study and evaluation of placement of sewage collector/transmission lines to, and the use of the Koppel Sewage Treatment Plan for treatment of same;

WHEREAS, as a result of said studies/evaluations, Addendums to the said BEAVER FALLS AREA REGIONAL SEWAGE FACILITIES PLAN - JUNE 1993 have been prepared, namely ADDENDUM NO. 1 - NOVEMBER 1993; ADDENDUM NO. 2 - FEBRUARY 1994; ADDENDUM NO. 3 - JULY 1994; ADDENDUM NO. 3A - JANUARY 1995 as REVISED OCTOBER 1995; and ADDENDUM NO. 4 - MAY 1996, together packaged/booked as the BEAVER FALLS AREA ACT 537 REGIONAL SEWAGE FACILITIES PLAN, ADDENDUMS NOS. 1, 2, 3, 3A & 4 - MAY 1996; and

WHEREAS, the Council of the Borough of Big Beaver finds and declares that the said BEAVER FALLS AREA REGIONAL SEWAGE FACILITIES PLAN - JUNE 1993; ADDENDUM NO. 1 - NOVEMBER 1993; ADDENDUM NO. 2 - FEBRUARY 1994; ADDENDUM NO. 3 - JULY 1994; ADDENDUM NO. 3A - JANUARY 1995 as REVISED OCTOBER 1995; and ADDENDUM NO. 4 - MAY 1996, provide alternate public sewage collection/treatment

concepts and possible plans therefor conforming to the municipal ordinances, including but not limited to zoning and subdivision ordinances, of the Borough of Big Beaver, and are appropriate for and to a comprehensive program of pollution control and water quality management.

**NOW THEREFORE, BE IT RESOLVED** that the Council of the Borough of Big Beaver does hereby adopt, and concurrently submit to the Pennsylvania Department of Environmental Protection for its approval, as a revision to the "Official Sewage Facilities Plan" of the Borough of Big Beaver, the aforesaid BEAVER FALLS AREA REGIONAL SEWAGE FACILITIES PLAN - JUNE 1993; ADDENDUM NO. 1 - NOVEMBER 1993; ADDENDUM NO. 2 - FEBRUARY 1994; ADDENDUM NO. 3 - JULY 1994; ADDENDUM NO. 3A - JANUARY 1995 as REVISED OCTOBER 1995; and ADDENDUM NO. 4 - MAY 1996.

The Borough of Big Beaver hereby assures the Pennsylvania Department of Environmental Protection that the Borough of Big Beaver, with the needed cooperative efforts of other municipal entities, in accordance to all applicable laws, shall diligently pursue and cause implementation of one or more of the alternate methods of public sewerage collection and treatment as studied/evaluated per the aforesaid revision to its "Official Sewage Facilities Plan" in accordance to, and upon it being determined by local officials in their joint efforts, that the construction and subsequent maintenance and continued operation thereof is economically ~~feasibility~~ FEASIBLE to address present, and long term, public sewage collection/treatment needs of the Borough of Big Beaver and the regional area included in said revision to its "Official Sewage Facilities Plan."

ADOPTED this 10th day of June, 1996.

ATTEST:

Janet E. Kolson
Secretary

BOROUGH OF BIG BEAVER

Joseph R. Lutz
President of Council

I, Janet E. Kolson, Secretary of the Borough of Big Beaver, do hereby certify this is a true and correct copy of the Borough's Resolution No. 08 of 1996, adopted the 10th day of June, 1996.

Janet E. Kolson
Secretary

BIG BEAVER BOROUGH
ORDINANCE NO. 220

AN ORDINANCE OF THE BOROUGH OF BIG BEAVER, COUNTY OF BEAVER, COMMONWEALTH OF PENNSYLVANIA, APPROVING A POLICY FOR THE COLLECTION OF DELINQUENT SEWER USE CHARGES FOR BIG BEAVER BOROUGH MUNICIPAL AUTHORITY ACCOUNTS

WHEREAS, Big Beaver Borough Municipal Authority provides for imposition of a sewer use charge upon all users of the public sanitary sewer serving Big Beaver Borough; and,

WHEREAS, the sewer use charge, and penalties, are set forth in the latest Sewer Rate Resolution adopted by the Big Beaver Borough Municipal Authority; and,

WHEREAS, The Sewer Rate Resolution provides that sewer use charges will be billed on the first of the month and shall be paid not later than the 15th of the month or shall be subject to a 10 percent penalty, and further assesses interest on delinquent accounts of one-half percent per month or any fraction thereof until paid; and,

WHEREAS, procedures for collection of delinquent accounts have been implemented over the years without formal adoption; and

WHEREAS, the Big Beaver Borough Municipal Authority by separate resolution dated Dec. 17th 2018 has adopted the delinquent collection policy herein; and

WHEREAS, the Beaver Falls Municipal Authority provides for the collection of sewer bills of the Big Beaver Borough Sewer System for those with public water; the Big Beaver Borough Municipal Authority provides for the collection of sewer bills for the Sewer System for those without public water;

NOW THEREFORE, BE IT RESOLVED and it is hereby resolved that the policy for collection of delinquent sewer use charges shall be as follows:

SECTION I. OWNER OCCUPIED STRUCTURE:

Section 1.1 An owner who becomes three or more months delinquent in paying the sewer bill will be sent a certified letter notifying the owner:

1. They are in violation of this Ordinance.
2. Penalties for continued violation.

3. Thirty days are provided for payment in full or establishment of a payment plan.
4. A complaint will be filed with the district justice after thirty days and all associated costs added to the account.
5. Judgements remaining unpaid after thirty days will be collected by sheriff's sale of personal and real property.

Section 1.2 An owner's refusal to accept delivery of the certified notice will result in the complaint being filed immediately with the district justice.

SECTION 2. TENANT OCCUPIED STRUCTURE:

Section 2.1 When a tenant becomes three or more months delinquent in paying the sewer bill, a certified letter will be sent notifying the owner of the property:

1. The tenant's account is delinquent and has been subject to penalty and interest.
2. The owner of the premises remains ultimately liable for payment of the bill.
3. They are in violation of this Ordinance.
4. Penalties for continued violation.
5. Thirty days are provided for payment in full or establishment of a payment plan.
6. A complaint will be filed with the district justice after thirty days and all associated costs added to the account.
7. Judgements remaining unpaid after thirty days will be collected by sheriff's sale of personal and real property.

Section 2.2 An owner's refusal to accept delivery of the certified notice will result in the complaint being filed immediately with the district justice.

Section 2.3 Tenant accounts that are chronically delinquent will be terminated and the monthly sewer bill will become the direct responsibility of the property owner.

SECTION 3. Nothing in this Ordinance shall prohibit Borough or Borough Municipal Authority personnel from attempting collection by personal contact or other informal means prior to enlisting the collection methods described in Section 1 and Section 2.

SECTION 4. This procedure is for internal use only and failure to adhere to the procedures contained herein shall not constitute a defense to the charges and shall not be grounds for dismissal of the charges or in any way relieve the owner of liability.

SECTION 5. All ordinances, resolutions or parts of ordinances/resolutions not in accord with this ordinance are hereby repealed insofar as they are inconsistent with this ordinance.

APPROVED AND ADOPTED this 18th day of December 2018.

BY:

Becky Bell

Becky Bell, Secretary

THE BOROUGH OF BIG BEAVER:

Jason Landsbach

Jason Landsbach, President

This Ordinance has been reviewed and approved this 18th day of Dec, 2018 by the Mayor of the Borough of Big Beaver.

Donald W. Wachter

Donald Wachter, Mayor

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME**: Big Beaver Municipal Authority (Attn: AORO)

Date of Request: 11/30/22 Submitted via: ☑ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini, Esquire (as counsel for the City of Beaver Falls) Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☑ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or records concerning the Big Beaver Municipal Authority and the City of Beaver Falls as it would relate to City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☑ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☑ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☐ $_____.**

---

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

## CharLee Rosini

**From:** Secretary <secretary@bigbeaverborough.org>
**Sent:** Wednesday, December 14, 2022 9:47 AM
**To:** CharLee Rosini
**Subject:** RE: Big Beaver Municipal Authority - RTK Request dated 11-30-22
**Attachments:** Municipal Authority Records.PDF

Good Morning CharLee,

Please see the attached document regarding the Right To Know request received. The Big Beaver Municipal Authority has been dissolved and is now a part of Big Beaver Borough.

Big Beaver Municipal Authority Resolution 8-17-01
Notice 2009 Joint Sewer Users Updates and Changes
Sewage Billing Agreement June 2010
Sewage Billing Agreement May 2014
Municipal Authority Agreement November 2001
Commonwealth of PA – Application to Join existing Municipal Authority

Please confirm receipt and let me know if you have any questions.

Thanks,
Jenn

---

**From:** CharLee Rosini <CRosini@gtnlaw.com>
**Sent:** Wednesday, December 7, 2022 5:10 PM
**To:** Secretary <secretary@bigbeaverborough.org>
**Subject:** RE: Big Beaver Municipal Authority - RTK Request dated 11-30-22

Thank you for the update Jennifer!

Best,
CharLee

---

**From:** Secretary [mailto:secretary@bigbeaverborough.org]
**Sent:** Wednesday, December 07, 2022 4:02 PM
**To:** CharLee Rosini <CRosini@gtnlaw.com>
**Subject:** RE: Big Beaver Municipal Authority - RTK Request dated 11-30-22

Hi Charlee,

Your Right To Know request is being worked on. I called your office and left a message for you. Due to the nature of the request, the Borough is requesting the 30-day extension on the request.

Please let me know if you have any questions.

Thanks,

Jennifer Gasser
Secretary
Big Beaver Borough
114 Forest Drive
Darlington, PA 16115
Phone: 724-827-8962
Fax: 724-827-2415

***IMPORTANT NOTICE: We have recently made changes to our contact information. Please update your records to this email.*** *This e-mail message is intended to be received only by persons entitled to receive the confidential information it may contain. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system.*

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**From:** Secretary
**Sent:** Monday, December 5, 2022 10:51 AM
**To:** CharLee Rosini <CRosini@gtnlaw.com>
**Subject:** RE: Big Beaver Municipal Authority - RTK Request dated 11-30-22

Good Morning CharLee,

I have received and reviewing your Right To Know request. This went to my Spam folder initially.

Thanks,
Jenn

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**From:** CharLee Rosini <CRosini@gtnlaw.com>
**Sent:** Wednesday, November 30, 2022 2:07 PM
**To:** Secretary <secretary@bigbeaverborough.org>
**Subject:** Big Beaver Municipal Authority - RTK Request dated 11-30-22

Good Afternoon Ms. Gasser:

I hope you are having a nice day so far. Kindly accept the attached Right to Know Request.

Thank you in advance for your assistance with this request.

Best regards,
CharLee Rosini
Associate Attorney
Gaitens, Tucceri & Nicholas, P.C.
519 Court Place
Pittsburgh, PA 15219
T: (412) 391-6920 | F: (412) 391-1189

# RESOLUTION

## No. 8-17-01

## BIG BEAVER MUNICIPAL AUTHORITY

**WHEREAS**, certain delinquent accounts were turned over to Portnoff and Associates; and

**WHEREAS**, Portnoff and Associates has now taken over the billing on certain past delinquent balances; and

**WHEREAS**, Beaver Falls Municipal Authority presently collects all Big Beaver Municipal Authority's accounts; and

**WHEREAS**, there is a need to write off the portion of the delinquent accounts that have been turned over to Portnoff and Associates; and

**WHEREAS**, Beaver Falls Municipal Authority will continue to bill said customers but only on the portion not turned over to Portnoff and Associates; and

**WHEREAS**, there is a need for a resolution authorizing the Solicitor of the Big Beaver Municipal Authority to notify Beaver Falls Municipal Authority of the accounts that are to be written off.

**NOW, WHEREFORE**, it is RESOLVED that the Big Beaver Municipal Authority's Solicitor shall notify Beaver Falls Municipal Authority of accounts that are turned over to Portnoff and Associates from time to time as authorized by the Big Beaver Municipal Authority Board.

**BIG BEAVER MUNICIPAL AUTHORITY**

ATTEST:

By Paul E. Phillips
Chairman

Janet E. Folson
Secretary

# NOTICE 2009 JOINT SEWER USERS UPDATES AND CHANGES

Date: SEPTEMBER 24, 2009

1 **RATES:** The rate of $3.20 per thousand gallons will remain in effect for the year 2010. However, we will review the financial status again in July 2010 and determine at that time if an increase is needed for the year 2011. I believe an increase in line with the cost of living should be expected.

2 **LATE FEE CHARGE: RESOLUTION 1209 -** Effective January 2010 a 5% late fee charge will be added to any community who fails to pay their quarterly bill on time. This action was taken by council to ensure continued prompt payments by all communities. For the past year no community failed to pay on time, so this action should have no effect on any community.

Enclosed is a copy of RESOLUTION 1209

3 **TAP IN FEE: RESOLUTION 1210 -** Effective January 2010 the tap-in fee will increase from $214.00 to $650.00 per E.D.U. Widmer Engineering did a study of the value for a tap-in according to Act 57. It was determined to be $650.00 per E.D.U.

Enclosed is a copy of RESOLUTION 1210

4 **METERS:** New meters and communications are being installed at this time. These meters will allow each community to monitor their flow entering the sewer system at the Beaver Falls line and infiltration problems will be easier to recognize.
As each communities new metering is completed, I will contact that community and demonstrate how this new metering system works and what effect infiltration has on overloading the treatment plant.
At this time, Big Beaver Municipal Authority and North Sewickley/Eastvale communities are complete and in operation.

**If there are any questions, please contact me at 724-843-7184 ext. 6**
**Jim Breznai**
**Chief Mechanic / Supervisor**

cc: Beaver Falls - Patterson Twp.- Patterson Heights- White Twp.- West Mayfield - East vale - Big Beaver - North Sewickley

CITY OF BEAVER FALLS
RESOLUTION 1210

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS ESTABLISHING THE RATE OF THE SEWER TAP-IN FEES FOR BOTH JOINT SEWER USERS AND PROPERTY OWNERS IN THE CITY OF BEAVER FALLS.

WHEREAS, the Council of the City of Beaver Falls pursuant to the Third Class City Code is empowered to establish and adjust certain fees collected by the City of Beaver Falls; and

WHEREAS, it has been determined that the sewage tap-in fees collected by the City of Beaver Falls need adjusted; and

WHEREAS, the City of Beaver falls Sewage treatment plant services not only City users but also outlying municipalities known as Joint Sewer Users.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Beaver falls, and it is hereby resolved by virtue of the authority of the same as follows:

1. The tap-in fee for property owners within the municipalities that are part of the Joint Sewer Users is hereby set at Six Hundred and Fifty ($ 650.00) Dollars per tap-in.

2. The tap-in fee for property owners within the City of Beaver Falls is hereby set at Two Thousand ($ 2,000.00) Dollars per tap-in.

3. Any Resolution conflicting with the provisions of this Resolution is hereby repealed so far as the same affects this Resolution.

4. This Resolution shall be effective immediately upon passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th Day of September, 2009.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS

Mayor

CITY OF BEAVER FALLS
RESOLUTION NO. 1209

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA APPROVING THE IMPOSITION OF A LATE FEE ON ALL JOINT SEWER USER MUNICIPALITIES TO BE APPLIED THE DAY FOLLOWING THE PAYMENT'S DUE DATE AND TO BE ADDED TO THE FOLLOWING QUARTERLY BILL.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Beaver Falls, Beaver County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

1. In order to insure prompt receipt of fees due and owing from Joint Sewer User municipalities, it has become necessary to implement a late fee.

2. That said late fee is to be assessed in an amount equal to the five percent (5%) of the outstanding and late bill. The late fee will be imposed the day after the bill was due and will be incorporated into the following quarterly bill.

3. That this Resolution shall be effective immediately.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th day of Sept., 2009.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS:

By: [signature]
Mayor

# SEWAGE BILLING AGREEMENT

**THIS AGREEMENT**, made this 22nd day of June, 2010 by and between the **BEAVER FALLS MUNICIPAL AUTHORITY**, a body corporate and politic, organized pursuant to the Pennsylvania Municipality Authorities Act of 1945, as amended, having its principal office at 1425 Eighth Avenue, Beaver Falls, Pennsylvania, hereafter called party of the first part,

A
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D

**BIG BEAVER MUNICIPAL AUTHORITY**, a borough situate in Beaver County, Pennsylvania, hereinafter called party of the second party.

**WHEREAS,** the party of the first part supplies water to customers and premises in various municipalities within Beaver County including the Boroughs of Big Beaver and Homewood; and,

**WHEREAS,** the party of the second part provides sewage collection and/or treatment services to various customers within the Boroughs of Big Beaver and Homewood; and

**WHEREAS,** party of the second part is authorized to designate the party of the first part to act as its billing and collecting agent for the rentals, rates and charges imposed by the party of the second part for the use of its sewer, sewage system and/or treatment works and cost; and,

**WHEREAS,** the party of the second part is authorized to designate the party of the first part as its billing and collecting agent and the party of the first part is willing to act as such upon the following terms and conditions:

**NOW WITNESSETH THAT** in consideration of the mutual covenants herein set forth, the parties hereto agree as follows:

1. The recitals set forth above are incorporated herein by reference thereto.

2. Party of the second part does hereby name, appoint and designate the party of the first part to act as its billing and payment collection agent for the rentals, rates and charges imposed by the party of the second part on owners and occupants or premises serviced by the party of the second part's sewers, sewerage system and/or sewage treatment works.

3. Billing and receipt of payment shall be made by the party of the first part as follows:

   A. Party of the first part, as it bills for its own water services, shall separately set forth in the bill the sewage charge imposed by the party of the second part on the same customer/premises. Party of the first part shall also bill any flat rate sewage charges to customers not serviced by party of the first part designated by party of the second party upon receipt of said rates.

B. While the sewage charge shall be set forth separately from the water charge for the same customer/premises, both the sewage charge and the water service charge shall be payable to and received by the party of the first party.

C. Any partial payment of the joint but separate bill shall, unless otherwise designated by the customer, be applied on a ratio basis. All accounts will be administered using current policies and procedures adopted by the Board of Directors of the Beaver Falls Municipal Authority.

D. On a monthly basis, on or about the 10th of the month, the party of the first part shall remit to the party of the second part by check, the amount the party of the first part has received in payment for the sewage charges together with a statement which will indicate those customers who have paid their sewage bill and the amount so paid.

E. Customers will be billed on a monthly basis.

4. Upon commencement of this Agreement, party of the first part will provide the party of the second part with a listing of its customers in the party of the second part's service area. The party of the second part shall reconcile this listing with its own customer list and indicate to the party of the first part, in writing, any additional customers to be billed and/or the identity of customers by name and address to be billed which differ from the original list although the premises served may be the same.

5. The party of the second part shall be responsible for notifying the party of the first part in a timely fashion of any change in customer identity or location, newly connected customers, rate changes or special assessments of additional charges cost and penalties. The party of the second part shall also notify the party of the first part as to the payee and address of where the monthly remittance check shall be mailed.

6. The party of the second part shall pay to the party of the first part the sum of One Dollar and twenty-five cents ($1.25) per each account billing made by the party of the first part. The party of the first part shall bill the party of the second part for the service rendered at the time the customer bills are mailed. Payment shall be due upon receipt thereof.

7. The party of the first part shall not be responsible for the actual collection of any past due or delinquent account of the party of the second part. Nothing herein shall, however, amend any existing water shut-off agreement or preclude the parties from entering into a water shut-off agreement for delinquent sewage accounts pursuant to 53 P.S. §§2261.

8. The term of this Agreement shall be for a period of four (4) years from the day and year first above written; provided, however, that either party may terminate this Agreement by giving ninety (90) days written notice of termination to the non-terminating party.

10. This Agreement is made and executed pursuant to a resolution of the Board of Directors of the party of the first part adopted on the 2ND day of JUNE, 2010 a quorum being present and a majority voting in favor thereof authorizing and directing the same to be done.

11. This Agreement is made under and by virtue of a resolution of the Big Beaver Municipal Authority, duly passed at a regular meeting thereof held on the 19TH day of MAY, 2010, a quorum being present, authorizing the same to be done.

ATTEST

ASST. SECRETARY

BEAVER FALLS MUNICIPAL AUTHORITY

BIG BEAVER MUNICIPAL AUTHORITY

SECRETARY/TREASURER

VICE CHAIRMAN

# SEWAGE BILLING AGREEMENT

**THIS AGREEMENT**, made this 22nd day of May, 2014 by and between the **BEAVER FALLS MUNICIPAL AUTHORITY**, a body corporate and politic, organized pursuant to the Pennsylvania Municipality Authorities Act of 1945, as amended, having its principal office at 1425 Eighth Avenue, Beaver Falls, Pennsylvania, hereafter called party of the first part,

A
N
D

**BIG BEAVER MUNICIPAL AUTHORITY**, a borough situate in Beaver County, Pennsylvania, hereinafter called party of the second party.

**WHEREAS,** the party of the first part supplies water to customers and premises in various municipalities within Beaver County including the Boroughs of Big Beaver and Homewood; and,

**WHEREAS,** the party of the second part provides sewage collection and/or treatment services to various customers within the Boroughs of Big Beaver and Homewood; and

**WHEREAS,** party of the second part is authorized to designate the party of the first part to act as its billing and collecting agent for the rentals, rates and charges imposed by the party of the second part for the use of its sewer, sewage system and/or treatment works and cost; and,

**WHEREAS,** the party of the second part is authorized to designate the party of the first part as its billing and collecting agent and the party of the first part is willing to act as such upon the following terms and conditions:

**NOW WITNESSETH THAT** in consideration of the mutual covenants herein set forth, the parties hereto agree as follows:

1. The recitals set forth above are incorporated herein by reference thereto.

2. Party of the second part does hereby name, appoint and designate the party of the first part to act as its billing and payment collection agent for the rentals, rates and charges imposed by the party of the second part on owners and occupants or premises serviced by the party of the second part's sewers, sewerage system and/or sewage treatment works.

3. Billing and receipt of payment shall be made by the party of the first part as follows:

   A. Party of the first part, as it bills for its own water services, shall separately set forth in the bill the sewage charge imposed by the party of the second part on the same customer/premises. Party of the first part shall also bill any flat rate sewage charges to customers not serviced by party of the first part designated by party of the second party upon receipt of said rates.

B. While the sewage charge shall be set forth separately from the water charge for the same customer/premises, both the sewage charge and the water service charge shall be payable to and received by the party of the first party.

C. Any partial payment of the joint but separate bill shall, unless otherwise designated by the customer, be applied on a ratio basis. All accounts will be administered using current policies and procedures adopted by the Board of Directors of the Beaver Falls Municipal Authority.

D. On a monthly basis, on or about the 10th of the month, the party of the first part shall remit to the party of the second part by check, the amount the party of the first part has received in payment for the sewage charges together with a statement which will indicate those customers who have paid their sewage bill and the amount so paid.

E. Customers will be billed on a monthly basis.

4. Upon commencement of this Agreement, party of the first part will provide the party of the second part with a listing of its customers in the party of the second part's service area. The party of the second part shall reconcile this listing with its own customer list and indicate to the party of the first part, in writing, any additional customers to be billed and/or the identity of customers by name and address to be billed which differ from the original list although the premises served may be the same.

5. The party of the second part shall be responsible for notifying the party of the first part in a timely fashion of any change in customer identity or location, newly connected customers, rate changes or special assessments of additional charges cost and penalties. The party of the second part shall also notify the party of the first part as to the payee and address of where the monthly remittance check shall be mailed.

6. The party of the second part shall pay to the party of the first part the sum of One Dollar and fifty cents ($1.50) per each account billing made by the party of the first part. The party of the first part shall bill the party of the second part for the service rendered at the time the customer bills are mailed. Payment shall be due upon receipt thereof.

7. The party of the first part shall not be responsible for the actual collection of any past due or delinquent account of the party of the second part. Nothing herein shall, however, amend any existing water shut-off agreement or preclude the parties from entering into a water shut-off agreement for delinquent sewage accounts pursuant to 53 P.S. §§2261.

8. The term of this Agreement shall be for a period of four (4) years from the day and year first above written; provided, however, that either party may terminate this Agreement by giving ninety (90) days written notice of termination to the non-terminating party.

10. This Agreement is made and executed pursuant to a resolution of the Board of Directors of the party of the first part adopted on the 22nd day of May, 2014 a quorum being present and a majority voting in favor thereof authorizing and directing the same to be done.

11. This Agreement is made under and by virtue of a resolution of the Big Beaver Municipal Authority, duly passed at a regular meeting thereof held on the 19th day of May, 2014, a quorum being present, authorizing the same to be done.

ATTEST

John Sylvester

BEAVER FALLS MUNICIPAL AUTHORITY

Jay T. Fra

BIG BEAVER MUNICIPAL AUTHORITY

Janet E. Kolson
SECRETARY/TREASURER

Sandra DeSanzo
Chair

# Agreement

**THIS AGREEMENT,** made this 14th day of November, 2001,

*by and between:*

**THE BEAVER FALLS MUNICIPAL AUTHORITY,** a body corporate and politic, having its principal office at 1425 Eighth Avenue, Beaver Falls, Pennsylvania,

*hereinafter referred to as "Water Authority".*

and

**BIG BEAVER MUNICIPAL AUTHORITY,** a body corporate and politic, having its principal office at 114 Forest Drive, Darlington, Pennsylvania,

*hereinafter referred to as "Big Beaver":*

**WHEREAS,** the *WATER AUTHORITY* supplies water to various municipalities within Beaver County, including parts of Big Beaver Borough and Homewood Borough; and

**WHEREAS,** *BIG BEAVER* provides sewage transportation services to some of the houses and customers situate within Big Beaver Borough and Homewood Borough; and

**WHEREAS,** the Pennsylvania Legislature has enacted a law authorizing the WATER AUTHORITY to shut off water supply to a premises for the non-payment of sewage services, rental and other charges to the premises as set forth in the Act of April 14, 1949, P.L. 482, as amended, 53 P.S. §2201, et seq.; and

**WHEREAS,** the Municipal Authorities Act also provides that *BIG BEAVER* and the *WATER AUTHORITY* may enter into an Agreement concerning such water shut-off services.

**NOW WITNESSETH THAT,** in consideration of the mutual promises, covenants and performance hereinafter set forth and intending to be legally bound hereby, the *WATER AUTHORITY* and *BIG BEAVER* agree as follows:

1. Upon the written request of *BIG BEAVER*, as more fully described herein below, the *WATER AUTHORITY*, within five (5) working days after *BIG BEAVER* has made said written request, shall go to the premises for the purpose of shutting off the water supply.

2. If the delinquent amount of the sewage bill is collected after the request for water shut-off is made but up to and including the time when the personnel from the *WATER AUTHORITY* and *BIG BEAVER* go to the premises for the purpose of shutting off the water supply, *BIG BEAVER* shall pay the *WATER AUTHORITY* the existing water shut-off fee (as established annually by the *WATER AUTHORITY*) for each water main that was to have been shut off. If the delinquent amount of the sewage bill is not collected when the *WATER AUTHORITY* and *BIG BEAVER* personnel go to the premises and the water is shut off, *BIG BEAVER* shall pay the *WATER AUTHORITY* the then existing water shut-off and restoration fee (as established annually by the *WATER AUTHORITY)* for each water main that is shut off. This fee also includes the cost of the *WATER AUTHORITY* again going to the premises to turn the water back on once the delinquent charge has been paid, and *BIG BEAVER* authorizes, in writing, that the water service be restored to the premises.

3. Payment of said amount by *BIG BEAVER* to the *WATER AUTHORITY* shall be made at the time when the *WATER AUTHORITY* and *BIG BEAVER* personnel go to the premises to shut off the water.

4. This Agreement may be terminated by either party upon thirty (30) days written notice of termination.

5. *BIG BEAVER* agrees to deliver to the *WATER AUTHORITY*, concurrently with execution and delivery of this Agreement, a certified copy of a Resolution by *BIG BEAVER* authorizing *BIG BEAVER* to invoke the shut-off provisions of the Act of April 14, 1949, P.L. 482, 53 P.S. §2261 et seq., as amended, to enforce collection of sewage collection treatment service charges. Said Resolution shall also set forth the name and title of any officer, agent or employee of *BIG BEAVER* who shall have the power to: (a) request the shut-off of water service for delinquent accounts; (b) certify compliance by *BIG BEAVER* with all applicable provisions of the aforesaid Act of Assembly; and (c) direct restoration of water service to the premises involved. *BIG BEAVER* shall also, from time to time, furnish the *WATER AUTHORITY* with a certified copy of any subsequent resolution by *BIG BEAVER* changing or repealing any provision of said original Resolution.

6. The *WATER AUTHORITY* will not consider a request for a water shut-off unless the following conditions and procedures are met and strictly followed:

A. *BIG BEAVER* will provide the *WATER AUTHORITY* with a copy of the Notice of Intent to Shut-off Water mailed to the person or persons liable for the sewage charges, together with a copy of the certified mail sender's receipt for said Notice.

B. The person designed in paragraph five (5) shall execute an Affidavit and deliver it to the *WATER AUTHORITY* at the same time that the written request for shut-off is made stating:

1) The name and address of the person or persons liable for the payment of the sewage charges, the name of the occupants and whether the occupants are tenants or owners of the property.

2) The location of the property, including house number and street address.

3) That the account is delinquent for a period of thirty (30) or more days from the due date of the bill and the date of the last billing.

4) That a Notice of Intent to Shut-off the Water for failure to pay the sewage bill has been sent to the person or persons liable for the account at their last known address and the date of the mailing hereof.

5) That the premises have also been posted at the main entrance with a Notice of Intent to Shut-off Water and the date the notice was posted and the name of the person posting said notice.

6) That at least ten (10) days have elapsed from the time the Notice of Intent to Shut-off Water was mailed and posted.

7) The amount due on the sewage account, together with any other charges, interest or penalties to be collected.

8) That the water is not being shut off because a previous tenant has failed to pay the sewage charges.

7. Upon receipt of the written request for shut-off and if no Affidavit of Defense is received by the *WATER AUTHORITY* during a period of at least ten (10) days from the mailing and posting of the Notice of Intent to Shut-off Water from the person or persons liable for the payment of said sewage charges, the person designed in paragraph five (5) above shall contact the *WATER AUTHORITY* personnel and make arrangements within five (5) working days as to when the water can be shut off. *BIG BEAVER* shall provide a representative to accompany the *WATER AUTHORITY* representative to the premises to explain to the occupant/owner the reason for the shut-off or to collect the amount due for the sewage charges. In no case will the *WATER AUTHORITY* personnel collect the delinquent sewer service charges. The *WATER AUTHORITY* personnel will only locate the valve and turn the water off if the account is not then and there paid to the *BIG BEAVER* representative.

8. *BIG BEAVER* shall have the duty to make periodic inspections to determine whether the water service has been restored improperly. If so, the *WATER AUTHORITY* agrees to return to the property to shut off the water service upon receipt of a written notice from the authorized representative of *BIG BEAVER* as stated in paragraph five (5) above. Any such return trips made by the *WATER AUTHORITY* shall be charged to *BIG BEAVER* at the same rate as the water shut-off fee referred to in paragraph two (2) above. Provided further that if it is necessary for the *WATER AUTHORITY* to fill the curb box to prevent the repeated unauthorized resumption of water service, the then existing curb box fee shall be imposed upon *BIG BEAVER* and paid to the *WATER AUTHORITY* for the filling and cleaning of the curb box.

9. *BIG BEAVER* shall be responsible to the *WATER AUTHORITY* for loss of revenue, computed on an estimated usage basis for the subject account due to any shut-off for non-payment of the sewage bill.

10. Nothing contained in this Agreement shall in any way affect the right of the *WATER AUTHORITY* to shut off water service to any property served by *BIG BEAVER* for the non-payment of charges for water service to such property or for any other reason for which the *WATER AUTHORITY* may properly terminate water service. The shut off of water service by the *WATER AUTHORITY* for its own purposes shall not subject it to liability of any kind to *BIG BEAVER* for any loss that may result from such shut off.

11. The *WATER AUTHORITY* shall not be liable for injury to any person, including death, or damage to any property directly or indirectly arising out of the shut off of water service pursuant to this Agreement, at the direction of *BIG BEAVER*. *BIG BEAVER* does by this Contract agree to indemnify and hold the *WATER AUTHORITY*, its directors, officers, agents and employees harmless from any claim, damages, payment, cost or expense, including counsel fees, for injury to any person, including death, or damage to any property, directly or indirectly arising from the shut off of water service, for a delinquent sewage account. It is expressly understood by the *WATER AUTHORITY* and *BIG BEAVER* that this Agreement of indemnification shall not require *BIG BEAVER* to indemnify the *WATER AUTHORITY* for the negligent or otherwise tortious acts of the *WATER AUTHORITY'S* officers, agents and employees in shutting off water services pursuant to this Agreement.

12. This Agreement is duly made and entered into pursuant to a Resolution of the Beaver Falls Municipal Authority duly passed at a regularly scheduled meeting of its Board of Directors held on the _____ day of _____, 2001, a quorum being present and voting in favor thereof and pursuant to a Resolution of the Board of Directors of the Big Beaver Municipal Authority, duly passed at a regularly scheduled meeting of its Board, held on the 14th day of November, 2001, a quorum being present and voting in favor thereof.

**IN WITNESS WHEREOF**, the parties by their hands and seals the day and year first above written.

THE BEAVER FALLS MUNICIPAL AUTHORITY

ATTEST:

_____
Secretary

By: _____
Chairman

_____
Witness

_____
Witness

BIG BEAVER MUNICIPAL AUTHORITY

ATTEST:

_____
Secretary

By: _____
Chairman

_____
Witness

_____
Witness

Copy

Applicant's Account No. _____

Filed this _____ day of

_____, 1996.
Commonwealth of Pennsylvania
Department of State

_____
Secretary of the Commonwealth

**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF STATE**
**CORPORATION BUREAU**

**Application to Join**
existing Municipal Authority

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In compliance with the requirements of the Municipal Authorities Act, namely the Act of May 2, 1945, P.L. 382, as amended, including but not limited to Section 3.2 and Section 3 thereof [53 P.S. 304 and 303 respectively], the undersigned duly authorized officers of the **Big Beaver Municipal Authority**, the **Borough of Homewood** and the **Borough of Big Beaver**, file this **Application to Join** for the purpose of having the Borough of Homewood to be a participating municipality to and of the Big Beaver Municipal Authority, hereby certify that:

1. The name of the municipal authority is:

**BIG BEAVER MUNICIPAL AUTHORITY**

2. The said municipal authority was created solely by the Borough of Big Beaver and was duly granted a **Certificate of Incorporation** on May 31, 1963 pursuant to the provisions of the Municipal Authorities Act, being the Act of May 2, 1945, P.L. 382, as amended. [53 P.S. 301 et seq.], and per Section 3.2 of said Act [53 P.S. 304], the Borough of Homewood is a joining municipality to said Authority.

3. No other Authority has been organized under the said Municipal Authorities Act, or under any previous Act of Assembly of the Commonwealth of Pennsylvania authorizing and/or regulating municipal authorities by either the Borough of Big Beaver or the Borough of Homewood, and the **Big Beaver Municipal Authority** is in existence in or for the municipalities, the said Borough of Big Beaver and the Borough of Homewood, both situate within Beaver County, Pennsylvania.

4. The name of the joining or in-coming municipality is the Borough of Homewood, and the names and addresses of its present officers are as follows:

Mayor - Edward Barnhouse, P.O. Box 8017, Racine, PA 15010

President of Council - Alfred DeSanzo, P.O. Box 8417, Racine, PA 15010

Council Members - Alan DeSanzo, P.O. Box 8437, Racine, PA 15010
Viola Freed, P.O. Box 8027, Racine, PA 15010
David Huffman, Sr.. P.O. Box 8425, Racine, PA 15010
Jerry Mussey, R.D.#3, Beaver Falls, PA 15010
Frank Policaro, P.O. Box 8014, Racine, PA 15010
Jeffrey Policaro, P.O. Box 8414, Racine, PA 15010

Secretary - Elaine Buzzelli, P.O. Box 8067, Racine, PA 15010

5. The membership of the governing Board of the Big Beaver Municipal Authority is and shall remain five in number, following staggering first appointment terms upon organizing as a joint authority as hereafter stated, with the term of office being five (5) years, with two members always being appointed by each municipality and alternating the appointment of the fifth member every other term by the joining municipalities of Big Beaver Borough and Homewood Borough, with the initial members of the Board of the joint authority being:

a.) Russell Ernfield, 134 Forest Drive, Darlington, PA 16115, for initial joint authority board member term of five (5) years, appointed by Big Beaver Borough.

b.) Nick V. Colao, II, 1431 Shenago Road, Darlington, PA 16115, for initial joint authority board member term of four (4) years, appointed by Big Beaver Borough.

c.) John A. Filby, 1116 Shenago Road, Beaver Falls, PA 25020, for initial joint authority board member term of three (3) years, appointed by Big Beaver Borough.

d.) James C. Cananzi, P.O. Box 8412, Racine, PA 15010, for initial joint authority board member term of two (2) years, appointed by Homewood Borough.

e.) Robert K. McKeel, II, P.O. Box 8054, Racine, PA 15010, for initial joint authority board member term of one (1) year, appointed by Homewood Borough.

6. The project or projects to be undertaken by the Big Beaver Municipal Authority is and shall be such projects permitted and authorized under and pursuant to the aforesaid Municipal Authorities Act as the Borough of Big

Beaver and the Borough of Homewood shall specify by ordinance or resolution from time to time, including but not limited to implementation of a public sewage project in accordance to said Borough's approved Comprehensive Sewage Facilities Plan.

IN WITNESS WHEREOF, the undersigned officials of the Big Beaver Municipal Authority, Big Beaver Borough and Homewood Borough have hereunto set their respective hands and seals to this Application to Join the day and year set forth as to each.

Attest:

Janet E. Kolson
Secretary

Dated: August 21, 1996

**Big Beaver Municipal Authority**

By: Nicholas V. Colavita
Chairman-President

Attest

_____

Dated: August _____, 1996

**Borough of Homewood**

By: Alfred DeSanzo
President of Council

Attest

Janet E. Kolson

Dated: August 22, 1996

**Borough of Big Beaver**

By: Joseph R. Fantauzzi
President of Council

APPROVED AND FILED IN THE DEPARTMENT OF STATE ON THE _____ DAY OF

_____, 1996.

_____
Secretary of the Commonwealth

# EXHIBIT F4

02003
TFS
JHW
CF

RECEIVED

FEB 07 2003

WIDMER ENGINEERING, INC.

# AGREEMENT

THIS AGREEMENT, made and entered into this 9th day of January, 2003, by and between:

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**, a Municipal Authority, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "Authority",

AND

**CITY OF BEAVER FALLS**, a Third-Class City, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "City".

**WHEREAS**, the City owns, operates and maintains an existing sewage treatment system and public sewage collection and conveyance system; and

**WHEREAS**, the Authority is planning the construction of a public sewage collection and conveyance system for Phase 2 of its sanitary sewer project covering a portion of North Sewickley Township; and

**WHEREAS**, the City has agreed to provide treatment at its treatment facility for approximately 950 EDU's of sanitary sewage generated from the areas of the North Sewickley Township which are within Phase 2 of the Authority's sanitary sewer project; and

**WHEREAS**, the Authority desires to convey the sanitary sewage generated by Phase 2 of its sanitary sewer project to the collection and conveyance system and sewage treatment system of the City,

**NOW, THEREFORE,** the parties, for and in consideration of the foregoing promises and mutual covenants and obligations contained herein, and intending to be legally bound, do hereby agree as follows:

## ARTICLE I
## DEFINITIONS

**Section 1.01 – Definitions.**

In addition to the terms defined elsewhere in this Agreement, the following terms, when used in this Agreement, shall have the following meanings:

A. **Agreement** means this Intermunicipal Sewage Services Agreement as amended or supplemented at the time in question.

B. **Consulting Engineer** means a person who is engaged in the engineering profession, who is a registered professional engineer under the laws of the Commonwealth of Pennsylvania, and who is charged with monitoring the construction and operation of sewage systems. A "Consulting Engineer" may be employed or retained by either party.

C. **Costs.** When used with reference to Capital Additions or the Treatment Plant, Costs shall mean expenditures in respect to said Capital Additions or the Treatment Plant which constitute proper items of cost in accordance with generally accepted engineering and accounting practices. In determining Cost of Capital Additions or Cost of the Treatment Plant which are to be shared by the City and the Authority and other municipal entities using the City System, there shall first be deducted from total costs all

Federal, State and other construction grants received by the City in aid for such construction. The costs may include, but not be limited to, the following items:

1. Costs and expenses of acquiring, by purchase or condemnation of land, rights-of-way, easements, licenses and any other interests in real property, including amounts of any award or final judgment in or settlement or compromise of any condemnation proceeding, all damages incident to or consequent upon acquisition or construction, and all fees and expenses incidental thereto, including without limitation, engineering and legal fees and costs of abstracts of title, title insurance, title opinions and title reports;

2. Amounts paid to contractors, builders, suppliers, materialmen, workmen and laborers;

3. Costs of performance, payment, maintenance or other bonds, fees for permits and premiums for insurance of any type deemed necessary during construction;

4. Fees and expenses of engineers and architects for the preparation of studies, tests, surveys, reports, maps, plans and specifications and for supervision and inspection services;

5. Legal, accounting and auditing expenses incurred for the acquisition, construction and installation of a Capital Facility or any part thereof;

6. Expenses incurred in connection with the financing of a Capital Facility in whole or in part, including accounting, auditing, legal and financial advisor fees and expenses, financial and printing charges, bond insurance



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premiums and charges for other credit enhancement facilities, advertising expenses and the fees and expenses of paying agents, escrow agents and trustees; and

7. Capitalized interest on indebtedness during the construction of a Capital Facility.

D. **Fiscal Year** means the period of twelve months beginning on January 1 of each year.

E. **Operating Expenses** means the reasonable, proper and necessary costs of management and operation of sewage systems including, but not limited to, labor, chemicals, utilities, equipment, materials, supplies and ordinary maintenance, repair and replacement of the sewage collection and conveyance systems, pumping facilities, treatment plant and appurtenances thereto determined in accordance with generally accepted engineering and accounting practices.

F. **Beaver Falls Plant** means the sewage treatment plant owned, operated and maintained by the City and having on the date of this Agreement an average daily design capacity of 4.8 million gallons per day (MGD).

## ARTICLE 2
## SERVICE AREA

**Section 2.01 – Service Area.**

The City will accept and the Authority will deliver to the City's collection system for transmission and treatment by the City all sanitary sewage which will emanate from North Sewickley Township in accordance with the current Act 537 Plan. The area included in the

aforesaid Act 537 Plan is shown on a map attached hereto, made a part hereof and marked as Exhibit "A". The Authority agrees that it will transport only the sanitary sewage originating from the area shown on Exhibit "A" and not from any other area of North Sewickley Township without having obtained the written approval of the City.

**Section 2.02 – Maintenance of Collection System.**

The Authority will maintain the sewage collection and conveyance system within its jurisdiction in a state of good repair and operating condition.

## ARTICLE 3
## MANNER OF COLLECTION

The Authority shall construct such sewers that are necessary to connect the City's existing sewer system at one connection point located as shown on the drawing attached hereto, made a part hereof and marked as Exhibit "B". Said connection shall be made in accordance with quality construction practice as to not interfere with the flows and use of the existing manholes.

## ARTICLE 4
## RATES AND CHARGES

**Section 4.01 – Treatment Charge: Rates.**

A. The rate charged to the Authority shall be based upon a cost per thousand gallons of water usage by Authority customers conveyed to the City by the Authority over the monthly period. Said rate shall be reasonable and uniform and shall initially be the same rate as that charged to all other customers of the City but may subsequently vary consistent with Article 5. The actual billing procedure between the parties shall be as agreed between the parties from time to time.



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B. The City shall notify the Authority by letter of any proposed change in the rate at least sixty (60) days prior to the time that said rate shall take effect. The City shall include with the notice to the Authority a complete copy of the proposed revised rate schedule for its sanitary sewer customers.

**Section 4.02 – Invoices.**

Invoices for the amount payable by the Authority under this Article shall be submitted by the City to the Authority promptly and said invoices shall be payable within thirty (30) days after the invoice date.

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## CAPITAL ADDITIONS

**Section 5.01 – General.**

The City shall have the right to exercise exclusive discretion in determining what capital improvements or expansions to its treatment plant are necessary. The Authority recognizes that it may be liable for the cost of any treatment plant upgrade on a proportional basis. However, unless the Authority agrees, it shall only be liable for the cost of any betterment, improvement or addition to the City's treatment plant which improves sanitary sewage service to the Authority's customers.

**Section 5.02 – Costs to be Charged Proportionally.**

In the event that Capital Additions are required which the City is liable to pay or agrees to pay under Section 5.01 above, the rate to be set shall include the cost of said Capital Additions, including all financing costs and debt service amortization requirements on a proportional basis consistent with prior provisions of this Agreement.

**Section 5.03 – Capital Additions Requested by the Authority.**

In the event that the Authority requests that a Capital Addition be added in order to accommodate its needs, the City shall cooperate with the Authority and cause said request to be fulfilled if practicable. The City shall design and cause said Capital Addition to be financed, provided that the Authority agrees to bear said costs. The Authority shall have the option to elect to obtain the financing itself and pay a lump sum to the City to complete the project. In the alternative, the Authority may elect to have the City complete the financing which would be repaid by increasing monthly charges which the Authority would pay to the City.

## ARTICLE 6
## CONNECTION FEE

**Section 6.01 - Connection Fee.**

The connection fee for each EDU connected to the Authority's system, the sewage from which is conveyed to the City's sewage treatment plant, that will be paid to the City is Two Hundred Fourteen ($214.00) Dollars.

## ARTICLE 7
## QUALITY STANDARDS

**Section 7.01 – Quality Standards.**

All sewage discharged from the Authority's Collection System into the City's sewage system shall meet reasonable quality standards promulgated by the City, provided however, that such standards shall not be more stringent than those standards imposed by any law or regulation of the United States of America or the Commonwealth of Pennsylvania unless the Authority consents in writing. The Authority shall at all times maintain and enforce rules and regulations



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governing the composition of sewage discharged into its collection system identical in all material respects to those promulgated by the City and will permit only approved waste to be discharged into the Authority's Collection System. Before promulgating any changes in its rules or regulations relating to quality standards, and its industrial pre-treatment program, the City shall give the Authority written notice of any such changes at least sixty (60) days before the same are to become effective. If the Authority so requests, representatives of the City shall discuss said proposed changes with representatives of the Authority and will provide such additional information relating to said changes as may reasonably be requested by the Authority.

## ARTICLE 7
## ARBITRATION

In the event of any dispute between the parties to this Agreement arising out of the interpretation of this Agreement or any matters herein set forth or pertaining to the same, and inability of the parties to amicably adjust the same, then any such dispute shall be settled by arbitration in accordance with the provisions of 42 Pa. C.S.A. 7301, et seq., Chapter A, as amended. In any such case, three arbitrators shall be appointed, one by the City, one by the Authority and the third by the two so selected, and the decision of the majority thereof shall be binding and conclusive upon the parties. The arbitrators shall not be the Solicitor of any interested party nor the Solicitor of a municipality contracted to transport sewage to the City. Upon the refusal of either party to appoint an arbitrator upon ten (10) days' written notice to do so, the other party may apply to the Court of Common Pleas of Beaver County, Pennsylvania, for the appointment of a second arbitrator, and the person so appointed shall for all purposes be deemed to be the arbitrator appointed by such other party; in the event the two arbitrators



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appointed by the parties or by the Court, as the case may be, shall fail to effect the appointment of a third arbitrator within two weeks following the appointment of the second arbitrator, either party to this Agreement may likewise apply to said Court for the appointment of said third arbitrator. The cost of any such arbitration shall be equally borne by the parties hereto.

In order to be qualified as an arbitrator, the arbitrator must be admitted to practice law in Pennsylvania and must have at least seven years of experience as a Solicitor for a municipality or a municipal authority. The Arbitrators shall be admitted to practice in Beaver County.

## ARTICLE 8
## MISCELLANEOUS

**Section 9.01 – Notices.**

All notices required or authorized to be given pursuant to this Agreement shall be in writing and shall be sent by certified mail, postage prepaid, to the following addresses:

**The Authority:**
North Sewickley Township
Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010

**The City:**
City of Beaver Falls
8th Avenue and 15th Street
Beaver Falls, PA 15010

or to other such addresses as may, from time to time, be furnished to the parties effective upon receipt of the notice there as set forth above.



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Telephone: (724) 266-1000

**Section 9.02 – Amendments, Waviers and Consents.**

Neither this Agreement, nor any term hereof may be amended; changed, waived, discharged or terminated orally and this Agreement may only be amended in writing, signed by both parties.

**Section 9.03 – Entire Agreement and Counterparts.**

This Agreement constitutes the entire understanding between the parties and shall supersede any and all prior understandings and agreements with respect to the subject matter covered herein.

The captions in this Agreement are for purposes of reference only and shall not limit or otherwise affect any of the terms thereof. The Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one in the same instrument.

**Section 9.04 – No Assignments.**

No party may assign or transfer its rights hereunder without the prior written consent of the other party.

**Section 9.05 – Successors and Assigns.**

This Agreement shall bind the parties hereof and their respective successors and assigns.

## ARTICLE 9
## TERMINATION AND EFFECTIVE DATE

This Agreement shall become effective when both parties have approved its terms at a public meeting. It shall terminate on December 31, 2012. Either party shall have the right to renegotiate said Agreement by making said request in writing within 180 days of December 31,



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2012. No renegotiation or termination may occur unless a written notice of at least 180 days is given to the other party. In the event that there is no termination or renegotiation, the Agreement shall then be automatically renewed in increments of one year beginning on January 1, 2013.

**IN WITNESS WHEREOF**, this Agreement has been executed the day and year first above written.

ATTEST:

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**

Richard W. Weaver
[redacted], Secretary
Richard W Weaver

By: Albert Dainton
**Albert Dainton, Chairman**

(SEAL)

ATTEST:

**CITY OF BEAVER FALLS**

Paula Burdine
**Paula Burdine, City Coordinator**

By: Karl E. Boak
**Karl Boak, Mayor**

(SEAL)



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pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME:** North Sewickley Township Sewage Authority (Attn: AORO)

Date of Request: 11/30/22 Submitted via: ☑ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini, Esquire (as counsel for the City of Beaver Falls) Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☑ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or records concerning the North Sewickley Township Sewage Authority and the City of Beaver Falls as it would relate to the City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☑ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☑ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☐ $_____.**

---

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

## AGREEMENT

THIS AGREEMENT, made and entered into this 9th day of January, 2003, by and between:

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**, a Municipal Authority, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "Authority",

AND

**CITY OF BEAVER FALLS**, a Third-Class City, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "City".

**WHEREAS**, the City owns, operates and maintains an existing sewage treatment system and public sewage collection and conveyance system; and

**WHEREAS**, the Authority is planning the construction of a public sewage collection and conveyance system for Phase 2 of its sanitary sewer project covering a portion of North Sewickley Township; and

**WHEREAS**, the City has agreed to provide treatment at its treatment facility for approximately 950 EDU's of sanitary sewage generated from the areas of the North Sewickley Township which are within Phase 2 of the Authority's sanitary sewer project; and

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D. **Fiscal Year** means the period of twelve months beginning on January 1 of each year.

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## ARTICLE 2
## SERVICE AREA

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The Authority will maintain the sewage collection and conveyance system within its jurisdiction in a state of good repair and operating condition.

## ARTICLE 3
## MANNER OF COLLECTION

The Authority shall construct such sewers that are necessary to connect the City's existing sewer system at one connection point located as shown on the drawing attached hereto, made a part hereof and marked as Exhibit "B". Said connection shall be made in accordance with quality construction practice as to not interfere with the flows and use of the existing manholes.

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## RATES AND CHARGES

**Section 4.01 – Treatment Charge: Rates.**

A. The rate charged to the Authority shall be based upon a cost per thousand gallons of water usage by Authority customers conveyed to the City by the Authority over the monthly period. Said rate shall be reasonable and uniform and shall initially be the same rate as that charged to all other customers of the City but may subsequently vary consistent with Article 5. The actual billing procedure between the parties shall be as agreed between the parties from time to time.



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In order to be qualified as an arbitrator, the arbitrator must be admitted to practice law in Pennsylvania and must have at least seven years of experience as a Solicitor for a municipality or a municipal authority. The Arbitrators shall be admitted to practice in Beaver County.

## ARTICLE 8
## MISCELLANEOUS

**Section 9.01 – Notices.**

All notices required or authorized to be given pursuant to this Agreement shall be in writing and shall be sent by certified mail, postage prepaid, to the following addresses:

**The Authority:**
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Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010

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or to other such addresses as may, from time to time, be furnished to the parties effective upon receipt of the notice there as set forth above.



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**Section 9.03 – Entire Agreement and Counterparts.**

This Agreement constitutes the entire understanding between the parties and shall supersede any and all prior understandings and agreements with respect to the subject matter covered herein.

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**Section 9.04 – No Assignments.**

No party may assign or transfer its rights hereunder without the prior written consent of the other party.

**Section 9.05 – Successors and Assigns.**

This Agreement shall bind the parties hereof and their respective successors and assigns.

## ARTICLE 9
## TERMINATION AND EFFECTIVE DATE

This Agreement shall become effective when both parties have approved its terms at a public meeting. It shall terminate on December 31, 2012. Either party shall have the right to renegotiate said Agreement by making said request in writing within 180 days of December 31,



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2012. No renegotiation or termination may occur unless a written notice of at least 180 days is given to the other party. In the event that there is no termination or renegotiation, the Agreement shall then be automatically renewed in increments of one year beginning on January 1, 2013.

**IN WITNESS WHEREOF**, this Agreement has been executed the day and year first above written.

ATTEST:

Richard W Weaver

**Augustine A. Fornataro, Secretary**

Richard W Weaver

(SEAL)

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**

By: Albert Dainton

**Albert Dainton, Chairman**

ATTEST:

Paula Burdine

**Paula Burdine, City Coordinator**

(SEAL)

**CITY OF BEAVER FALLS**

By:

**Karl Boak, Mayor**



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# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME:** North Sewickley Township (Attn: AORO)

Date of Request: 11/30/22 Submitted via: ☑ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini, Esquire (as counsel for the City of Beaver Falls) Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☑ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or records concerning North Sewickley Township's relationship with the City of Beaver Falls as it would relate to the City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU). Additionally, please provide any and all agreements and/or records concerning the North Sewickley Township Sewage Authority and the City of Beaver Falls as it would relate to City of Beaver Falls Sewage Treatment Facility and the existence of and/or participation in the entity known as the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☑ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☑ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☐ $_____.**

---

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

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Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

## AGREEMENT

THIS AGREEMENT, made and entered into this 9th day of January, 2003, by and between:

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**, a Municipal Authority, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "Authority",

AND

**CITY OF BEAVER FALLS**, a Third-Class City, organized and existing under the laws of the Commonwealth of Pennsylvania, hereinafter referred to as "City".

**WHEREAS**, the City owns, operates and maintains an existing sewage treatment system and public sewage collection and conveyance system; and

**WHEREAS**, the Authority is planning the construction of a public sewage collection and conveyance system for Phase 2 of its sanitary sewer project covering a portion of North Sewickley Township; and

**WHEREAS**, the City has agreed to provide treatment at its treatment facility for approximately 950 EDU's of sanitary sewage generated from the areas of the North Sewickley Township which are within Phase 2 of the Authority's sanitary sewer project; and

**WHEREAS**, the Authority desires to convey the sanitary sewage generated by Phase 2 of its sanitary sewer project to the collection and conveyance system and sewage treatment system of the City,

**NOW, THEREFORE,** the parties, for and in consideration of the foregoing promises and mutual covenants and obligations contained herein, and intending to be legally bound, do hereby agree as follows:

## ARTICLE I
## DEFINITIONS

**Section 1.01 – Definitions.**

In addition to the terms defined elsewhere in this Agreement, the following terms, when used in this Agreement, shall have the following meanings:

A. **Agreement** means this Intermunicipal Sewage Services Agreement as amended or supplemented at the time in question.

B. **Consulting Engineer** means a person who is engaged in the engineering profession, who is a registered professional engineer under the laws of the Commonwealth of Pennsylvania, and who is charged with monitoring the construction and operation of sewage systems. A "Consulting Engineer" may be employed or retained by either party.

C. **Costs.** When used with reference to Capital Additions or the Treatment Plant, Costs shall mean expenditures in respect to said Capital Additions or the Treatment Plant which constitute proper items of cost in accordance with generally accepted engineering and accounting practices. In determining Cost of Capital Additions or Cost of the Treatment Plant which are to be shared by the City and the Authority and other municipal entities using the City System, there shall first be deducted from total costs all



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Federal, State and other construction grants received by the City in aid for such construction. The costs may include, but not be limited to, the following items:

1. Costs and expenses of acquiring, by purchase or condemnation of land, rights-of-way, easements, licenses and any other interests in real property, including amounts of any award or final judgment in or settlement or compromise of any condemnation proceeding, all damages incident to or consequent upon acquisition or construction, and all fees and expenses incidental thereto, including without limitation, engineering and legal fees and costs of abstracts of title, title insurance, title opinions and title reports;

2. Amounts paid to contractors, builders, suppliers, materialmen, workmen and laborers;

3. Costs of performance, payment, maintenance or other bonds, fees for permits and premiums for insurance of any type deemed necessary during construction;

4. Fees and expenses of engineers and architects for the preparation of studies, tests, surveys, reports, maps, plans and specifications and for supervision and inspection services;

5. Legal, accounting and auditing expenses incurred for the acquisition, construction and installation of a Capital Facility or any part thereof;

6. Expenses incurred in connection with the financing of a Capital Facility in whole or in part, including accounting, auditing, legal and financial advisor fees and expenses, financial and printing charges, bond insurance



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premiums and charges for other credit enhancement facilities, advertising expenses and the fees and expenses of paying agents, escrow agents and trustees; and

7. Capitalized interest on indebtedness during the construction of a Capital Facility.

D. **Fiscal Year** means the period of twelve months beginning on January 1 of each year.

E. **Operating Expenses** means the reasonable, proper and necessary costs of management and operation of sewage systems including, but not limited to, labor, chemicals, utilities, equipment, materials, supplies and ordinary maintenance, repair and replacement of the sewage collection and conveyance systems, pumping facilities, treatment plant and appurtenances thereto determined in accordance with generally accepted engineering and accounting practices.

F. **Beaver Falls Plant** means the sewage treatment plant owned, operated and maintained by the City and having on the date of this Agreement an average daily design capacity of 4.8 million gallons per day (MGD).

## ARTICLE 2
## SERVICE AREA

**Section 2.01 – Service Area.**

The City will accept and the Authority will deliver to the City's collection system for transmission and treatment by the City all sanitary sewage which will emanate from North Sewickley Township in accordance with the current Act 537 Plan. The area included in the



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aforesaid Act 537 Plan is shown on a map attached hereto, made a part hereof and marked as Exhibit "A". The Authority agrees that it will transport only the sanitary sewage originating from the area shown on Exhibit "A" and not from any other area of North Sewickley Township without having obtained the written approval of the City.

**Section 2.02 – Maintenance of Collection System.**

The Authority will maintain the sewage collection and conveyance system within its jurisdiction in a state of good repair and operating condition.

## ARTICLE 3
## MANNER OF COLLECTION

The Authority shall construct such sewers that are necessary to connect the City's existing sewer system at one connection point located as shown on the drawing attached hereto, made a part hereof and marked as Exhibit "B". Said connection shall be made in accordance with quality construction practice as to not interfere with the flows and use of the existing manholes.

## ARTICLE 4
## RATES AND CHARGES

**Section 4.01 – Treatment Charge: Rates.**

A. The rate charged to the Authority shall be based upon a cost per thousand gallons of water usage by Authority customers conveyed to the City by the Authority over the monthly period. Said rate shall be reasonable and uniform and shall initially be the same rate as that charged to all other customers of the City but may subsequently vary consistent with Article 5. The actual billing procedure between the parties shall be as agreed between the parties from time to time.



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B. The City shall notify the Authority by letter of any proposed change in the rate at least sixty (60) days prior to the time that said rate shall take effect. The City shall include with the notice to the Authority a complete copy of the proposed revised rate schedule for its sanitary sewer customers.

**Section 4.02 – Invoices.**

Invoices for the amount payable by the Authority under this Article shall be submitted by the City to the Authority promptly and said invoices shall be payable within thirty (30) days after the invoice date.

## ARTICLE 5
## CAPITAL ADDITIONS

**Section 5.01 – General.**

The City shall have the right to exercise exclusive discretion in determining what capital improvements or expansions to its treatment plant are necessary. The Authority recognizes that it may be liable for the cost of any treatment plant upgrade on a proportional basis. However, unless the Authority agrees, it shall only be liable for the cost of any betterment, improvement or addition to the City's treatment plant which improves sanitary sewage service to the Authority's customers.

**Section 5.02 – Costs to be Charged Proportionally.**

In the event that Capital Additions are required which the City is liable to pay or agrees to pay under Section 5.01 above, the rate to be set shall include the cost of said Capital Additions, including all financing costs and debt service amortization requirements on a proportional basis consistent with prior provisions of this Agreement.



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**Section 5.03 – Capital Additions Requested by the Authority.**

In the event that the Authority requests that a Capital Addition be added in order to accommodate its needs, the City shall cooperate with the Authority and cause said request to be fulfilled if practicable. The City shall design and cause said Capital Addition to be financed, provided that the Authority agrees to bear said costs. The Authority shall have the option to elect to obtain the financing itself and pay a lump sum to the City to complete the project. In the alternative, the Authority may elect to have the City complete the financing which would be repaid by increasing monthly charges which the Authority would pay to the City.

## ARTICLE 6
## CONNECTION FEE

**Section 6.01 - Connection Fee.**

The connection fee for each EDU connected to the Authority's system, the sewage from which is conveyed to the City's sewage treatment plant, that will be paid to the City is Two Hundred Fourteen ($214.00) Dollars.

## ARTICLE 7
## QUALITY STANDARDS

**Section 7.01 – Quality Standards.**

All sewage discharged from the Authority's Collection System into the City's sewage system shall meet reasonable quality standards promulgated by the City, provided however, that such standards shall not be more stringent than those standards imposed by any law or regulation of the United States of America or the Commonwealth of Pennsylvania unless the Authority consents in writing. The Authority shall at all times maintain and enforce rules and regulations



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governing the composition of sewage discharged into its collection system identical in all material respects to those promulgated by the City and will permit only approved waste to be discharged into the Authority's Collection System. Before promulgating any changes in its rules or regulations relating to quality standards, and its industrial pre-treatment program, the City shall give the Authority written notice of any such changes at least sixty (60) days before the same are to become effective. If the Authority so requests, representatives of the City shall discuss said proposed changes with representatives of the Authority and will provide such additional information relating to said changes as may reasonably be requested by the Authority.

## ARTICLE 7
## ARBITRATION

In the event of any dispute between the parties to this Agreement arising out of the interpretation of this Agreement or any matters herein set forth or pertaining to the same, and inability of the parties to amicably adjust the same, then any such dispute shall be settled by arbitration in accordance with the provisions of 42 Pa. C.S.A. 7301, et seq., Chapter A, as amended. In any such case, three arbitrators shall be appointed, one by the City, one by the Authority and the third by the two so selected, and the decision of the majority thereof shall be binding and conclusive upon the parties. The arbitrators shall not be the Solicitor of any interested party nor the Solicitor of a municipality contracted to transport sewage to the City. Upon the refusal of either party to appoint an arbitrator upon ten (10) days' written notice to do so, the other party may apply to the Court of Common Pleas of Beaver County, Pennsylvania, for the appointment of a second arbitrator, and the person so appointed shall for all purposes be deemed to be the arbitrator appointed by such other party; in the event the two arbitrators



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appointed by the parties or by the Court, as the case may be, shall fail to effect the appointment of a third arbitrator within two weeks following the appointment of the second arbitrator, either party to this Agreement may likewise apply to said Court for the appointment of said third arbitrator. The cost of any such arbitration shall be equally borne by the parties hereto.

In order to be qualified as an arbitrator, the arbitrator must be admitted to practice law in Pennsylvania and must have at least seven years of experience as a Solicitor for a municipality or a municipal authority. The Arbitrators shall be admitted to practice in Beaver County.

## ARTICLE 8
## MISCELLANEOUS

**Section 9.01 – Notices.**

All notices required or authorized to be given pursuant to this Agreement shall be in writing and shall be sent by certified mail, postage prepaid, to the following addresses:

**The Authority:**
North Sewickley Township
Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010

**The City:**
City of Beaver Falls
8th Avenue and 15th Street
Beaver Falls, PA 15010

or to other such addresses as may, from time to time, be furnished to the parties effective upon receipt of the notice there as set forth above.



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**Section 9.02 – Amendments, Waviers and Consents.**

Neither this Agreement, nor any term hereof may be amended, changed, waived, discharged or terminated orally and this Agreement may only be amended in writing, signed by both parties.

**Section 9.03 – Entire Agreement and Counterparts.**

This Agreement constitutes the entire understanding between the parties and shall supersede any and all prior understandings and agreements with respect to the subject matter covered herein.

The captions in this Agreement are for purposes of reference only and shall not limit or otherwise affect any of the terms thereof. The Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one in the same instrument.

**Section 9.04 – No Assignments.**

No party may assign or transfer its rights hereunder without the prior written consent of the other party.

**Section 9.05 – Successors and Assigns.**

This Agreement shall bind the parties hereof and their respective successors and assigns.

## ARTICLE 9
## TERMINATION AND EFFECTIVE DATE

This Agreement shall become effective when both parties have approved its terms at a public meeting. It shall terminate on December 31, 2012. Either party shall have the right to renegotiate said Agreement by making said request in writing within 180 days of December 31,



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2012. No renegotiation or termination may occur unless a written notice of at least 180 days is given to the other party. In the event that there is no termination or renegotiation, the Agreement shall then be automatically renewed in increments of one year beginning on January 1, 2013.

**IN WITNESS WHEREOF**, this Agreement has been executed the day and year first above written.

ATTEST:

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**

Richard W Weaver

**Augustine A. Fornataro, Secretary**

Richard W Weaver

By: Albert Dainton

**Albert Dainton, Chairman**

(SEAL)

ATTEST:

**CITY OF BEAVER FALLS**

Paula Burdine

**Paula Burdine, City Coordinator**

By:

**Karl Boak, Mayor**

(SEAL)



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# EXHIBIT F5

**CITY OF BEAVER FALLS**
**BEAVER COUNTY PENNSYLVANIA**

**ORDINANCE NO. 2036**

**AN ORDINANCE OF THE CITY OF BEAVER FALLS AUTHORIZING THE EXECUTION AND DELIVERY OF A CAPITAL LEASE AGREEMENT WITH THE JOINT SEWER USERS OF THE CITY OF BEAVER FALLS**

WHEREAS, The Joint Sewer Users (the "JSU") was created by the City of Beaver Falls (the "City") pursuant to the Pennsylvania Municipality Authorities Act, as amended, 53 Pa. C.S.A. §5601 et. seq. (the "Act") and is authorized under the Act to acquire, hold, construct, finance, improve, maintain, operate, own or lease, either in the capacity of lessor or lessee, sewers, sewer systems or parts thereof and sewage treatment works, including works for treating and disposing of industrial wastes; and

WHEREAS, the JSU transports sanitary waste sewage collected through a network of sewage transmission pipelines within the City and owned by the City (the "City's Sewage Transmission Pipelines"); and

WHEREAS, the JSU has determined that it is in its best interests and in the best interests of its customers to enter into a long-term lease with the City for the City's Main Sewage Transmission Pipeline from Outlying Communities and to set forth certain other agreements between the City and the JSU pursuant to terms and conditions of a Capital Lease Agreement (the "Lease Agreement") between the City, as lessor, and the JSU, as lessee;

NOW, THEREFORE, BE IT ORDAINED, by the Council of the City of Beaver Falls and it is hereby ordained as follows:

Section 1. In order to provide for the lease of the City's Main Sewage Transmission Pipelines from Outlying Communities and to set forth certain other agreements between the JSU and the City, the JSU shall execute and deliver the Capital Lease Agreement (the "Lease Agreement"), presented at this meeting, with such changes therein as may be approved by the City hereby authorize and direct the Mayor to execute and deliver the Lease Agreement in the name on behalf of Council and to acknowledge the same to be the acts and deeds of Council and the Clerk is authorized and directed to affix the seal of the City to the Lease Agreement when so executed, and to attest the same.

Section 2. Pursuant to paragraph 8 (a) of the Lease Agreement, during the Term of the Lease Agreement, including any extensions thereof, in consideration of the Rent to be paid by the JSU to the City there under and other good and valuable consideration, the City covenant s and agrees not to acquire of attempt to acquire any project or facility owed or operated by the JSU, whether now or hereafter existing, or to terminate or attempt to terminate the existence of the JSU pursuant to the Act, including but not limited to 53 Pa. C.S.A. § 5622, and during the Term of the Lease Agreement, including any extensions thereof, the **CITY HEREBY VOLUNTARILY RELINQUISHES AND EXPRESSLY WAIVES ANY RIGHT OR POWER TO ACQUIRE ANY PROJECT OR FACILITY OF THE JSU OR TO TERMINATE THE EXISTENCE OF THE JSU INCLUDING BUT NOT LIMITED TO ANY STATUTORY RIGHT OR POWER UNDER THE ACT, INCLUDING BUT NOT LIMITED TO 53 PA.C.S.A §5622.**

Section 3. The proper officers of the City are hereby authorized, empowered and directed on behalf of the City to execute any and all papers and documents and to do and cause to be done any and all actions and things necessary or proper for the execution or carrying out of this Ordinance and the Lease Agreement.

Section 4. Any ordinance or part of an ordinance not in accord with this Ordinance is hereby repealed as of the effective date of this Ordinance insofar as they affect this Ordinance.

Section 5. This Ordinance shall be effective on the date set forth below.

This Ordinance is hereby enacted this 8th day of April, 2014.

**Attest:**

Paula J. Burdine
City Clerk

(Seal)

**CITY OF BEAVER FALLS:**

George S. Quay III
Mayor

## CERTIFICATION

I, George S. Quay III, Mayor of the City of Beaver Falls, do hereby certify that the attached Ordinance was fully enacted and passed at a meeting of the City of Beaver Falls held on April 8, 2014 after due and proper notice of said meeting having been given and a quorum being present.

IN WITNESS WHEREOF, I hereunto set my hand and seal this 8th day of April, 2014.

George S. Quay III

Mayor

## AFFIDAVIT

This is to certify that the above is a true and correct copy of the Ordinance enacted by the City of Beaver Falls on the 8th day of April, 2014.

Paula J. Burdine

City Clerk

## CAPITAL LEASE AGREEMENT

THIS CAPITAL LEASE AGREEMENT, is made and entered into as of April 8, 2014, by and between the **CITY OF BEAVER FALLS**, Beaver County, Pennsylvania, a municipal corporation organized and existing under and by virtue of the laws of the Commonwealth of Pennsylvania (the "CITY"), as lessor

and

**THE JOINT SEWER USERS**, a body corporate and politic, organized and existing under the laws of the Commonwealth of Pennsylvania (the "Commonwealth"), having its principal office in the City of Beaver Falls and County of Beaver ("JSU"), as lessee.

WHEREAS, the JSU was created by the City of Beaver Falls (the "City") pursuant to the Pennsylvania Municipality Authorities Act, as amended, 53 Pa. C.S.A. §5601 et. seq. (the "Act") and is authorized under the Act to acquire, hold, construct, finance, improve, maintain, operate, own or lease, either in the capacity of lessor or lessee, sewers, sewer systems or parts thereof and sewage treatment works, including works for treating and disposing of industrial wastes; and

WHERAS, the JSU have determined that it is in its best interests and in the best interests of its customers to enter into a long-term lease with the City for the City's main sewage trunk line from outlying communities and to set forth certain other agreements between the City and the JSU pursuant to terms and conditions of this Lease Agreement;

NOW THEREFORE, in consideration of the foregoing recitals, and of the premises and mutual terms and conditions contained herein, and intending to be legally bound hereby, the parties agree as follows:

1. Lease of City's Main Sewage Pipelines From Outlying Communities

The City hereby demises and lets to the JSU and the JSU hereby takes and leases from the City, for the Term, as hereinafter defined, and upon the provisions hereinafter specified, the following described property (collectively the "Leased Property"): (i) the City's Main Sewage Pipelines from Outlying Communities as acquired, repaired, or constructed the date hereof, (ii) all sewage transmission pipelines dedicated by builders or developers subsequent to the date of this Lease Agreement and all assets associated with or used in connection with such pipelines and (iii) all licenses, rights of way, easements and rights of entry benefiting the City's Sewage Transmission Pipelines or providing ingress and egress to the same.

2. Term.

Subject to the provisions hereof, the JSU shall have and hold the Leased Property for a term commencing as of January 1, 2014 and ending on December 31, 2024 at 11:59 p.m., unless extended pursuant to the provisions of paragraph 8 ( c) below (the "Term").

At the expiration of the Term the JSU shall deliver up peaceable possession of the Leased Property to the City without delay upon demand therefor by the City.

3. Rent.

The JSU shall pay to the City as rent (the "Rent") for the Leased Property and in consideration of the other covenants and agreements of the City set forth herein as follows: Upon the signing of this agreement, the JSU shall pay to the City on or prior to November 30 of each year thereafter an annual rent amount of Forty Thousand and no/100 ($40,000.00) Dollars. For Rent payment due on and after November 30, 2014 the exact amount of annual Rent shall be determined exclusively by the JSU each year, subject to the minimum and maximum rental amounts set forth in the preceding sentence, taking into account (i) the financial condition and

results of operations of the JSU as of the time of such determination, (ii) economic conditions of the City and other municipalities if any served by the JSU, (iii) the economic condition of the JSU's customer base, (iv) industry, economic, and financial conditions that may affect or be relevant to the operations of the JSU and (v) such other facts, circumstances and conditions as the JSU, in its sole discretion, shall determine to be relevant.

4. Use of Leased Property; Quiet Enjoyment.

(a) The JSU may occupy and use the Leased Property in order to provide sewer services and services incidental thereto to its customers and other purposes consistent with the public purposes of the JSU. The JSU shall not use or occupy or permit any Leased Property to be used or occupied, nor do or permit anything to be done in or any of the Leased Property, in a manner which would materially violate any law or legal requirement.

(b) Subject to the provisions hereof, so long as no event of default has occurred and is continuing, the City covenants to do no act to disturb the peaceful and quiet occupation and enjoyment of the Leased Property by the JSU.

(c) During the term of this Lease Agreement, the City covenants not to assign, sell, convey or transfer any right, title or interest in or to the Leased Property or create, incur, assume or suffer to exist, directly or indirectly, any lien, encumbrance or security interest of any kind on the Leased Property, other than encumbrances existing as of the date hereof that do not materially interfere with the present use of any of the Leased Property or otherwise materially impair its intended use.

5. Representations and Warranties of the City.

The City hereby represents and warrants to the JSU the following:

(a) Organization; Power: Good Standing. The City has all requisite power and authority to own, operate, and lease its properties including the Leased Property, to carry on its business as now being conducted and to enter into this Lease Agreement and perform its obligations hereunder.

(b) JSU Relative to Lease. The execution, delivery, and performance of this Lease Agreement by the City will have been duly and effectively authorized by all necessary action by the City. This Lease Agreement had been duly executed by the City and is a valid legally binding and enforceable obligation of the City.

(c) Effect of Lease. The execution, delivery, and performance of this Lease Agreement by the City and the consummation of the transactions contemplated hereby will not (i) require the consent, approval, or authorization of any person, cooperation, partnership, joint venture or other business association or public authority (other than the City Council of the City); (ii) violate, with or without the giving of notice or the passage of time, or both, any provisions of law of statute or any rule, regulation, order, award, judgment or decree of any court or governmental Authority applicable to the City; or (iii) conflict with or result in a breach or termination of any provision of, or constitute a default under, or result in the creation of any lien, charge or encumbrance upon any of the Leased Property pursuant to any charter, bylaw, indenture, mortgage, lease, contract, agreement or other instrument, or any order, judgment, award, decree, statute, ordinance, regulation, or any other restriction of any kind or character, to which the City is a party, or by which the City or any of the Leased Property may be bound.

(d) Absence of Certain Changes or Events. The City has not:

(i) mortgaged, pledged, or subjected to any lien, charge, security interest or to any other encumbrance any of the Leased Property; and

(ii) suffered any material casualty loss or damage to the Leased Property, whether or not such loss or damage shall have been covered by insurance.

(e) Title to Leased Property; Absence of Liens and Encumbrances.

(i) The City has good and marketable title to all of the Leased Property, free and clear of all claims and encumbrances, other than easements, liens, pledges, charges and encumbrances, if any, as do not materially interfere with the present use of any of the Leased Property or otherwise materially impair its intended use.

(ii) All rights of way and easements pursuant to which the City uses the Leased Property are valid and binding against the City, in accordance with their terms and there is not under any of such rights of way or easements any existing default by the City, event of default by the City or event which with notice or lapse of time, or both, would constitute a default by the City (and in respect of which the City has not taken adequate steps to prevent such a default from occurring). None of the rights of the City under any of such rights of way or easements is subject to termination or modification as the result of the transactions contemplated hereby.

(f) Litigation. There are no claims, actions, suits, proceedings or investigations pending or, to the City's knowledge, threatened against or affecting the Leased Property at law or in equity, or before or by any federal, state, municipal or governmental or nongovernmental department, commission, board, bureau, agency or instrumentality, United States or foreign, which would have a material adverse affect on the Leased Property.

6. Representation and Warranties of the JSU.

The JSU represents and warrants to the City as follows:

(a) Organization; Good Standing; Power. The JSU is a municipal JSU duly organized,

validly existing and in good standing under the laws of the Commonwealth and will have all requisite power and authority to own, lease and operate its properties and the Leased Property and to carry on its business as now being conducted in connection with the Leased Property and to enter into this Lease Agreement and perform its obligations.

(b) Authority Relative to Lease. On the date hereof, the execution, delivery and performance of this Lease Agreement and the transactions contemplated hereby and thereby by the JSU will have been duly and effectively authorized and ratified by all necessary action by the JSU. This lease has been duly executed buy the JSU and is a valid, legally binding and enforceable obligation of the JSU.

(c) Effect of Lease Agreement. The execution, delivery and performance of this Lease Agreement and the consummation of the transactions contemplated hereby will not (i) require the consent, approval or authorization of any person, corporation, partnership, joint venture or other business association or other public authority (other than the Board of the JSU); (ii) violate, with or without the giving of notice or the passage of time, or both, any provisions of law or statute or any rule, regulation, order, award, judgment or decree of any court or governmental authority applicable to the JSU; or (iii) conflict with or result in a breach or termination of any provision of, or constitute a default under, or result in the creation of any lien, charge or encumbrance upon any of the properties or assets of the JSU pursuant to any indenture, corporate charter, bylaw, mortgage, deed of trust, lease, contract, agreement or any other restriction of any kind or character, to which the JSU is a party, or by which the JSU or any of its assets or properties may be bound.

(d) Litigation. There are no claims, action, suits, proceedings, or investigations pending against the JSU or to the best of the JSU's knowledge, threatened, that would have a material

adverse effect on the transaction contemplated hereby.

7. Maintenance and Repair.

The JSU shall throughout the Term, including any extensions thereof, maintain the Leased Property in good condition and promptly make all repairs, replacements and renovations necessary to maintain the same in a safe, good and efficient serviceable condition and to enable the JSU to operate its sewage treatment facilities, whether such repairs, replacements and renovations be ordinary or extraordinary, foreseen or unforeseen. The costs of any such repairs, replacements and renovations of the Leased Property shall be the responsibility of the JSU. The City shall throughout the Term, including any extensions thereof, be responsible for the televising and cleaning of the sewage transmission pipelines necessary to maintain the same in a safe, good and efficient serviceable condition which will enable the JSU to operate its sewage treatment facilities during the term of the lease.

8. Covenants of City

(a) During the Term, including any extensions thereof, the City covenants and agrees not to acquire or attempt to acquire any project or facility owned or operated by the JSU, whether now or hereafter existing, or to terminate or attempt to terminate the existence of the JSU pursuant to the Act, including but not limited to Pa. C.S.A. § 5622, and during the Term, including any extensions thereof, the **CITY HEREBY VOLUNTARILY RELINQUISEHES AND EXPRESSLY WAIVES ANY RIGHT OR POWER TO ACQUIRE ANY PROJECT OR FACILTY OF THE JSU OR TO TERMINATE THE EXISTENCE OF THE JSU INCLUDING BUT NOT LIMITED TO ANY STATUTORY RIGHT OR POWER UNDER THE ACT, INCLUDING BUT NOT LIMTED TO 53 PA. C.S.A. § 5622.**

(b) If requested in writing by the JSU pursuant to the provisions of the Act, the City covenants and agrees to adopt by resolution or ordinance, within a reasonable time after receipt of such written request, an amendment to the JSU's Articles of Incorporation.

(c) If required by a lender to the JSU, in connection with a loan to the JSU during the Term or in the event the JSU proposed to issue bonds or notes under the Act during the Term and as required by the underwriter or other purchased of such bonds or noted or by bond insurer insuring the same, the City covenants and agrees to extend the Term of this Lease Agreement as required by said lender, underwriter, purchaser, or bond insurer. The annual rent for any extension period shall not be less than (**$40,000.00).** In the event the Term of this Lease Agreement is extended pursuant to the provisions of this paragraph, all other terms and provisions of this Lease Agreement unless amended by an agreement of both parties shall remain in full force and effect.

9. Events of Default and Remedies

(a) If any one or more of the following events (an "Event of Default") shall happen:

(i) Failure by the JSU to make due and punctual payments of all or any portion of the Rent as and when the same shall be due and payable as provided in other provisions of this Lease Agreement and such failure shall continue for thirty (30) days after receipt of written notice thereof from the City to the JSU; or

(ii) Failure by the JSU or the City to materially perform and comply with any of the other agreements, terms, covenants, or conditions of this lease Agreement within a period of thirty (30) days after notice from one party to the other specifying that such items are in default; provided that, if such failure is not susceptible of being cured with due diligence within such thirty (30) day period,

the time allowed the party to cure such failure shall be extended for such period as may be reasonably necessary so long as the party promptly makes all efforts to complete such cure with all due diligence, provided, further, that if such failure shall subject the Leased Property to any risk of seizure, foreclosure, forfeiture or shall subject a party to any risk of default under any other leases, mortgages or agreements of which the party has been given notice of criminal prosecution, the time allowed hereunder for curing such failure shall immediately and without further notice cease notwithstanding anything to the contained in this Lease Agreement; or

(iii) The JSU or City shall make a general assignment for the benefit of creditors; or

(iv) The JSU or the City shall commence a municipal bankruptcy (adjustment or debts) proceedings under Chapter 9 of the Federal Bankruptcy Code; or

(v) A receiver shall be employed or appointed to take possession of substantially all of the assets of the JSU or the City, which receivership shall remain undissolved for a period of ninety (90) days after creation thereof;

Then in any such event, the non-defaulting party shall have all rights or remedies available to it at law or in equity, including specific performance.

(b) No failure by a party to insist upon the strict performance of any agreement, term, covenant, or condition hereof or to exercise any right or remedy consequent upon a breach thereof, and no acceptance or full or partial rent during the continuance of any breach, shall constitute a waiver of any such breach of such agreement, term, covenant, or condition. No waiver of any breach shall affect or alter this paragraph but each and every agreement, term,

covenant, and condition hereof shall continue in full force and effect with respect to any other then existing or subsequent breach thereof.

(c) Each right and remedy provided for in this Lease Agreement shall be cumulative and shall be in addition to every other right or remedy provided for in this Lease Agreement or now or hereafter existing at law or in equity or by statute or otherwise, and the exercise or beginning of the exercise by a party of any one or more of the rights or remedies provided for in this Lease Agreement or now or hereafter existing al law or in equity or by statute or otherwise shall not preclude the simultaneousness or later exercise by the party of any or all other rights or remedies provided for in this Lease Agreement or now of hereafter existing in law, in equity, under any statute or otherwise.

10. Miscellaneous

(a) Waivers and Amendment.

(i) The City and the JSU may, by written notice to the other,(i) extend the time for the performance of any obligations or other actions of the other, (ii) waive any inaccuracies in the representations or warranties of the other contained in this Lease Agreement; (iii) waive compliance with any of the covenants of the other contained in this Lease Agreement; and (iv) waive or modify performance of any of the obligations of the other.

(ii) This Lease Agreement may be amended, modified or supplemented only by a written instrument executed by both of the parties hereto. Except as provided in the preceding sentence, no action taken pursuant to this Lease Agreement, including without limitation, any investigation by or on behalf of any party, shall be deemed to constitute a waiver by the party taking such action of compliance

with any representations, warranties, covenants or agreements contained herein as a waiver by any party hereto of a breach of any subsequent breach.

(c) Notices. All notices, requests, demands and others, communications which are required or may be given under this Lease Agreement shall be in writing and shall deemed to have been duly given if delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid to the attention of the Mayor and City Council or the Chairman of the JSU.

(d) Entire Agreement. This Lease Agreement constitutes the entire agreement by the JSU and the City, and there are no collateral or oral agreements or understandings with respect to the subject matter hereof. This Lease Agreement supersedes all previous communications, representations or agreements, either verbal or written, between the parties.

(e) Binding Effect. This Lease Agreement shall inure to the benefit of and be binding upon the parties hereto and their successors; nothing in this Lease Agreement, expressed or implied, is intended to confer on any other person other than the parties hereto, or their successors, any rights, remedies, obligations or liabilities under or by reason of this Lease Agreement.

(f) Non- assignability. This Lease Agreement and any rights pursuant hereto shall not be assignable by either party without the prior written consent of the other and any assignment in violation hereof shall be null and void and of no force and effect.

(g) Applicable Law. This Lease Agreement and the legal relations between the parties shall be governed by and in accordance with the Laws of the Commonwealth.

(h) Section and Other Headings. The section and other headings contained in this Lease Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Lease Agreement.

(i) Counterparts. This Lease Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument.

(j) Further Assurances. The parties hereto each agree to execute, make, acknowledge and deliver such instruments, agreements, assignments, other instruments of title and conveyances and other assurances and documents as may be required to effectuate the purposes of this Lease Agreement and to consummate the transactions contemplated hereby.

IN WITNESS WHEREOF, THE CITY OF BEAVER FALLS has caused this Lease Agreement to be executed on its behalf by its Mayor and its municipal seal to be hereunto affixed and attested by its City Clerk, and the JOINT SEWER USERS has caused this Lease Agreement to be executed on its behalf by its Manager and its seal to be hereunto affixed and attested by its _____, on the date of the last acknowledgement at the end hereof.

CITY OF BEAVER FALLS:

By:_____
Mayor

(SEAL)
Attest:

_____
City Clerk

JOINT SEWER USERS:

By:_____
(Title) J.S.U. MANAGER

(SEAL)
Attest:

_____
(Title) City Clerk

# EXHIBIT F6

GAITENS, TUCCERI & NICHOLAS, P.C.
ATTORNEYS AT LAW

519 COURT PLACE
PITTSBURGH, PENNSYLVANIA 15219

gtnlaw.com

**CHARLEE ROSINI, ESQUIRE**
**crosini@gtnlaw.com**

June 8, 2022

**VIA E-MAIL: pheights600@gmail.com**

Mr. Jack Doyle
Open Records Officer
Borough of Patterson Heights
600 7th Avenue
Patterson Heights, Pennsylvania 15010

In Re: Right-to-Know Request – June 8th, 2022

Dear Mr. Doyle:

Kindly accept the attached Right-to-Know Request. Thank you in advance for your assistance with this request.

I look forward to hearing from you.

Very truly yours,

CharLee Rosini

CharLee Rosini

Attachments

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME:** Borough of Patterson Heights (Attn: AORO)

Date of Request: June 8th, 2022 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ■ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or information concerning the Borough of Patterson Heights relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☒ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ■ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☒ $100 (or) ☐ $_____.**

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

June 9, 2022

CharLee Rosini
Gaitens, Tucceri & Nicholas, P.C.
519 Court Place
Pittsburgh, PA 15219

RE: Records Request Pursuant to the Right-to-Know Law (OOR Tracking No. 220601)

Dear Ms. Rosini:

Thank you for writing to the Office of Open Records ("OOR") with your request for information pursuant to the Pennsylvania Right-to-Know Law, 65 P.S. 67.101, et. seq. On June 8, 2022, you requested "any and all agreements and/or information concerning the Borough of Patterson Heights relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

Pursuant to Section 902(a) of the Right-to-Know Law, the OOR requires an additional 30 days to respond because:

- A legal review is necessary to determine whether the record is a record subject to access under this act, 65 P.S. § 67.902(a)(4).
- The extent or nature of the request precludes a response within the required time period, 65 P.S. § 67.902(a)(7).

The OOR expects to respond to your request on or before August 7, 2022.

If you have any questions, or would like to discuss this matter further, please give me a call at the Borough office, (724) 846-0677, or you may reach me on my cell phone at (724) 462-0923.

Yours truly,

Jack D. Doyle
Borough Secretary/Treasurer

**BOROUGH OF PATTERSON HEIGHTS**

**BEAVER COUNTY**
**600 7TH AVENUE, PATTERSON HEIGHTS**
**BEAVER FALLS, PENNSYLVANIA 15010**
**Phone: 724-846-0677**

July 20, 2022

CharLee Rosini
GTN Law
519 Court Place
Pittsburgh, PA 15219

RE: Records Request Pursuant to the Right-to-Know Law (OOR Tracking No. 220601)

Dear Ms. Rosini:

Thank you for writing to the Office of Open Records ("OOR") with your request for any and all agreements and/or information concerning the Borough of Patterson Heights relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

Examinations of Borough ordinances and Borough Council meeting minutes indicate that two records exist that mention a relationship between the Borough of Patterson Heights (Borough) and either the City of Beaver Falls or the Beaver Falls Municipal Authority (BFMA). Copies of both documents are attached.

The first such document is the Sewage Billing Agreement between the Borough and BFMA. This agreement is signed every four years, usually without any changes.

The second is the Borough's Resolution 18-2-2 from 2018, which also relates to billing.

If you have any questions please give me a call at the Borough office, (724) 846-0677, or you may reach me on my cell phone at (724) 462-0923.

Sincerely,

Jack D. Doyle
Borough Secretary/Treasurer

# SEWAGE BILLING AGREEMENT

**THIS AGREEMENT**, made this 22nd day of February, 2018, by and between the

**BEAVER FALLS MUNICIPAL AUTHORITY,** a body corporate and politic, organized pursuant to the Pennsylvania Municipality Authorities Act of 1945, as amended, having its principal office at 1425 Eighth Avenue, Beaver Falls, Pennsylvania, hereafter called party of the first part,

A

N

D

**PATTERSON HEIGHTS BOROUGH,** a borough situate in Beaver County, Pennsylvania, hereinafter called party of the second party.

**WHEREAS,** the party of the first part supplies water to customers and premises in various municipalities within Beaver County, including Patterson Heights Borough ; and

**WHEREAS,** the party of the second part provides sewage collection and/or treatment services to various customers in Patterson Heights Borough; and

**WHEREAS,** party of the second part is authorized to designate the party of the first part to act as its billing and collecting agent for the rentals, rates and charges imposed by the party of the second part for the use of its sewer, sewage system and/or treatment works and cost; and

**WHEREAS,** the party of the second part is authorized to designate the party of the first part as its billing and collecting agent and the party of the first part is willing to act as such upon the following terms and conditions:

**NOW WITNESSETH THAT** in consideration of the mutual covenants herein set forth, the parties hereto agree as follows:

1. The recitals set forth above are incorporated herein by reference thereto.

2. Party of the second part does hereby name, appoint and designate the party of the first part to act as its billing and payment collection agent for the rentals, rates and charges imposed by the party of the second part on owners and occupants or premises serviced by the party of the second part's sewers, sewerage system and/or sewage treatment works.

3. Billing and receipt of payment shall be made by the party of the first part as follows:

A. Party of the first part, as it bills for its own water services, shall separately set forth in the bill the sewage charge imposed by the party of the second part on the same customer/premises. Party of the first part shall also bill any flat rate sewage charges to customers not serviced by party of the first part designated by party of the second party upon receipt of said rates.

B. While the sewage charge shall be set forth separately from the water charge for the same customer/premises, both the sewage charge and the water service charge shall be payable to and received by the party of the first party.

C. Any partial payment of the joint but separate bill shall, unless otherwise designated by the customer, be applied on a ratio basis. All accounts will be administered using current policies and procedures adopted by the Board of Directors of the Beaver Falls Municipal Authority.

D. On a monthly basis, on or about the 10th of the month, the party of the first part shall remit to the party of the second part by check, the amount the party of the first part has received in payment for the sewage charges, together with a statement which will indicate those customers who have paid their sewage bill and the amount so paid.

E. Residential customers and small commercial customers will be billed on a quarterly basis. Large commercial customers and industrial customers will be billed on a monthly basis.

4. Upon commencement of this Agreement, party of the first part will provide the party of the second part with a listing of its customers in the party of the second part's service area. The party of the second part shall reconcile this listing with its own customer list and indicate to the party of the first part, in writing, any additional customers to be billed and/or the identity of customers by name and address to be billed which differ from the original list although the premises served may be the same.

5. The party of the second part shall be responsible for notifying the party of the first part in a timely fashion of any change in customer identity or location, newly connected customers, rate changes or special assessments of additional charges, costs, and penalties. The party of the second part shall also notify the party of the first part as to the payee and address of where the monthly remittance check shall be mailed.

6. The party of the second part shall pay to the party of the first part the sum of One Dollar and Fifty Cents ($1.50) per each account billing made by the party of the first part. The party of the first part shall bill the party of the second part for the service rendered at the time the customer bills are mailed. Payment shall be due upon receipt thereof.

7. The party of the first part shall not be responsible for the actual collection of any past due or delinquent account of the party of the second part. Nothing herein shall, however, amend any existing water shut-off agreement or preclude the parties from entering into a water shut-off agreement for delinquent sewage accounts pursuant to 53 P.S. §3102.501. et. seq.

8. The term of this Agreement shall be for a period of four (4) years from the day and year first above written; provided, however, that either party may terminate this Agreement by giving ninety (90) days written notice of termination to the non-terminating party.

9. This Agreement is made and executed pursuant to a Resolution of the Board of Directors of the party of the first part, adopted on the _____ day of _____, 2018, a quorum being present and a majority voting in favor thereof, authorizing and directing the same to be done.

10. This Agreement is made under and by virtue of a Resolution of Patterson Heights Borough, Resolution No. 18-2-3, duly passed at a regular meeting thereof held on the 21ST day of FEBRUARY, 2018, a quorum being present and a majority voting in favor thereof, authorizing and directing the same to be done.

**IN WITNESS WHEREOF**, and intending to be legally bound hereby, the parties have caused this Agreement to be executed.

ATTEST:

BEAVER FALLS MUNICIPAL AUTHORITY

ATTEST:

PATTERSON HEIGHTS BOROUGH

William A. Starn, Borough President

BOROUGH OF PATTERSON HEIGHTS
BEAVER COUNTY, PENNSYLVANIA

RESOLUTION NO. 18-2-32

RESOLUTION FOR THE SEWAGE BILLING AGREEMENT BETWEEN THE BEAVER FALLS MUNICIPAL AUTHORITY AND THE BOROUGH OF PATTERSON HEIGHTS.

WHEREAS, the Borough of Patterson Heights (hereinafter "Borough"), a borough located in the County of Beaver, Commonwealth of Pennsylvania, incorporated as a body corporate and politic pursuant to the Borough Code, 8 Pa. C.S.A.§101, et. seq., having its office located at 600 Seventh (7th) Avenue, Beaver Falls, Pennsylvania, 15010, desires to have the Beaver Falls Municipal Authority act as its billing and payment collection agent for the rentals, rates and charges imposed by the Borough on its owners and occupants or premises serviced by the Borough's sewers, sewerage system and/or sewage treatment works; and

WHEREAS, the Beaver Falls Municipal Authority (hereinafter "Authority") is a body corporate and politic, organized pursuant to the Pennsylvania Municipality Authorities Act of 1945, as amended, having its principal office at 1425 Eighth Avenue, Beaver Falls, Pennsylvania, 15010, is willing to act as the Borough's billing and payment collection agent as the Borough desires.

NOW THEREFORE, BE IT ADOPTED AND RESOLVED by the Council of the Borough of Patterson Heights as follows:

SECTION 1. The Borough hereby agrees that the Authority shall be its billing and payment collection agent for the rentals, rates and charges imposed by the Borough on its owners and occupants or premises serviced by the Borough's sewers, sewerage system and/or

sewage treatment works, for a period of four (4) years, from the day and year written on the Agreement for such services between the parties.

SECTION 2. The Borough further incorporates the Agreement in its entirety herein.

SECTION 3. Any Resolution of the Borough previously enacted that is inconsistent with the foregoing is hereby repealed.

RESOLVED and ADOPTED by the Borough of Patterson Heights, this 21ST day of FEBRUARY, 2018.

BOROUGH OF PATTERSON HEIGHTS

ATTEST: _____
Borough Secretary

BY: _____
President

# EXHIBIT F7

GAITENS, TUCCERI & NICHOLAS, P.C.
ATTORNEYS AT LAW

519 COURT PLACE
PITTSBURGH, PENNSYLVANIA 15219

gtnlaw.com

**CHARLEE ROSINI, ESQUIRE**
**crosini@gtnlaw.com**

July 8, 2022

**VIA U.S. FIRST CLASS MAIL**

West Mayfield Borough
3700 W. 9th Avenue
Beaver Falls, Pennsylvania 15010

In Re: Right-to-Know Request – June 8th, 2022

To Whom It May Concern:

Kindly accept the enclosed Right-to-Know Request. Thank you in advance for your assistance with this request.

I look forward to hearing from you.

Very truly yours,

CharLee Rosini

CharLee Rosini

Enclosures

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME**: West Mayfield Borough (Attn: AORO)

Date of Request: June 8th, 2022 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☒ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or information concerning the Borough of West Mayfield's relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☒ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☒ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☒ $100 (or) ☐ $_____.**

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**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

borough has 98 streetlights. If we would decide to use solar lights, we would also have to provide poles for the lights because we cannot use Duquesne Light poles. The lights that he is researching are state of the art LED lights and use less energy for a longer period of time. They can go 10 days without sunlight. The borough would have to trim trees in the municipality to provide ample sunlight for the lights to function. There is a window of opportunity for funding during the months of April through June. Mr. DeLuca asked if a representative could come and explain the lights to council and possibly provide a sample light installed at the borough building for us to determine if these would work for our community. Since a significant amount of money is needed to purchase these, we want to make sure that we are doing the right thing. Mr. Fenchel suggested that Mr. Bostek contact the COG secretary to get the grant writer to help in obtaining grants for a study to see if this will work for us. It was also suggested to find other municipalities where these lights are in use and talk to the people there. More research is definitely needed before a decision of this magnitude can be made. Mr. Bostek also complained about building and construction materials being dumped at the Householder property. Mr. DeLuca will talk to the owner and have it cleaned up.

Mayor Wiltrout – none

Atty. Fenchel - none

Mr. Tate reported that the roofs are on, the siding and soffit and fascia are installed on the park shelter. Mr. Bob Mazzant donated the siding and Bill Kidd supplied free shingles. More money was needed in labor to get the building enclosed prior to winter. The bid in the amount of $8800 was submitted and the job is now complete. A check for the remainder in the amount of $3674 will be sent for payment. Mr. Tate asked if the borough had a web site. We do not and Mr. Tate suggested that we look into getting one. There is a lot involved in setting up a web site but we will look into it.

Matthew Price, a White Township police officer arrived late to the meeting because he was on duty. He will officially replace Donald Lutz as code enforcement officer beginning 1/1/2009. We will go over the duties at the January meeting. He agreed to accept the same compensation as Mr. Lutz - $60 per month plus the use of a cell phone on the borough's plan. He has some experience with setting up web sites and will get together with Tom T. Orosz to show him how it can be done and what it would cost.

Mr. DeLuca brought up the necessity for the borough to increase sewage rates because Beaver Falls has increased our usage fee. Right now our minimum usage is $12.00 per 5000 gallons and $2.50 per each additional 1000 gallons per quarter. Several options were discussed and it was decided to increase the minimum usage to $18.00 per 5000 gallons and $3.25 per each 1000 gallons used. This will offset what Beaver Falls is charging us for usage. Mr. Klugh moved to increase the quarterly fees as noted above and was seconded by Mr. Tom E. Orosz. A roll call vote passed the motion as follows: Mr. Tom T. Orosz – yes; Mr. Klugh – yes; Mr. Tom E. Orosz – yes; Mr. Bostek – yes; Mr. Tate – yes; and Mr. DeLuca – yes.

Mr. DeLuca also noted that the 2009 budget had to be voted on. A question regarding the budgeting of $20,000 for street lighting from the general fund was raised. If it becomes necessary, the street lighting can be paid from the liquid fuel fund to provide extra money in the general fund if needed. Mr. Tate moved to approve the 2009 budget in the amount of $270,551.00 and was seconded by Mr. Klugh. A roll-call vote passed the motion as follows: Mr. Tom T. Orosz – yes; Mr. Klugh – yes; Mr. Tom E. Orosz – yes; Mr. Bostek – yes; Mr. Tate – yes; and Mr. DeLuca – yes.

## NEW BUSINESS

Mr. Tom T. Orosz - none

Little seconded the motion that passed by roll-call vote as follows: Mr. Bostek – yes; Mrs. Helbig – yes; Ms. Harker – yes; Mr. Little – yes; Mr. Heaton – no; Mr. Tate – yes; and Mr. DeLuca – yes.

**New Business**

Mr. Bostek - none
Mrs. Helbig – none
Ms. Harker - none
Mr. Little - none
Mr. Heaton - none
Mr. Farkas asked about the status of the Standard Street sewer repair (Old Business). The repair is complete and the line has been working for about 2 weeks.
Mr. Tate - none
Mr. Deluca - none
Mr. Eakles reported that there is no stop sign at Mayfield Alley and Harbison. There hasn't been one there for quite some time so no action will be taken.
Mr. McNeely asked about a credit card for the street department employees to make purchases for the borough because Mr. Orosz had one before. Mr. DeLuca has a card and can be called for any purchase that is necessary to make. There was discussion about also obtaining a card for Mr. Heaton.
Mr. DeLuca brought up a discussion about the borough's sewer rates. At this time West Mayfield has the lowest rates in the county. This could cause some difficulty in obtaining any type of grants for sewer repairs or replacement of antiquated sewer lines. Our service provider, Beaver Falls Municipal Authority has increased our payment to them on a yearly basis as well as the joint users. We pay $3.70 per 10000 gallons and the fees that we charge don't begin to cover our costs. Our sewage account has steadily decreased in the past year and we have paid out more than we have collected. At this rate we will deplete our sewer fund within a year and this could be quite detrimental to the borough. Following some discussion, it was decided to increase our rates for 2013. Mr. Heaton moved to raise the quarterly base fee from $18.00 to $40.00 for the first 10,000 gallons and raise the fee for each additional 1000 gallons of use from $3.25 to $3.50. Mr. Tate seconded the motion that passed by a vote of 6-1 with Mr. Little casting the nay vote. This is still less than what we are being charged and is still less than some of our neighboring communities like Chippewa and Big Beaver. As far as the repairs that had to be made to the sewer line on Standard Street, Mr. DeLuca looked into funding from PennVest but they have no funds available for repairs – only replacement. Mr. Fenchel said that money used for stone for the repair could come from the Liquid Fuel fund. At this time Ms. Harker moved to enter an executive session (7:35 p.m.) to discuss personnel issues. Mr. Little seconded the motion.
Following the executive session Mrs. Lansberry was instructed to pay overtime hours to Brian McNeely for work done on Standard Street. Mr. Heaton now has a spread sheet in place to track all employee hours. A check in the amount of $20,000 will be made to Nicely Excavation for the sewer work on Standard Street.
Motion to ratify purchases made by committees Tate/Heaton carried.
Motion to adjourn at 9:45 Little/Heaton carried.

Respectfully submitted,
Patricia Lansberry, Secretary Patricia Lansberry

**ORDINANCE NO. 040195**

AN ORDINANCE OF THE BOROUGH OF WEST MAYFIELD, BEAVER COUNTY, PENNSYLVANIA ADOPTING REGULATIONS CONCERNING THE WEST MAYFIELD SANITARY SEWER SYSTEM, REGULATING THE CONNECTION REQUIRED AND EXCEPTIONS THERETO; PROVIDING FOR NOTICE TO PROPERTY OWNERS AND RESULTS OF THEIR FAILURE TO CONNECT WITH SAID SYSTEM ALONG WITH EQUITABLE REMEDIES; SETTING FORTH THE REQUIRED FEES WITH REGARD TO UTILIZING THE SANITARY SEWER SYSTEM AND PERMITS THEREFORE; PROVIDING FOR THE CONNECTION BY THE BOROUGH AND THE RECOVERING OF COSTS IN THE EVENT THE PROPERTY OWNER FAILS TO PAY THE NECESSARY FEES; SETTING FORTH DESIGN STANDARDS REGARDING SAID CONNECTIONS; SETTING FORTH PROHIBITED CONNECTIONS AND THE DISCONTINUANCE OF SEPTIC SYSTEMS; PROVIDING FOR CONSTRUCTION REGULATIONS AND INSPECTIONS; ESTABLISHING THE PENALTY FOR VIOLATION OF SAID ORDINANCE.

The Borough of West Mayfield by and through the council of the borough of West Mayfield, Beaver County, Pennsylvania enact and establish the following ordinance, by the authority of the same:

040195-1. DEFINITIONS.

As used in this chapter, the following terms shall have the meanings indicated:

PERSON - Any natural person, association, partnership, firm or corporation. The singular shall include the plural and the masculine shall include the feminine and the neuter.

EXISTING SEWER CUSTOMER - All borough residents served by the existing sewer system as defined herein.

EXISTING SEWER SYSTEM - All sanitary sewer lines in the borough, together with all appurtenances and facilities, serving the residents of the borough prior to the construction of any sewer system addition.

NEW CUSTOMERS - All borough residences served by any sewer system addition as defined herein.

CALCULATION OF INITIAL SANITARY SEWER SERVICE CHARGE - A

Geoffrey N. Gray
ATTORNEY AT LAW
P.O. BOX 437
2400 DARLINGTON ROAD
BEAVER FALLS, PA 15010
(412) 846-7171

study done by Widmer Engineering determining the appropriate charges pursuant to Act 203 of 1990 (House Bill No. 444).

040195-2. CONNECTION REQUIRED.

Every owner of property in the Borough of West Mayfield whose property abuts upon any line of the sanitary sewers of the Borough of West Mayfield which drains into the sewage treatment plant of the Beaver Falls Joint Sewer Authority or which adjoins or abuts upon any street or alley in which a public sewer is or shall hereafter be located shall connect, at his own costs, the building, buildings or other structures located on said property with said sanitary sewers of the borough in such manner and within such time as the borough shall order, for the purpose of the discharge of all fecal matter, human excrement, kitchen and laundry waste and such other sewage as is customarily disposed of in a sanitary sewer system. All such sewage shall, after such connection, be conducted into such sewer. Every such property shall be connected separately and independently with the sewer through the tap-in connection branch directly opposite the building or nearest in a downstream direction.

040195-3. SEPTIC SYSTEMS PROHIBITED ABUTTING SEWER LINE.

It shall be unlawful for any owner, lessee or occupier of any property abutting on any line of the sanitary sewer system of said borough to employ any means, either by septic tank or otherwise, for the disposal of sanitary sewage other than into and through the sanitary sewers of the borough, unless

otherwise determined by the borough sewage enforcement officer that said connection cannot be accomplished.

040195-4. NOTICE TO DISCONNECT SEPTIC SYSTEMS.

Where any structure is now or hereafter connected to any septic tank or using any method by which sanitary sewage is disposed of or eliminated other than through the sanitary sewer system of said borough, it shall be the duty of the Borough Secretary or other authorized person to notify the owner, lessee or occupier of such structure, in writing, either by personal service or certified mail, to disconnect the same and make proper connections for the discharge and disposal of sewage throughout the sanitary sewer system of the borough, as hereinafter provided, within sixty (60) days after receipt of such notice.

040195-5. CONNECTION BY BOROUGH; RECOVERY OF COSTS.

In case any owner of property adjoining or adjacent to such sewers shall neglect or refuse to connect with and use said sewers within such period of sixty (60) days after notice to do so has been served upon him, either by personal service or by certified mail as aforesaid, the Borough Council or its agents may enter upon such property and construct such connection. In such case, the Secretary or other authorized person on behalf of the Borough Council shall forthwith upon completion of the work an itemized bill for the cost of construction of such connection to the owner of the property to which connection has been so made, which bill shall be

shall be done in accordance with rules and regulations established by the borough and shall be inspected by the Borough Engineer before being covered.

040195-11. VIOLATIONS AND PENALTIES.

Any person, persons, partnership or any agents or executive officers of any corporation violating the provisions of this chapter shall, upon conviction for each and every violation, be subject to a fine not to exceed six hundred dollars ($600.00) and costs of prosecution and, in default of payment of fine and costs, be subject to imprisonment for a period not exceeding thirty (30) days.

040195-12. PRIOR ORDINANCE.

Any and all prior ordinances not in conformity with this said ordinance are hereby rescinded to the extent they are not in conformity with this said ordinance.

ENACTED AND ORDAINED, this 12 day of June, 1995.

Witness:

Patricia Lansberry
Patricia Lansberry, Secretary

BOROUGH OF WEST MAYFIELD

by: Paul Farkas
President of Council
Paul Farkas

Approved: Thomas F Bozich
Mayor

BOROUGH OF WEST MAYFIELD

RESOLUTION NO. 04-11-13

**BE IT KNOWN THAT THE BOROUGH OF WEST MAYFIELD INTENDS TO ADOPT AND ORDAIN THE FOLLOWING RESOLUTION AMENDING THE BILLING FEE CHARGED BY THE BEAVER FALLS MUNICIPAL AUTHORITY.**

**WHEREAS,** the Borough of West Mayfield has entered into a new four year agreement with the Beaver Falls Municipal Authority to provide various services relating to water and sewage.

**WHEREAS,** the Borough of West Mayfield maintains the authority to approve and charge fees related to items such as water and sewage, including the billing fees associated with the same.

**WHEREAS,** the Borough Council desires to approve a change of the amount chargeable by the Beaver Falls Municipal Authority to $1.50.

**ORDAINED AND ENACTED** this 11th day of April, 2013.

Attest:

Patricia Lansberry
Borough Secretary

Borough of West Mayfield

Thomas DeLuca
President of Council

Paul Farkas
Mayor

No. - 1995
RESOLUTION FOR
SEWER USER'S CHARGE

RESOLUTION DETERMINING THE UNIFORM SEWER USER'S CHARGE FOR THE YEAR 1996 AND THEREAFTER AND ESTABLISHING A MINIMUM UNIFORM USER'S CHARGE.

WHEREAS, the Borough of West Mayfield (hereinafter referred to as Borough) owns and operates the sanitary sewage system located within the boundaries of the Borough; and

WHEREAS, the Borough has incurred additional expenses and an increase in costs in order to operate and maintain the Borough's sanitary sewage system; and

WHEREAS, under a previously enacted ordinance, the Borough of West Mayfield is permitted to establish a sewer rental charge and further to annually amend the same to state the sewer rental charge payable by the owner and/or occupier of premises served by the Borough's sanitary sewer system;

NOW THEREFORE, be it resolved by the Council of the Borough of West Mayfield as follows:

1. A sewer user's charge for the calendar year 1996 will be $2.25 per 1000 gallons of water consumption.

2. The minimum uniform user's charge for any user for the Borough's sanitary sewer system is established at $11.25 per quarter for usage of 0 - 5000 gallons per quarter.

ENACTED AND ORDAINED this 14th day of March , 1996.

BOROUGH OF WEST MAYFIELD

Attested by:

Borough Secretary

Edward T. Sebastian
President

Approved this 14 day of March, 1996.

**ORDINANCE NUMBER 1040-A**

AN ORDINANCE OF THE BOROUGH OF WEST MAYFIELD, BEAVER COUNTY, PENNSYLVANIA, ADOPTING AND IMPOSING SEWER RENTAL CHARGES; PROVIDING FOR PAYMENT OF THE SAME; AND PROVIDING THAT UNPAID CHARGES SHALL BE A LIEN ON PROPERTY AND PROVIDING SPECIAL ARRANGEMENTS FOR INDUSTRIAL CONCERNS.

The Borough of West Mayfield, by and through the Council of said Borough of West Mayfield, Beaver County, Pennsylvania, does hereby enact and establish the following Ordinance:

I. Imposition of sewer rental charges; all owners of property connected or connecting with the sewer lines in the public sewer system, and all of the owners of property who may hereafter connect with and use the same shall pay annual sewer rental or charges in quarterly installments as hereinafter provided. Said bills may either be submitted and processed by the Borough of West Mayfield or the City of Beaver Falls or the Beaver Falls Municipal Authority on behalf of the Borough as the Borough Council may designate. Said rental or charges for the use of said sewer facilities are based upon the following schedules of rates:

a) The service charge for all non-commercial or non-industrial customers supplied with public water from the Beaver Falls Municipal Authority shall be set, billed and collected at an annual uniform sewer user's charge for calendar year 1998 at $2.50 per 1,000 gallons of water consumption. The minimum uniform user's charge for any user of the sanitary sewer system is established at $12.00 per quarter.

b) The service charge for all non-commercial or non-industrial customers not supplied with public water from the Beaver Falls Municipal Authority but from lot wells or otherwise shall be set, billed and collected as follows: The minimum uniform user's charge for such user of the sanitary sewer system is established at $45.00 per quarter.

c) The service charge for all commercial and industrial customers supplied with public water from the Beaver Falls, Municipal Authority shall be set, billed and collected as follows: The annual uniform sewer user's charge for calendar year 1998 shall be $2.50 per 1,000 gallons of water consumption. The minimum uniform user's charge for any such user of the sanitary sewer system is established at $60.00 per quarter.

d) The service charge for all commercial and industrial customers not supplied with public water from the Beaver Falls Municipal Authority but from lot wells or otherwise shall be set, billed and collected as follows: the minimum uniform user's charge for any such user of the sanitary sewer system is established at $60.00 per quarter.

**II.** There is imposed upon each property in the Borough of West Mayfield served by the Borough sanitary sewer system and having the use thereof, a surcharge payable by the property owner and/or the occupier of said premises as hereinafter may be stated, for the non-payment of cost of use, whether direct or indirect, of the sanitary sewer system based upon the cost as hereinafter set forth.

**III.** The cost for said sewer surcharge shall be computed as follows and paid directly to the Borough:

**a)** In the event that a Notice of Intent to shut-off water is mailed to the owner and/or occupier of the premises, an additional surcharge of $20.00 plus any cost (including but not limited to mailing costs, etc.) shall be added onto the cost of the sewage bill. This is in addition to the Beaver Falls Municipal Authority costs.

b) In the event that the water is disconnected for nonpayment of the bill, an additional surcharge of $35.00 plus any cost (including mailing and water shut-off fee) shall be added onto the cost of the sewage bill and other previously imposed surcharge. This is in addition to the Beaver Falls Municipal Authority costs.

**IV.** All of the aforementioned annual or quarterly sewer rental charges and sewage surcharges shall be liened on the property charged with the payment thereof and, if not paid, may be collected by an Action in Assumpsit in the name of the Borough of West Mayfield against the owner of the property charged or by distress of the personal property on the premises, or by a lien filed in the nature of a municipal lien.

**V.** No portion of this Ordinance shall be construed as to prevent any special agreement or arrangement between the Borough of West Mayfield and any industrial concern or commercial concern whereby industrial waster or commercial waster of any strength or character may be accepted by the Borough for treatment, subject to payment therefor by said industrial concern or commercial concern as agreed upon.

VI. Council reserves the right to and may from time to time adopt, revise and amend such rules and regulations, including charges as stated herein, as it deems necessary and proper for the use and operation of the sewer system, which rules and regulations shall be and become a part of this Ordinance.

ENACTED AND ORDAINED this 14th day of May, 1998.

Borough of West Mayfield

Patricia Lansberry
Patricia Lansberry, Secretary

by: Paul Farkas
President

APPROVED:

Thomas Bergick
Mayor

# EXHIBIT F8

GAITENS, TUCCERI & NICHOLAS, P.C.
ATTORNEYS AT LAW

519 COURT PLACE
PITTSBURGH, PENNSYLVANIA 15219

gtnlaw.com

**CHARLEE ROSINI, ESQUIRE**
**crosini@gtnlaw.com**

June 8, 2022

**VIA E-MAIL: whitetwp@comcast.net**

Ms. Emily Dean
Open Records Officer, White Township
2511 13th Avenue
Beaver Falls, Pennsylvania 15010

In Re: Right-to-Know Request – June 8th, 2022

Dear Ms. Dean:

Kindly accept the attached Right-to-Know Request. Thank you in advance for your assistance with this request.

I look forward to hearing from you.

Very truly yours,

CharLee Rosini

CharLee Rosini

Attachments

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME:** White Township (Attn: AORO)

Date of Request: June 8th, 2022 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☒ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or information concerning White Township's relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☒ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☒ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☒ $100 (or) ☐ $_____.**

---

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

# White Township
## Beaver County

2511 13th Avenue, Beaver Falls, PA 15010 · Phone 724-843-2819 · Fax 724-843-2346
whitetwp@comcast.net
www.whitetwp.net

**Right-To-Know Law Extension Notice**

06-09-22

CharLee Rosini
GTN Law
519 Court Place
Pittsburgh PA, 15219

Dear CharLee Rosini:

Thank you for writing to White Twp., Beaver County to request records pursuant to Pennsylvania's Right-to-Know Law ("RTKL"), 65 P.S. §§ 67.101 *et seq*. On 12-3-21 you requested **detailed monthly tax collector statements for August, September, October 2021 Township and Fire.**

Pursuant to Section 902(a) of the RTKL, an additional 30 days are required to respond because:

- ☐ The request requires redaction in accordance with Section 706 of the RTKL.
- ☐ The request requires the retrieval of a record stored in a remote location.
- ☐ A timely response cannot be accomplished due to bona fide staffing limitations.
- ☐ A legal review is needed to determine whether the record is subject to access.
- ☐ The requester has not complied with the Agency's policies regarding access to records.
- ☐ The requester refuses to pay applicable fees authorized by the RTKL.
- ☒ The extent or nature of the request precludes a response within the required time period.

White Twp. expects to respond to your request on or before 7/9/22.

Respectfully,

Emily Dean
Secretary-Treasurer
White Township, Beaver County

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it may be required if an appeal is filed. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME:** White Township (Attn: AORO)

Date of Request: June 8th, 2022 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: CharLee Rosini Company (if applicable): GTN Law

Mailing Address: 519 Court Place

City: Pittsburgh State: PA Zip: 15219 Email: crosini@gtnlaw.com

Telephone: 412-391-6920 Fax: 412-391-1189

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☒ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law. Use additional pages if necessary.*

Please provide any and all agreements and/or information concerning White Township's relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users (JSU).

**DO YOU WANT COPIES?** ☐ Yes, printed copies (*default if none are checked*)
☒ Yes, electronic copies preferred if available
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☒ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☒ $100 (or) ☐ $_____.**

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**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Feb. 3, 2020

# White Township
Beaver County

2511 13th Avenue, Beaver Falls, PA 15010 · Phone 724-843-2819 · Fax 724-843-2346
whitetwp@comcast.net
www.whitetwp.net


**Right-To-Know Response**

July 8, 2022

CharLee Rosini
519 Court Place
Pittsburgh PA, 15219

Dear CharLee Rosini,

Thank you for writing to White Twp. to request records pursuant to Pennsylvania's Right-to-Know Law ("RTKL"), 65 P.S. §§ 67.101 *et seq*.

On June 8, 2022 you requested information on all agreements and/or information concerning White Township's relationship with the City of Beaver Falls as it would relate to sewage and the existence and/or participation in the Joint Sewer Users.

Based on a thorough examination of records in the possession, custody and control of White Township, please see the attached ordinances we have on file. This is the only information we have in our possession.

If you choose to file an appeal you must do so within 15 business days of the mailing date of the agency's response. *See* 65 P.S. § 67.1101. Please note that a copy of your original RTKL request, and the agency's response letter should be included when filing an appeal. More information about how to file an appeal under the RTKL is available at the Office of Open Records website, https://www.openrecords.pa.gov.

If you have additional questions, please contact me, using the information on this letterhead. This correspondence will serve to close this record with our office as permitted by law.

Respectfully,

Emily C. Dean

Emily Dean
Open Records Officer
White Township, Beaver County

No. 3

AN ORDINANCE

Signifying and expressing the desire of the corporate authorities of the Township of White, County of Beaver and Commonwealth of Pennsylvania, to increase the indebtedness of said Township by the amount of Twenty Thousand Five Hundred ($20,500.00) dollars for the purpose of constructing sanitary trunk line sewers, intercepting sewers, manholes, flush tanks and work incident thereto within the Township of White aforesaid; to pay said Township's proportionate share of the expense of the original cost of the Sanitary Sewer Plant of the City of Beaver Falls, Beaver County, Pennsylvania, and the main trunk line and appurtenances thereof, and to pay said Township's proportionate cost of the intercepting sewer in the Township of Patterson, Beaver County, Pennsylvania, and tp pay off the present indebtedness of said Township as evidenced by notes, and providing further for the holding of an election therefore and authorizing and directing the corporate authorities to make the necessary announcements of said election and do all other acts and things incident thereto.

BE IT ENACTED AND ORDAINED by the Township Supervisors of the Township of White, County of Beaver and Commonwealth of Pennsylvania, and it is hereby enacted and ordained by authority of the same, That the corporate authorities of the Township of White aforesaid hereby signify and express their desire to increase the bonded indebtedness of the Township of White aforesaid by the amount of Twenty Thousand Five Hundred ($20,500.00) dollars for the purpose of constructing sanitary trunk line sewers, intercepting sewers, manholes, flush tanks and work incident thereto within the Township of White aforesaid; to pay said Township's proportionate share of the expense of the original cost of the Sanitary Sewer Plant of the City of Beaver Falls, Beaver County, Pennsylvania, and the main trunk line and appurtenances thereof, and to pay said Township's proportionate cost of the intercepting sewer in the Township of Patterson, Beaver County, Pennsylvania, and to pay off the present indebtedness of said

semi-annually on the first day of the months of May and November in each year, on presentation and surrender of the interest coupons hereto attached, as they severally become due, without deduction for any tax, except gift, succession or inheritance taxes, which may be levied or assessed thereon or on this bond or on the debt secured hereby pursuant to any present or future law of the Commonwealth of Pennsylvania, all of which taxes the Township of White hereby assumes and agrees to pay, as the same may be, from time to time assessed thereon.

Both principal and interest are payable in lawful money of the United States of America at the John T. Reeves & Co., Bankers, Beaver Falls, Pennsylvania.

This bond is one of a series of twenty-nine (29) bonds of like date, amount and tenor except as to the date of maturity; numbered consecutively from one (1) to twenty-nine (29) both inclusive, amounting in the aggregate to the sum of Twenty-Nine Thousand Dollars ($29,000.00), issued in accordance with the Act of the General Assembly of the Commonwealth of Pennsylvania, approved the twenty-fifth day of June, A.D. 1941, P. L. 159, as amended, and by virtue of an ordinance of the Township of White and the sworn statement of authorized officers thereof, as appears of record in the office of the Clerk of the Court of Quarter Sessions of Beaver County, Pennsylvania.

It is hereby certified that all acts, conditions and things required to be or be done, happen and be performed precedent to and in the issuance of this bond or in the creation of the debt of which it is evidence, have been done, happened and been performed in regular and due form and manner as required by law; and that this bond, together with all other indebtedness of the said Township of White is not in excess of any constitutional or statutory



#47

Township as evidenced by notes.

That a public election be and the same is hereby authorized and directed to be held at the usual hours and places on the second day of November, A.D. 1937, for the purpose of obtaining the assent of the electors of the said Township for the increase of the bonded indebtedness of said Township by the amount and for the purposes aforesaid, and the corporate authorities are hereby authorized and directed to make the necessary announcements of said election and do all other acts and things incident thereto.

That the amount of the last assessed valuation of the Township of White is $324,000.00, and the amount of the existing debt is $1790.00. The percentage of the proposed increase of indebtedness is .06327, plus.

Enacted and ordained this Third day of September A. D. 1937.

Township of White,

by W G Robbins
President of Board of Supervisors.

Attest:

Geo L. Haley
Secretary

#3

OBSOLETE

Date May 4 2004

ORDINANCE NO. 47

AN ORDINANCE INCREASING THE BONDED INDEBTEDNESS OF THE TOWNSHIP OF WHITE, COUNTY OF BEAVER, COMMONWEALTH OF PENNSYLVANIA BY AN ISSUE OF COUPON BONDS IN THE AMOUNT OF TWENTY NINE THOUSAND DOLLARS ($29,000.00) FOR THE PURPOSE OF FUNDING UNFUNDED INDEBTEDNESS INCURRED PURSUANT TO AGREEMENT WITH THE CITY OF BEAVER FALLS, FOR PERMANENT SEWER IMPROVEMENTS; FIXING THE FORM, NUMBER, DATE, INTEREST AND MATURITY THEREOF; LEVYING A TAX FOR PAYMENT OF DEBT SERVICE CHARGES; AND AUTHORIZING EXECUTION, SALE AND DELIVERY THEREOF.

WHEREAS it is necessary that the bonded indebtedness of the Township of White, County of Beaver and Commonwealth of Pennsylvania, be increased by the amount of Twenty Nine Thousand Dollars ($29,000.00) for the purpose of funding unfunded indebtedness incurred pursuant to agreement with the City of Beaver Falls, for permanent sewer improvements.

NOW THEREFORE BE IT ORDAINED AND ENACTED by the Board of Township Supervisors of the Township of White and it is hereby ordained and enacted as follows:

Section 1. That the bonded indebtedness of the Township of White, County of Beaver, Commonwealth of Pennsylvania, be and the same is hereby increased by the amount of Twenty Nine Thousand Dollars ($29,000.00), for the aforesaid purpose.

Section 2. Said indebtedness shall be evidenced by twenty-nine (29) general obligation bonds in coupon form, numbered consecutively from one (1) to twenty-nine (29) both numbers inclusive, each in the principal sum of One Thousand Dollars ($1,000.00), dated and bearing interest from the first day of November, 1965 at the rate of three and three fourths (3-3/4%) per centum per annum, payable semi-annually on the first day of the months of May and November in each year during the term of said bonds which shall mature in numerical order in accordance with Section 210 (d)

of the Municipal Borrowing Law of 1941, as amended, and be paid as follows:

Bonds Nos. 1 to 4, both inclusive, $4,000, November 1st, 1966
Bonds Nos. 5 to 9, both inclusive, $5,000, November 1st, 1968
Bonds Nos. 10 to 14, both inclusive, $5,000, November 1st, 1970
Bonds Nos. 15 to 19, both inclusive, $5,000, November 1st, 1972
Bonds Nos. 20 to 24, both inclusive, $5,000, November 1st, 1974
Bonds Nos. 25 to 29, both inclusive, $5,000, November 1st, 1976

The principal and interest of said bonds shall be payable at John T. Reeves & Co., Bankers, Beaver Falls, Pennsylvania without deduction for any taxes, except gift, succession and inheritance taxes, which may be levied or assessed thereon or on the debt secured thereby pursuant to any present or future law of the Commonwealth of Pennsylvania, all of which taxes the Township of White assumes and agrees to pay as the same may be from time to time assessed thereon.

Section 3. The period of usefulness of the improvements for which an unfunded debt was incurred which is to be funded by the said bonds to be issued, is 20 years.

Section 4. The said bonds are hereby declared to be general obligations of the Township of White and shall pledge the full faith and credit of the Township.

Section 5. The form of said bonds and the coupons thereto annexed shall be substantially as follows:

UNITED STATES OF AMERICA
COMMONWEALTH OF PENNSYLVANIA
COUNTY OF BEAVER
TOWNSHIP OF WHITE
FUNDING BOND OF 1965

Number $1,000.00

KNOW ALL MEN BY THESE PRESENTS, that the Township of White, County of Beaver, Commonwealth of Pennsylvania, for value received, hereby acknowledges itself indebted and promises to pay to the bearer hereof, or if registered, to the registered owner hereof, the just sum of One Thousand Dollars ($1,000.00) on the first day of November, A.D. 19 , with interest thereon at the rate of three and three fourths (3-3/4 %) per centum per annum, payable

semi-annually on the first day of the months of May and November in each year, on presentation and surrender of the interest coupons hereto attached, as they severally become due, without deduction for any tax, except gift, succession or inheritance taxes, which may be levied or assessed thereon or on this bond or on the debt secured hereby purtuant to any present or future law of the Commonwealth of Pennsylvania, all of which taxes the Township of White hereby assumes and agrees to pay, as the same may be, from time to time assessed thereon.

Both principal and interest are payable in lawful money of the United States of America at the John T. Reeves & Co., Bankers, Beaver Falls, Pennsylvania.

This bond is one of a series of twenty-nine (29) bonds of like date, amount and tenor except as to the date of maturity; numbered consecutively from one (1) to twenty-nine (29) both inclusive, amounting in the aggregate to the sum of Twenty-Nine Thousand Dollars ($29,000.00), issued in accordance with the Act of the General Assembly of the Commonwealth of Pennsylvania, approved the twenty-fifth day of June, A.D. 1941, P. L. 159, as amended, and by virtue of an ordinance of the Township of White and the sworn statement of authorized officers thereof, as appears of record in the office of the Clerk of the Court of Quarter Sessions of Beaver County, Pennsylvania.

It is hereby certified that all acts, conditions and things required to be or be done, happen and be performed precedent to and in the issuance of this bond or in the creation of the debt of which it is evidence, have been done, happened and been performed in regular and due form and manner as required by law; and that this bond, together with all other indebtedness of the said Township of White is not in excess of any constitutional or statutory



#47

FORM OF COUPON

$18.75

On the day of , 19 , the Township of White, Beaver County, Pennsylvania, will pay to the bearer at the John T. Reeves & Co., Bankers, Beaver Falls, Pennsylvania, the amount shown hereon, free of tax, being six months' interest on its Funding Bond of 1965, dated the first day of November, 1965 and numbered

Treasurer

BACK OF BOND

No.

UNITED STATES OF AMERICA
COMMONWEALTH OF PENNSYLVANIA
COUNTY OF BEAVER
TOWNSHIP OF WHITE
Tax Free
$1000.00
3-3/4%
Funding Bond of 1965
Dated November 1, 1965
Due November 1, 19
Interest Payable
May first and November first
Principal and Interest Payable
at
John T. Reeves & Co., Bankers,
Beaver Falls, Pennsylvania
NOTHING TO BE WRITTEN HERE EXCEPT BY THE TREASURER

| Date of Registry | In Whose Name Registered | Treasurer |
|---|---|---|
| | | |
| | | |

Section 6. The said bonds shall be executed in the name and under the corporate seal of the Township by the Chairman of the Board of Township Supervisors, attested by the Secretary and

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#47

countersigned by the Treasurer, and the interest coupons shall be authenticated by the facsimile signature of the Treasurer. The Treasurer is hereby authorized and directed to deliver said bonds to the purchaser and receive payment therefor on behalf of the Township after sale of the bonds in the manner required by law; provided, however, that said bonds shall not be sold for less than their par value with accrued interest to the date of delivery and payment.

Section 7. There is hereby levied and assessed upon all persons and property subject to taxation for Township purposes an annual tax in each of the following fiscal years of so many mills as will yield amounts sufficient for the payment from time to time of interest covenanted to be paid on said bonds and the principal thereof at maturity:

| | |
|---|---|
| For the year 1966 | $ 5,087.50 |
| For the year 1967 | 937.50 |
| For the year 1968 | 5,937.50 |
| For the year 1969 | 750.00 |
| For the year 1970 | 5,750.00 |
| For the year 1971 | 562.50 |
| For the year 1972 | 5,562.50 |
| For the year 1973 | 375.00 |
| For the year 1974 | 5,375.00 |
| For the year 1975 | 187.50 |
| For the year 1976 | 5,187.50 |

which taxes are sufficient for and shall be applied exclusively to said debt service charges as the same shall from time to time become due and payable. The collection of said tax shall commence with the fiscal year beginning 1966 being the first fiscal year following the issue of said bonds.

Section 8. There is hereby established a sinking fund for the payment of the bonds hereby authorized, said fund to be known as Sinking Fund No. 1. All moneys realized from the taxes hereby

levied shall be paid into the sinking fund hereby created as collected, and shall be applied exclusively to the payment of the principal of said bonds at maturity and interest and taxes thereon meanwhile, to which purpose they are hereby irrevocably pledged.

Section 9. All moneys derived from the sale of said bonds are hereby appropriated to the purposes stated and shall not be used for any other purpose.

Section 10. It is hereby declared that the debt to be incurred hereby, together with the existing net debt of the Township is not in excess of any constitutional or statutory limitation and the Chairman of the Board of Township Supervisors and Secretary are hereby authorized and directed to prepare, verify and file with the Clerk of the Court of Quarter Sessions of Beaver County, the statement required by the Act of Assembly, approved June 25th, 1941, P. L. 159 as amended and to do and perform all other acts proper in connection therewith.

Section 11. All ordinances or parts of ordinances not in accord with this ordinance are hereby repealed in so far as they conflict herewith.

ORDAINED AND ENACTED INTO LAW by the Board of Township Supervisors of the Township of White, this 27th day of October, 1965 in lawful session specially assembled.

Chairman, Board of Township Supervisors.

Attest:

Secretary

(Township Seal)



#47

# C E R T I F I C A T E

I, Stephen J. Stedila, Secretary of the Township of White, Beaver County, Pennsylvania, do hereby certify that the foregoing and attached is a true copy of an Ordinance which was duly enacted by the affirmative vote of a majority of all the members of the Board of Township Supervisors at a special meeting of the Board held the 27th day of October, 1965 after due and proper notice to the members and to the public and which was at all times open to the public; that the same was duly recorded and published as required by law in the

a newspaper of general circulation circulating generally in said Township, there being no such paper published therein. I further certify that the vote upon said Ordinance was called and duly recorded upon the minutes of the Board of Township Supervisors and that the members of the Board voted in the manner following:

Charles Brockhouse, .Aye

Alfred F. Yorns, Jr. Aye

Roy W. Craven Absent

WITNESS my hand and the seal of the Township of White this day of , 1965.

Stephen J. Stedila
Secretary

(Seal of the Township)

# EXHIBIT F9

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the ____ day of _____, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and [•] (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System **[including, without limitation, [•] (the "Existing Agreement")]**[1]; and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

[1] **Note to Draft:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as described in the list and plan attached on Exhibit A.

2.1.3. "Contributing Users." The Big Beaver Municipal Authority, Borough of Eastvale, the City, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "CPI Index." The Consumer Price Index for All Urban Consumers (CPI-U), All Items in Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, all urban consumers, not seasonally adjusted, as published by the Bureau of Labor Statistics of the U.S. Department of Labor.

2.1.5. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.6. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.7. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.7.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points.

2.1.7.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Beaver Falls Municipal Authority and have been identified on Exhibit B. If new un-metered flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed in Exhibit B, a revised list shall be determined and Exhibit B shall be modified accordingly. If at some time in the future any of these interconnections become metered

by a formal flow metering device, Exhibit A and Exhibit B shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.8. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.9. "Industrial Waste Survey." As defined in Section 12.

2.1.10. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.11. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.12. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.13. "Outside Users." The Contributing Users excluding the City.

2.1.14. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.15. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.16. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.17. "PUC." The Pennsylvania Public Utility Commission.

2.1.18. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). Notwithstanding the foregoing, Sections 18 and 19 shall be effective as of the Execution Date. If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of ten (10) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or their water provider. After flow meters are installed to measure the Flow from each

Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow, and (ii) all remaining Un-Metered Flow pursuant to Exhibit B. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14)) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable, and if such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the

maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. The Municipality shall reimburse Aqua for all costs and expenses that Aqua incurs related to the installation of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing any metering device ("Metering Costs"). The Municipality shall pay any Metering Costs to Aqua within thirty (30) days of Aqua submitting an invoice for any Metering Costs to the Municipality.

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a

license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service.

13.1. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through December 31, 2023, the Rate shall be Four and 54/100 Dollars ($4.54) per thousand gallons.

13.2. Rate Adjustments.

13.2.1. For each calendar year during the Term in which there is not an effective date for a rate increase pursuant to a rate case that Aqua has filed with the PUC under Section 1308 of the Public Utility Code, 66 Pa. C.S. § 1308 (an "Aqua Rate Case"), effective as of January 1 of such year, the then current Rate shall be adjusted by an amount equal to the amount of the percentage increase (if any) in the CPI Index for the month of October preceding the effective date of the adjustment as compared to the CPI Index for the month of October in the preceding year, not to exceed five percent (5%). In no event shall such adjustment result in a reduction of the then current Rate.

13.2.2. For each calendar year during the Term in which there is or will be an effective date for a rate increase pursuant to an Aqua Rate Case, effective as of the effective date of the rate increase set forth in the Aqua Rate Case (the "PUC Rate Effective Date"), the then current Rate shall be adjusted to an amount equal to the rate that the PUC has determined Aqua may charge to the Outside Users (the "PUC Permitted Rate") in lieu of any increase that would have occurred in that year under Section 13.2.1.

13.3. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within thirty (30) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

14. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $5,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within one (1) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 14 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

15. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System

and any repair, maintenance, expansion or modification of all or any party of the Municipality System shall be at the sole cost and expense of the Municipality.

16. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

16.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua;

16.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Municipality or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

16.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

The provision of this Section 16 shall survive the expiration of this Agreement.

17. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

18. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall approve the update to the City's Act 537 Plan and shall pass a resolution in form and substance acceptable to PA DEP and the City approving the City's updated Act 537 Plan. The City is and shall be an intended third-party beneficiary of this Section 18 and shall have the right to enforce directly the terms and conditions of this Section 18. The terms of this Section 18 shall be effective as of the Execution Date.

19. Consent to Sale of Acquired System. Effective as of the Execution Date, the Municipality (a) hereby consents to Aqua's purchase and acquisition of the Acquired System and related assets, (b) hereby waives any and all objections it has or may have in regard to the City's sale and Aqua's acquisition of the Acquired System and related assets, and (c) shall take any and all actions reasonably requested by Aqua and/or the City to effectuate the City's sale and Aqua's acquisition

of the Acquired System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution; provided, however, nothing set forth in this Section 19 shall waive or affect the ability of the Municipality to seek payment from the City to the Municipality of a portion of the proceeds of the sale of Acquired System. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19.

20. Agreement of Allocation of Remaining Capacity. In the event that Acquired Treatment Plant reaches 80% of its treatment capacity, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the Municipality shall enter into an agreement with Aqua regarding the remaining treatment capacity of the Acquired Treatment Plant that Aqua shall allocate to the Municipality.

21. Miscellaneous.

21.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

21.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

21.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

21.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

21.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

21.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an

agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

21.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

21.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: [●]

_____

_____

_____

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

21.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater **[, including, but not limited to the Existing Agreement,]**[2] shall terminate and be of no further force or effect.

21.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law.

21.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, shall be settled by arbitration in accordance with the Rules of

[2] **NTD:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

the American Arbitration Association, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in any Court having jurisdiction thereof. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

21.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

21.13. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | [•] |
| By: _____ | By: _____ |
| Name: _____ | Name: _____ |
| Title: _____ | Title: _____ |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 21.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: _____

Title: _____

EXHIBIT A
METERED FLOW POINTS

EXHIBIT B
UNMETERED FLOW POINTS

# EXHIBIT F10

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the ____ day of _____, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and [•] (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System **[including, without limitation, [•] (the "Existing Agreement")]**[1]; and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

[1] **Note to Draft:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as described in the list and plan attached on Exhibit A.

2.1.3. "Contributing Users." The Big Beaver Municipal Authority, Borough of Eastvale, the City, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "CPI Index." The Consumer Price Index for All Urban Consumers (CPI-U), All Items in Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, all urban consumers, not seasonally adjusted, as published by the Bureau of Labor Statistics of the U.S. Department of Labor.

2.1.5. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.6. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.7. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.7.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points.

2.1.7.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Beaver Falls Municipal Authority and have been identified on Exhibit B. If new un-metered flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed in Exhibit B, a revised list shall be determined and Exhibit B shall be modified accordingly. If at some time in the future any of these interconnections become metered

by a formal flow metering device, Exhibit A and Exhibit B shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.8. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.9. "Industrial Waste Survey." As defined in Section 12.

2.1.10. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.11. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.12. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.13. "Outside Users." The Contributing Users excluding the City.

2.1.14. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.15. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.16. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.17. "PUC." The Pennsylvania Public Utility Commission.

2.1.18. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). Notwithstanding the foregoing, Sections 18 and 19 shall be effective as of the Execution Date. If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of ten (10) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or their water provider. After flow meters are installed to measure the Flow from each

Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow, and (ii) all remaining Un-Metered Flow pursuant to Exhibit B. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14)) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable, and if such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the

maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. The Municipality shall reimburse Aqua for all costs and expenses that Aqua incurs related to the installation of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing any metering device ("Metering Costs"). The Municipality shall pay any Metering Costs to Aqua within thirty (30) days of Aqua submitting an invoice for any Metering Costs to the Municipality.

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a

license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service.

13.1. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through December 31, 2023, the Rate shall be Four and 54/100 Dollars ($4.54) per thousand gallons.

13.2. Rate Adjustments.

13.2.1. For each calendar year during the Term in which there is not an effective date for a rate increase pursuant to a rate case that Aqua has filed with the PUC under Section 1308 of the Public Utility Code, 66 Pa. C.S. § 1308 (an "Aqua Rate Case"), effective as of January 1 of such year, the then current Rate shall be adjusted by an amount equal to the amount of the percentage increase (if any) in the CPI Index for the month of October preceding the effective date of the adjustment as compared to the CPI Index for the month of October in the preceding year, not to exceed five percent (5%). In no event shall such adjustment result in a reduction of the then current Rate.

13.2.2. For each calendar year during the Term in which there is or will be an effective date for a rate increase pursuant to an Aqua Rate Case, effective as of the effective date of the rate increase set forth in the Aqua Rate Case (the "PUC Rate Effective Date"), the then current Rate shall be adjusted to an amount equal to the rate that the PUC has determined Aqua may charge to the Outside Users (the "PUC Permitted Rate") in lieu of any increase that would have occurred in that year under Section 13.2.1.

13.3. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within thirty (30) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

14. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $5,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within one (1) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 14 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

15. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System

and any repair, maintenance, expansion or modification of all or any party of the Municipality System shall be at the sole cost and expense of the Municipality.

16. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

16.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua;

16.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Municipality or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

16.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

The provision of this Section 16 shall survive the expiration of this Agreement.

17. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

18. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall approve the update to the City's Act 537 Plan and shall pass a resolution in form and substance acceptable to PA DEP and the City approving the City's updated Act 537 Plan. The City is and shall be an intended third-party beneficiary of this Section 18 and shall have the right to enforce directly the terms and conditions of this Section 18. The terms of this Section 18 shall be effective as of the Execution Date.

19. Consent to Sale of Acquired System. Effective as of the Execution Date, the Municipality (a) hereby consents to Aqua's purchase and acquisition of the Acquired System and related assets, (b) hereby waives any and all objections it has or may have in regard to the City's sale and Aqua's acquisition of the Acquired System and related assets, and (c) shall take any and all actions reasonably requested by Aqua and/or the City to effectuate the City's sale and Aqua's acquisition

of the Acquired System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19.

20. Agreement of Allocation of Remaining Capacity. In the event that Acquired Treatment Plant reaches 80% of its treatment capacity, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the Municipality shall enter into an agreement with Aqua regarding the remaining treatment capacity of the Acquired Treatment Plant that Aqua shall allocate to the Municipality.

21. Miscellaneous.

21.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

21.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

21.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

21.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

21.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

21.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions

thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

21.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

21.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: [●]

_____

_____

_____

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

21.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater **[, including, but not limited to the Existing Agreement,]**[2] shall terminate and be of no further force or effect.

21.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law.

21.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, shall be settled by arbitration in accordance with the Rules of the American Arbitration Association, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in any Court having jurisdiction thereof. Notwithstanding the above,

[2] **NTD:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

21.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

21.13. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | [•] |
| By: _____ | By: _____ |
| Name: _____ | Name: _____ |
| Title: _____ | Title: _____ |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 21.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: _____

Title: _____

EXHIBIT A
METERED FLOW POINTS

EXHIBIT B
UNMETERED FLOW POINTS

# EXHIBIT F11

October 19, 2021

Honorable Mayor George S Quay III
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

RE: **Charitable Contribution**

Dear Mr. Mayor:

Reference is made to that certain Asset Purchase Agreement (the "APA"), dated October 18, 2021, by and between: (i) Aqua Pennsylvania Wastewater, Inc., a Pennsylvania corporation ("Aqua"); and, (ii) the City of Beaver Falls, Pennsylvania (the "City") regarding the acquisition by Aqua of the City's wastewater collection and treatment system (the "Transaction"). Capitalized terms that are used but not otherwise defined herein shall have the meanings ascribed to such terms in the APA.

This letter is intended to memorialize the mutual understanding and agreement between Aqua and the City. In connection with the Transaction, and conditioned upon the Closing of the Transaction, Aqua, or an affiliate of it, agrees to participate in and contribute to certain charitable activities or entities located in and around the City in an amount of at least One Million Two Hundred and Fifty Thousand dollars ($1,250,000) (the "minimum contribution") over a period of eighteen months following the Closing. The City has identified the charitable events or entities attached hereto on Exhibit A as being eligible for Aqua to participate in; however, the City expressly reserves its rights to supplement and/or edit the charitable events or entities listed on Exhibit A. For the sake of clarity, nothing herein shall require Aqua or any of its affiliates to contribute more than the minimum contribution, and the minimum contribution shall only be made to duly qualified charitable entities.

If the foregoing is acceptable, please sign below and return this letter to the undersigned.

Sincerely,

By: Matthew Rhodes
Name: Matthew Rhodes
Title: Executive Vice President

AGREED AND ACCEPTED:

By: George S. Ryan III
Name: George S. Ryan III
Title: Mayor City of Beaver Falls, PA
Date: Oct 21, 2021

**Exhibit A**

**Beaver Falls Fire Department Ladder Truck**
**Beaver Falls Carnegie Library**

# EXHIBIT F12

# WATER USAGE AGREEMENT

THIS AGREEMENT made this _____ day of _____, 20____ by and between the BEAVER FALLS MUNICIPAL AUTHORITY, a body corporate politic, organization under the laws of the Commonwealth of Pennsylvania, having its principal office located at 1425 8th Avenue, Beaver Falls, Pennsylvania 15010, hereinafter called "Authority".

AND

Aqua Pennsylvania Wastewater, Inc. a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania with its principal office located at 762 W. Lancaster Avenue, Bryn Mawr, Pennsylvania 19010, hereinafter called "Aqua".

WHEREAS, Authority provides public water service to various customers within the City of Beaver Falls, hereinafter "Beaver Falls"; and

WHEREAS, Aqua has acquired the Beaver Falls wastewater collection and treatment system from Beaver Falls ("Aqua-Beaver Falls Transaction"); and

WHEREAS, Aqua and Beaver Falls require meter reading information in order to bill the acquired Beaver Falls wastewater customers at the volumetric rates in Beaver Falls.

WHEREAS, the parties hereto desire to enter into a written agreement concerning the provision of water meter read information and the payment therefore.

NOW WITNESSETH that in consideration of the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. Authority hereby agrees to provide Aqua with a report of the water usage for its public water service customers who are likewise wastewater customers of Aqua's wastewater system in Beaver Falls on at least a quarterly basis, except for those customers that are billed monthly by the Authority as described in paragraph five (5) herein.

2. The report to be provided by the Authority shall be sent to Aqua in the same month the water bill was issued, and no later than within five (5) days of the report being available.

3. The report to be provided by the Authority shall be in excel format or other electronic format and shall provide Aqua with the actual (or estimated) water usage as read and billed by the Authority. The report shall provide any changes in billing addresses and any separate billing address if the service address is not the same as the billing address. The report shall also provide move-in and move-out dates for customers that have opened or closed an account during the billing period.

4. Upon receipt of the water usage report, Aqua shall pay the Authority the sum of One Dollar ($1.00) per each meter reading (actual or estimate) contained in the report. A bill for

the total cost of the report shall be prepared by the Authority and sent out at least quarterly, or at least monthly in the case of customers that the Authority bills monthly as described in paragraph five (5) herein. Payment for the report shall be made by Aqua to the Authority within 45 days of the receipt of the statement. Should Aqua fail to pay the statement within the payment period, the Authority shall be under no duty or obligation to furnish Aqua with any subsequent reports until the bill is paid and payment in advance is made for any subsequent reports.

5. The Authority hereby reserves its right to bill its water customers on a basis which may be more frequently than quarterly, and may bill certain large volume customers monthly, in which case water usage information as described in paragraph three (3) shall be furnished to Aqua on a basis no more frequently than monthly for those customers billed by the Authority on a monthly basis.

6. This Agreement shall be effective as of the date Aqua and Beaver Falls close on the Aqua-Beaver Falls Transaction and shall remain in effect for four (4) years from the effective date. Agreement shall renew annually thereafter unless one party requests a renegotiation no less than 60-days prior to expiration.

7. This Agreement can be terminated by Aqua upon Aqua giving the Authority at least sixty (60) days written notice of its desire to terminate the Agreement and do without public water meter read reports, or if such Agreement shall be either terminated or suspended pursuant to the provision of paragraph four (4) supra.

8. This Agreement is entered into pursuant to a resolution of the Beaver Falls Municipal Authority Board of Directors duly held on the _____ day of _____, 20_____, and authorizing its Chairman to sign this Agreement on its behalf, the same to be attested by its Secretary.

9. This Agreement is entered into by Aqua, authorizing its President to sign this Agreement on its behalf, and attested to by Aqua's corporate secretary.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK; SIGNATURES ON NEXT PAGE]

DRAFT

IN WITNESS WHEREOF AND INTENDING TO BE LEGALLY BOUND HEREBY, the parties hereto by their fully designated officers have executed this Agreement the day and year first above written.

ATTEST: BEAVER FALLS MUNICIPAL AUTHORITY

_____ By:_____
Secretary

Printed:_____

Its: Chairman

ATTEST: AQUA PENNSYLVANIA WASTEWATER, INC.

_____ By:_____
Secretary

Printed: Marc A. Lucca

Its: President

DRAFT

# EXHIBIT G

AQUA PENNSYLVANIA WASTEWATER, INC.
(hereinafter referred to as the "Company")

RATES, RULES, AND REGULATIONS

GOVERNING THE COLLECTIONS OF

WASTEWATER

IN PORTIONS OF

ADAMS, BEAVER, BERKS, BUCKS, CARBON, CHESTER, CLARION, CLEARFIELD, DELAWARE, LACKAWANNA, LUZERNE, MONROE, MONTGOMERY, PIKE, SCHUYLKILL, VENANGO, AND WYOMING COUNTIES

IN THE COMMONWEALTH OF PENNSYLVANIA

ISSUED: XX/XX/XXXX
By:
Marc Lucca, President
Aqua Pennsylvania, Inc.
762 Lancaster Avenue
Bryn Mawr, Pennsylvania 19010

EFFECTIVE: XX/XX/XXXX

# NOTICE

THIS TARIFF ESTABLISHES WASTEWATER RATES FOR CUSTOMERS OF THE CITY OF BEAVER FALLS SITUATED WITHIN BEAVER COUNTY, PENNSYLVANIA.

LIST OF CHANGES MADE BY THIS TARIFF

Changes: This tariff makes changes to the reflect the acquisition of the wastewater assets of the City of Beaver Falls located in Beaver County, Pennsylvania. Closing on the acquisition took place on XX/XX/XXXX, with the effective date of ownership occurring at 12:01AM on XX/XX/XXXX. (See page XXX)

This tariff is made pursuant to the Commission's Order adopted at Docket No. A-2022-3033138, which authorizes the issuance of the Certificate of Public Convenience.

TABLE OF CONTENTS


| | Page Number | | |
|---|---|---|---|
| Rates, Rules, and Regulations | 1 | XXXX Revised | (C) |
| List of Changes Made by This Tariff | 2 | XXXX Revised | (C) |
| Table of Contents | 3 | XXXX Revised | (C) |
| Table of Contents (Cont'd) | 4 | Fourth Revised | |
| Table of Contents (Cont'd) | 5 | | |
| Description of Territory Served | 6 | Original Page | |
| Description of Territory Served (Cont'd) | 7 | Original Page | |
| Description of Territory Served (Cont'd) | 8 | XXXX Revised | (C) |
| Held For Future Use | 9 | Original Page | |
| **SCHEDULE OF RATES:** | | | |
| Rate Zone 1 | 10.1.1 | Original Page | |
| Rate Zone 1 (cont'd) | 10.1.2 | Original Page | |
| Rate Zone 2 | 10.2.1 | Original Page | |
| Rate Zone 2 (cont'd) | 10.2.2 | Original Page | |
| Rate Zone 3 | 10.3.1 | Original Page | |
| Rate Zone 3 (cont'd) | 10.3.2 | Original Page | |
| Rate Zone 4 | 10.4.1 | Original Page | |
| Rate Zone 4 (cont'd) | 10.4.2 | Original Page | |
| Rate Zone 5 | 10.5.1 | Original Page | |
| Rate Zone 5 (cont'd) | 10.5.2 | Original Page | |
| Rate Zone 6 | 10.6 | Original Page | |
| Rate Zone 7 - Limerick Division | 10.7 | Original Page | |
| Rate Zone 8 - East Bradford Township Division | 10.8 | Original Page | |
| Rate Zone 9 - Cheltenham Township Division | 10.9.1 | Original Page | |
| Rate Zone 9 - Cheltenham Township Division (cont'd) | 10.9.2 | Original Page | |
| Rate Zone 10 - East Norriton Township Division | 10.10 | Original Page | |
| Rate Zone 11 - New Garden Township Division | 10.11 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division | 10.12.1 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division (cont'd) | 10.12.2 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division (cont'd) | 10.12.3 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division | 10.13.1 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division (cont'd) | 10.13.2 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division (cont'd) | 10.13.3 | Original Page | |
| Rate Zone 14 - Beaver Falls Division | 10.14 | Original Page | (C) |
| Rate Zone 14 - Beaver Falls Division (cont'd) | 10.14.1 | Original Page | (C) |

DESCRIPTION OF TERRITORIES SERVED

| | Township | County |
|---|---|---|
| RATE ZONE 12 | | |
| Lower Makefield Township Division | Lower Makefield | Bucks |
| RATE ZONE 13 | | |
| East Whiteland Township Division | East Whiteland | Chester |

Sewer District A: that part of East Whiteland Township not included within Districts B, C, D, and E
Sewer District B: properties served by the western extension of the Route 30 sewer main
Sewer District C: residential dwellings located in the Lockwood Chase subdivision
Sewer District D: all properties that flow into and whose effluent is treated at the sanitary sewage facility that serves the dwellings in the Malvern Hunt development
Sewer District E: all commercial and residential properties located in the Atwater development south of the quarry

A depiction of the Sewer Districts as noted above can be found in Revised Exhibit H to the Application filed at Docket No. A-2021-3026132

| | | |
|---|---|---|
| RATE ZONE 14 | | |
| Beaver Falls Division | City of Beaver Falls | Beaver |

*All Divisions and Subdivisions above are billed on a per EDU basis, with the exception of the Media Division, Plumsock Division, Treasure Lake Division, and Village of Valley Forge Division

## SCHEDULE OF RATES

### RATE ZONE 14 – METERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 14 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

QUARTERLY SERVICE & CONSUMPTION CHARGES ($)

| | | Gallons per Quarter | Rate Zone 14 Quarterly | |
|---|---|---|---|---|
| RESIDENTIAL | Base (per EDU) | 0 to 3,000 Gallons | $42.37 | |
| | Block 1 | 3,000 Gallons and over | $8.46 | per 1,000 gallons |
| COMMERCIAL | Base (per EDU) | 0 to 3,000 Gallons | $42.37 | |
| | Block 1 | 3,000 Gallons and over | $8.46 | per 1,000 gallons |
| Bulk Rates [1] | | | $4.54 | per 1,000 gallons |
| Bulk Rate Other (Dalton) | | | $4.54 | per 1,000 gallons |

MONTHLY SERVICE & CONSUMPTION CHARGES ($)

| | | | | |
|---|---|---|---|---|
| COMMERCIAL & INDUSTRIAL | Base (per EDU) | 0 to 1,000 Gallons | $14.12 | |
| | Block 1 | 1,000 Gallons and over | $8.46 | per 1,000 gallons |

The DSIC surcharge shall not be applied to bills of wastewater customers in the Beaver Falls division; this will remain effective until an amended Long-Term Infrastructure Improvement Plan (LTIIP) is filed and approved which includes Beaver Falls. Following the approval of an amended LTIIP, the DSIC surcharge shall be applicable to wastewater customers in the Beaver Falls division.

[1] Bulk Rate service is available to municipalities and municipal authorities that provide their own wastewater collection system but obtain conveyance and treatment service from the Beaver Falls division. Municipalities and municipal authorities must enter into a service agreement with Aqua to establish terms and conditions of service, which may include, among other things, rate provisions that authorize annual rate adjustments.

RATE ZONE 14 – CONTINUED

Industrial Pretreatment Program-Beaver Falls (IPP-Beaver Falls)

A. Introduction

1. This Section applies to Industrial and Commercial customers served under Rate Zone 14 of this Tariff. All customers subject to this section ("Users") shall comply with the Wastewater Control Regulations and Industrial and Commercial Service Limitations as set forth in Section H and M, respectively, of the Company's Tariff, as amended from time to time, except as such rules and regulations are modified by this Section.

2. The Users shall be responsible for the charges and fees set forth below for the administration of the IPP-Beaver Falls. IPP fees are in addition to any other charges set forth in this Tariff.

3. Specific limitations and prohibitions applicable to Industrial and Commercial Users under this Section are set forth on Aqua's website regarding IPP-Beaver Falls.

4. Users shall be required to enter into a separate pretreatment agreement to govern specific limitations; prohibitions; conditions; duties and responsibilities; and sampling, monitoring and reporting requirements.

B. Charges

1. Industrial Wastewater Discharge Contract Application/Renewal Fee: $300.00

2. Specific Fees to be applied to quarterly flow, if the quarterly average results from samples collected from the discharge exceeds 300 ppm for $BOD_5$ or 275 ppm for TSS:

    a. $BOD_5$ Rate per 1,000 gallons = 0.00834 x $0.25 x ($BOD_5$ Sample – 300)

    b. TSS Rate per 1,000 gallons = 0.00834 x $0.15 x (TSS Sample – 275)

3. Industrial Surcharge Rate: $0.01 per gallon.

# EXHIBIT H

CITY OF BEAVER FALLS
ORDINANCE NO. 4081

AN ORDINANCE OF THE CITY OF BEAVER FALLS (THE "CITY"), BEAVER COUNTY, PENNSYLVANIA, ESTABLISHING RATES AND BILLING PROCEDURES FOR BOTH JOINT SEWER USERS AND PROPERTY OWNERS WITHIN IN THE CITY OF BEAVER FALLS

WHEREAS, under the Third Class City Code, 53 P.S. § 37435, City Council has the "power to enact, make, adopt, alter, modify, repeal and enforce…ordinances, resolutions, rules and regulations, not inconsistent with or restrained by the Constitution of Pennsylvania and laws of this Commonwealth, that are either of the following: (1) expedient or necessary for the proper management, care and control of the city and its finances and the maintenance of peace, good government, safety and welfare of the city and its trade, commerce and manufactures; (2) necessary to the exercise of the powers and authority of local self-government in all municipal affairs."

WHEREAS, the City Council of the City of Beaver Falls desires to exercise its authority under the aforementioned statutory provision and other provisions of the laws of the Commonwealth of Pennsylvania to set forth the following rate schedule and billing procedures for the City and Joint Sewer Users (JSU) concerning water, sewer, waste and fire hydrant fees as applicable.

1. Residents living within the city limits of the City of Beaver Falls shall pay the following rates where applicable which is collected by the Beaver Falls Municipal Authority:

   Quarterly accounts for city residents:

   $41.14 minimum fee for 0-3,000 gallons; $8.21 for 3,000+ gallons
   $68.00 waste/refuse bill
   $6.00 fire hydrant fee

Monthly commercial and industrial:

$13.71 minimum fee for 0-1000 gallons
$8.21 per thousand for 1000+ gallons.
$22.67 waste/refuse
$2.00 fire hydrant fee

2. Joint Sewer User (JSU) Rates

   Upon receipt of three (3) months of potable water readings, invoices for each JSU municipality is sent calculated by the current rate of $4.41 per 1,000 gallons in the following formula: (Total potable water usage for three (3) months/1000)x ($4.41)- amount due.

   See attached pages B1-B5 for Procedures.

3. JSU- The City shall increase each JSU municipality's sewer charge by three (3%) effective January 1, 2023 and every year thereafter.

4. City- The City shall increase the City residents' sewer charge by three (3%) effective January 1, 2023 and every year thereafter.

5. The tap-in fee for property owners within the JSU municipalities is hereby set at Six Hundred and Fifty ($650.00) Dollars per tap-in.

6. The tap-in fee for property owners within the City of Beaver Falls is hereby set at Two Thousand ($2,000.00) Dollars per tap-in.

7. JSU municipalities shall be subject to a late fee assessed in an amount equal to five (5%) percent of the outstanding and late bill. The late fee will be imposed the day after the bill is due and will be incorporated in the following quarterly bill.

8. The city residents shall be subject to a late fee assessed in the following bills:
   Five (5%) percent of the outstanding water bill
   Ten (10%) percent of the outstanding sewer bill
   Ten (10%) percent of the outstanding fire hydrant bill
   Ten (10%) percent of the outstanding waste/refuse bill
   The late fee will be imposed seven (7) days after the bill is due and will be incorporated on their next bill.

9. This Ordinance shall take effect immediately upon final passage.

10. Any Ordinance or Resolution, or parts of any Ordinance or Resolution inconsistent herewith are hereby repealed.

PASSED AND ADOPTED by the Council of the City of Beaver Falls this 8th day of November, 2022.

ATTEST:

Paula J. Durish, City Clerk

CITY OF BEAVER FALLS:

Kenya Johns, Ph.D., Mayor

The billing process at the Joint Sewer Users Beaver Falls (aka: JSU; aka: Beaver Falls Sewage Treatment Plant; aka: Beaver Falls Water Pollution Control Plant)...

- Around the first of every month, I receive an emailed excel spreadsheet from the Beaver Falls Municipal Authority (aka: Water Company) that shows the potable water usage for the following municipalities: City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, and Big Beaver (which includes Homewood). After three months of potable water readings, I generate an invoice for each municipality and send it to them. The invoice states that it is from "City of Beaver Falls, Water Pollution Control Plant, 715 15th St, Beaver Falls, PA 15010. The amount due on each invoice is calculated by taking the current rate ($4.41 per 1,000 gallons) and applying it to the following formula:

  (Total potable water usage for three months/1,000) x ($4.41) = amount due

For example, if the City of Beaver Falls, as a whole, used 25,000,000 gallons of potable water in three months, they would owe:

(25,000,000/1000) x ($4.41) = $110,250.00 due

- North Sewickley Township Sanitary Authority emails me around the first of each month with their potable water readings. They are billed the exact same was as mentioned above, but they are billed monthly.
- Dalton's Service Co. emails me around the first of each month with detailed spreadsheets of every single load that is dumped into the system. They are billed exactly the same way as mentioned above, but they are billed for gallons dumped into the system and they are billed monthly.

  For example, if Dalton has a monthly total of 1,000,000 gallons dumped into the system, I will generate an invoice based on the current rate of $4.41 per 1,000 gallons...
  (1,000,000/1,000) x ($4.41) = $4,410.00 due

- Valley Waste Service emails me their monthly monitoring report around the first of every month. The last page of the report shows a breakdown of how they calculated the amount of gallons that were discharged into the system. I generate an invoice for them each month by using the following formula:

  Total gallons x industrial surcharge rate of 1 cent per gallon = amount due

  For example, if Valley Waste discharges 10,000 gallons, they would owe:

  10,000 x 0.01 = $100.00 due

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. 5-C

Reporting Period March 2022

**Permit Requirements vs Sample Results**

| Outfall 001 | | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Daily Maximum (mg/L)** | **Monthly Average (mg/L)** | **Concentration (mg/L) Sample Results and Dates (also attach laboratory sheets as backup)** | | | |
| Flow (Total Flow) (1) | Report (gal) | Report (gal) | 15,259 | | | |
| Total Susp. Solids (TSS) | 275 | 275 | 22 | | | |
| Oil & Grease | 100 | 100 | 78 | | | |
| 5-day Biochemical Oxygen Demand (BOD5) | 300 | 300 | 44 | | | |
| Arsenic (As) | Report | Report | < 0.02 | | | |
| Cadmium (Cd) | Report | Report | < 0.002 | | | |
| Chromium, total (Cr) | 3.5 | 3.5 | < 0.01 | | | |
| Cyanide, total (CN) | 1.0 | 1.0 | < 0.020 | | | |
| Copper (Cu) | 2.0 | 2.0 | 0.01 | | | |
| Lead (Pb) | 2.0 | 2.0 | < 0.02 | | | |
| Mercury (Hg) | Report | Report | < 0.0002 | | | |
| Nickel (Ni) | 3.0 | 3.0 | 0.01 | | | |
| Silver (Ag) | 5.0 | 5.0 | < 0.005 | | | |
| Zinc (Zn) | 2.0 | 2.0 | 0.07 | | | |
| Phenolic compounds | 1.0 | 1.0 | 0.027 | | | |
| pH – range (pH units) | 5.5 – 10.5 | 5.5 – 10.5 | 7.01 | | | |

(1) NOTE: For flow, report elapsed time (hours) x 60 x 11.56 gpm = gallons

**Violations Noted**

| Date | Constituent | Concentration |
|---|---|---|
| None | | |
| | | |
| | | |
| | | |

**FLOW and SURCHARGE CALCULATIONS (show below or on a separate sheet):**
BOD Rate per 1000 gallons = 0.00834 P (BOD – 300); where P = 25 cents
TSS Rate per 1000 gallons = 0.00834 B (TSS – 275); where B = 15 cents
Industrial Surcharge Rate = 1 cent per gallon.

See attached.

Calculate the appropriate surcharges and attach a check for that amount payable to: **Joint Sewer User's Account**.

***Process Information***

Has the Type of process changed? _____ Yes ✓ No

Have the waste chemical characteristics changed? _____ Yes ✓ No

Has the waste volume changed? _____ Yes ✓ No

Has the treatment utilized changed? _____ Yes ✓ No

Person Filing Report**

Name _____

Title Maintenance Manager

Date April 4, 2022

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true. accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

# Laboratory Results

## Geochemical Testing

Date: 15-Mar-22

CLIENT:
Client Sample ID: Outfall 001
Lab Order:
Project:
Sampled By:
Lab ID:
Collection Date: 3/2/2022 8:30:00 AM
Matrix: WASTE WATER
Received Date: 3/3/2022 10:15:21 AM

| Analyses | Result | QL | Q | Units | DF | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **PH BY SM 4500 H+B** | | Analyst: LAP | | | | | SM 4500-H+ B |
| Lab pH | 7.01 | | H | S.U. | 1 | | 03/07/22 12:02 PM |
| **PHYSICAL TESTS** | | Analyst: ACW | | | | SM 2540 D | SM 2540 D |
| Total suspended solids | 22 | 2 | | mg/L | 1 | 03/03/22 11:45 AM | 03/03/22 12:10 PM |
| **INDICATOR ORGANIC PARAMETERS** | | Analyst: MJR | | | | SM 5210 B | SM 5210 B |
| BOD 5-day | 44 | 3 | L2 | mg/L | 3 | 03/03/22 1:22 PM | 03/08/22 8:18 AM |
| **NOTES:** L2 - LCS below the acceptance limits. Result may be biased low | | | | | | | |
| **INORGANIC NON-METALS** | | Analyst: CML | | | | | ASTM D7511-12 |
| Cyanide, total | < 0.020 | 0.020 | | mg/L | 1 | | 03/10/22 4:29 PM |
| **INORGANIC NON METALS** | | Analyst: CML | | | | | EPA 420.4 |
| Phenolics | 0.027 | 0.020 | | mg/L | 1 | | 03/10/22 4:04 PM |
| **INORGANIC METALS** | | Analyst: MAS | | | | SM 3112 B | SM 3112 B |
| Mercury | < 0.0002 | 0.0002 | | mg/L | 1 | 03/04/22 10:50 AM | 03/07/22 9:44 AM |
| **INORGANIC METALS** | | Analyst: LEB | | | | EPA 200.2 | EPA 200.7 REV 4.4 |
| Arsenic | < 0.02 | 0.02 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Cadmium | < 0.002 | 0.002 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Chromium | < 0.01 | 0.01 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Copper | 0.01 | 0.01 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Lead | < 0.02 | 0.02 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Nickel | 0.01 | 0.01 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Silver | < 0.005 | 0.005 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| Zinc | 0.07 | 0.01 | | mg/L | 1 | 03/04/22 8:20 AM | 03/07/22 3:38 PM |
| **INDICATOR ORGANIC PARAMETERS** | | Analyst: HBB | | | | EPA 1664A | EPA 1664 B |
| Oil & Grease | 78 | 5 | | mg/L | 1.08 | 03/07/22 8:57 AM | 03/08/22 12:57 PM |

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

# March 2022

## Flow Calculations

NOTE: For flow, report elapsed time (hours) x 60 x 11.56 gpm = gallons

| | |
|---|---|
| Hour Meter Reading - Pump #1 | 1015 |
| Hour Meter Reading - Pump #2 | 1086 |
| Current Month Sum | 2101 |
| Prior Month Sum | 2079 |
| Elapsed Time (Hours) | 22 |
| Total Flow (gallons) | 15,259 |

## Surcharge Calculations

BOD Rate per 1000 gallons = 0.00834 P (BOD-300); where P = 25 cents
TSS Rate per 1000 gallons = 0.00834 B (TSS-275); where B = 15 cents
Industrial Surcharge Rate = 1 cent per gallon

| | |
|---|---|
| Current Month BOD Sample Result | 44 |
| BOD Permit Requirement | 300 |
| BOD Surcharge | $0.00 |
| | |
| Current Month TSS Sample Result | 22 |
| TSS Permit Requirement | 275 |
| TSS Surcharge | $0.00 |
| | |
| Current Month Flow (gallons) | 15259 |
| Industrial Surcharge | $152.59 |
| | |
| Total Surcharge Due | $152.59 |



B5

CITY OF BEAVER FALLS
RESOLUTION NO. 1576

A RESOLUTION OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, AMENDING RESOLUTION 1423 DETERMINING THE JOINT SEWER USER'S CHARGE RATE COMMENCING JANUARY 1, 2021 AND TO RE-IMPLEMENT THE AUTOMATIC JOINT SEWER USER'S CHARGE BY 3% ANNUALLY.

WHEREAS, the City desires to amend provisions contained in Resolution 1423 which assessed a suspension in the automatic annual increase in the JSU's charge per 1,000 gallons of water consumption and the JSU's charge;

BE IT RESOLVED by the Council of the City of Beaver Falls, it is hereby resolved by virtue of the authority of the same as follows:

1. That Paragraph 1 of Resolution 1423 shall reflect the 3% increase (beginning January 1, 2021) and is now $4.28 per 1,000 gallons of water consumption.

2. That the Council of the City of Beaver Falls, hereby re-implements Paragraph 4 of Resolution 1256 which reads: The City shall, effective January 1, 2021, and every year thereafter, increase the Joint Sewer User's charge by 3%.

All other provisions of Resolution No. 1256 and Resolution No. 1423 shall remain in full force and effect.

The City may, from time to time, amend this resolution as deemed necessary and appropriate by Council.

Any and all ordinances, parts of ordinances, resolution or p arts of resolutions in conflict with the terms, conditions and provisions of this Resolution are hereby repealed to the extent of such conflict.

That this Resolution shall take effect immediately upon its passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th day of December, 2020.

ATTEST:

Paula J. Durish – City Clerk

CITY OF BEAVER FALLS:

George S. Quay III - Mayor

CITY OF BEAVER FALLS

RESOLUTION 1589

A RESOLUTION OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, AMENDING RESOLUTION NO. 1256, TO ELIMINATE THE MINIMUM JOINT SEWER USER'S CHARGE ESTABLISHED AT $16.00 PER QUARTER

**WHEREAS**, the City of Beaver Falls ("City") is authorized by The Third Class City Code (53 P.S. § 35101, et seq.) to adopt resolutions setting fees and charges;

**WHEREAS**, the City desires to amend a provision contained in Resolution No. 1256 which assessed a minimum joint sewer user charge for any user of the City of Beaver Falls Sanitary Sewer System;

**BE IT RESOLVED** by the Council of the City of Beaver Falls, it is hereby resolved by virtue of the authority of the same as follows:

That the Council of the City of Beaver Falls, hereby suspends paragraph 2 of Resolution No. 1256 which reads: "The minimum joint sewer user's charge for any user of the City of Beaver Falls Sanitary Sewer System is established by $16.00 per quarter.."

All other provisions of Resolution No. 1256 shall remain in full force and effect.

The City may, from time to time, amend this resolution as deemed necessary and appropriate by Council.

Any and all ordinances, parts of ordinances, resolutions or parts of resolutions in conflict with the terms, conditions and provisions of this Resolution are hereby repealed to the extent of such conflict.

That this Resolution shall take effect immediately upon its passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 25th day, of May, 2021.

ATTEST:

Paula J. Durish - City Clerk

CITY OF BEAVER FALLS:

George S. Quay III - Mayor

CITY OF BEAVER FALLS
RESOLUTION NO. 1506

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, DETERMINING THE MINIMUM WATER CONSUMPTION USAGE FOR THE RESIDENTS OF THE CITY OF BEAVER FALLS AND ESTABLISHING QUARTERLY FEES FOR SUCH USAGE, ESTABLISHING THE CITY SEWER USER'S CHARGE AND INCREASING THE RATES FOR SOLID WASTE COLLECTION AND FIRE HYDRANT FEES.

This Resolution provides that the Council of the City of Beaver Falls will annually compute the sewer rental charge payable by the owner and/or occupier of premises served by the Beaver Falls Sanitary Sewer System.

Now therefore, be it resolved by the Council of the City of Beaver Falls, Beaver County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

1. The minimum City residents sewer charge is established at $38.78 per quarter for use of 3,000 gallons or less of water consumption.

2021
$39.94

2. For use above the minimum 3,000 gallons per quarter, the City residents sewer charge shall be $7.74 per 1,000 gallons of water consumption.

$7.97

3. The charge for Solid Waste shall be $56.00 per quarter.

4. The charge for Fire Hydrant fee shall be $4.00 per quarter.

5. These rates will take effect January 1, 2019 based on actual metered water usage.

6. The City shall, effective January 1, 2021, and every year thereafter, increase the City residents sewer charge by 3%.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 27th day of December, 2018.

ATTEST:

Paula J. Durish, City Clerk

CITY OF BEAVER FALLS:

George S. Quay III, Mayor

BILL NO. 23

ORDINANCE NO. 1423

AN ORDINANCE amending Section 2 of Ordinance No. 1227, passed February 27, 1967, as amended by Ordinance No. 1268, passed December 22, 1970 entitled "AN ORDIFANCE of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and the filing of liens therefor: providing for rules and regulations; and providing for surcharges on delinquent accounts." By providing for computation of the rate for sewer usage based on a ratio between operation and maintenance costs and meter reading volume:

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, hereinafter sometimes referred to as "City" and it is hereby ordained and enacted by authority of the same as follows:

Section I. Section 2 of Ordinance No. 1227, passed February 27, 1967, entitled " An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises: providing for the collection thereof and filing of liens therefor: providing for rules and regulations: and providing for surcharges on delinquent accounts." as amended, is hereby amended to read as follows:

"Section 2 (a) The rate for said sewer usage shall be reviewed annually and computed as follows:

The total anticipated yearly flow, as reflected by the actual total sewage treated at the sewage treatment plant of all users for the preceding year, shall be divided into the total projected cost of operation and maintenance (as approved by City Council) of the City's treatment works for the coming calendar year to determine ratio "r". Ration "R" is expressed numerically by the following:

$$R = \frac{\text{Total Projected Operation and Maintenance Costs (\$)}}{\text{Total Sewage Treated (gallons)}}$$

The above rate ratio shall be used exclusively for determination of user charges (based upon each users water meter readings) except when the total users metered flow is less than or greater than the actual total volume of wastewater treated at the City's treatment works for the preceding year. In such case, the difference of the yearly revenues generated by the rate ratio "R" (Revenue = R x Total users metered flows) and the projected total cost of operation and maintenance for the treatment works shall be determined. This difference is labeled herein as "d" and is calculated as follows:

d = (Projected Total Operation and Maintenance Cost,$)

- (R X Total Users Metered Flows, $)

To incorporate this cost difference, "d", into each users treatment works charges, a new rate ratio "$R_1$" shall be determined and calculated as follows:

$$R_1 = \frac{d,\$}{\text{Total Users Metered Flows, gallons}}$$

Therefore, the actual user billing rate ($/gallons recorded by water meter readings), $R_s$, shall be determined by the summation of rate ratios R and $R_1$. The user billing rate, $R_s$, can be expressed mathematically as follows;

$$R_s = R + R_1$$

Section II (b)

1. The rate ratios ( R and $R_1$ ) applied to each users treatment works charges shall be reviewed annually by the City of determine the need to adjust the rate ratios based upon the actual annual operation and maintenance costs incurred by the /City, the actual quantity of wastewater flow treated by the City's treatment works, and the total revenue generated by the existing rate ratios. Upon evaluating the revenues required to meet the projected annual operation and maintenance costs, the rate ratios shall be adjusted periodically as determined necessary by the City to generate suitable funds to meet all opeation and maintenance costs of the City's treatment works.

EPA-DH597

2. /Records of all information pertaining to the annual review of the rate ratios and all components utilized to determine said rate ratios shall be maintained on file and open for public review during normal working hours at the City's Municipal Building.

3. The following general items (but not limited to these alone) shall be included in determining the annual operation and maintenance costs associated with the City's treatment works:

(a) Wages and salaries

(b) Materials and supplies

(c) Utility requirements

(d) Repairs - replacement

(e) Administrative

(f) Debt service charges

(g) Reserve fund costs

4. The basis for acutally determining the operation and maintenance costs for each of the items detailed above shall be made by the plant superintendent and approved by City Council based upon expenditures incurred for the same items over the past years of operation as well as projected expenditures for the next calendar year of operation.

Section II (c)

1. In instances where an industrial or commercial user consumes large quantities of water for processing, cooling, or heating, and said water is not discharges into the City's sewerage system for treatment, then said industrial or commercial users may install separate water meters for all fixtures which will eventually contribute wastewater to the City's treatment works or said user may install a separate sewage flow meter (as approved by the City of Beaver Falls) at any and all connection points within the City's sewerage system. Any and all costs (including City inspection costs) to be incurred by the industrial or commercial user shall totally and solely be borne by said user."

Section II. All other provisions of said Ordinance 1227 shall remian in full force and effect.

Section III. All Ordinance or parts thereof inconsistent herewith are hereby repealed.

Section IV. This Ordinance shall become effective the 9th day of November 1976.

PASSED FINALLY by the Council of the City of Beaver Falls, this 9th day of November, 1976.

Nick L Camp

Mayor
Nick L. Camp

Attest:

Robert D Yoho

City Clerk-Coordinator
Robert D. Yoho

nlm

DDH597

CITY OF BEAVER FALLS
RESOLUTION NO. 1256

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, DETERMINING THE JOINT SEWER USER'S CHARGE RATE COMMENCING JANUARY 1, 2013.

WHEREAS, the City of Beaver Falls provides that the Council will annually compute the sewer rental charge payable by the joint sewer users served by the Beaver Falls Sanitary Sewer System.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Beaver Falls, Beaver County, Pennsylvania, and it is hereby resolved by the authority of the same, as follows:

1. The annual joint sewer user's charge will be $3.81 per 1,000 gallons of water consumption.

2. The minimum joint sewer user's charge for any user of the City of Beaver Falls Sanitary Sewer System is established at $16.00 per quarter.

3. These rates will take effect January 1, 2013 based on actual metered water usage.

4. The city shall, effective January 1, 2013, and every year thereafter, increase the Joint Sewer User's charge by three percent (3%).

This Resolution shall be effective immediately.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 16th day of August, 2011.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS:

Mayor

RESOLUTION NO. 567

RESOLUTION adopting rules and regulations for the use and operation of the City's sewer system.

WHEREAS, the Council of the City of Beaver Falls, by Section 8 of Ordinance No. 1227 of the City of Beaver Falls, has reserved the right to adopt, revise and amend rules and regulations for the use and operation of the City's sewer system, and;

WHEREAS, the Council of the City desires to adopt certain rules and regulations for the discharge of industrial and processed wastewater into the City's sewer system;

NOW THEREFORE, be it resolved by the Council of the City of Beaver Falls that the following rules and regulations for the use and operation of the City's sewer system are hereby adopted and made a part of Ordinance 1227, as amended;

1. The discharging to industrial and processed wastewater into the City's sewerage system is strictly prohibited except as provided for herein.

2. In order for the City to consider any industrial user's connection into the City's treatment works, the following information shall be proveded in duplicate to the City for evaluation of the proposed industrial wastewater discharge.

(a) Name of Institution.

(b) Address and Desired Location.

(c) Desired Tap-in Location.

(d) Estimated Quantity of Flow - include maximum gallons per minute discharge flowrate.

(e) Description of the process which generated the wastewater.

(f) Amount of sanitary wastes in the industrial wastewater and, if any, in what concentrations.

(g) A complete chemical analysis of the proposed wastewater discharge providing as a minimum the following: $BOD_5$, COD, SS, D.S., D.O., Chlorine Demand, $NH_3$-N, Total N, $NO_3$-N, oil and grease, pH, $PO_4$-P, phenols, cyanide-total and amenable, mercury total, temperature, heavy metals, and any other tests which will more appropriately describe the true characteristics of the proposed wastewater discharge.

3. The following conditions shall apply to all industrial wastewater contributors to the City's sewage treatment facilities which are approved by the City:

(a) Any user of the treatment works whose applied loading to the treatment plant exceeds any one of the following criteria shall be classified to the conditions of this program:

$BOD_5$ > 230 mg/l

SS > 220 mg/l

Dissolved Solids (D. S.) 300 mg/l

Flow ≥ 10% of Average Design Flow of Treatment Works

Delivery Flowrate ≥ 175 GPM

pH - > 8.0 or > 6.0

Phenols - Any amount

Heavy Metals - Any amount

Cyanides - Any amount

EEC941

(b) Each industrial user of the said treatment works shall be required to pay its share of the total amount of the grant and any grant amendment awarded to the City pursuant to Federal Project No. C=420676-01 divided by the recovery period.

(c) The industrial recovery period is defined as the useful design life of the treatment works (until 1995) or 19 years based upon the treatment plant additions being completed in 1976.

(d) Payments shall be made by the industrial users no less often than annual. The first payment by the said user shall be made not later than one (1) calaendar year after such time the user begins using the treatment works.

8 (e) The industrial user's share of the grant amount shall be based upon the following factors: strength (BOD, Suspended Solids, Dissolved Solids, etc), volume, and delivery flowrate. These factors shall be proportioned in relation to the existing design parameters allocated for the existing sewage treatment facility. (Since the City presently accepts no industrial wastewater discharges, the actual proportioning of the costs will be determined by the City at the time of proposed industrial tap-in). If throughout the recovery period there is a substantial change in the strength, volume, and, or delivery flowrate characteristics introduced into the treatment works by said industrial user, such user's share shall be adjusted accordingly. As a minimum, an industrial user's share shall be proportional to its flow, in relation to the treatment works flow capacity.

(f) If there is an expansion or upgrading of the treatment works, each existing industrial user's share (at the time of the expansion or upgrading)shall be adjusted accordingly.

(g) The City shall retain 50 percent of the amounts recovered from said industrial user. The remainder, together with any interest earned thereon, shall be returned to the U. S. Treasury on an annual basis.

(h) The City shall use a minimum of 80 percent of the retained amounts, together with interest earned thereon, for the expansion and/or reconstruction which may be required of the treatment works. The City shall obtain the written approval of the retained amounts for any expansion and reconstruction. The remainder of the retained amounts shall be used, as the City sees fit. Pending use, the City shall invest the retained amounts for reconstruction and expansion in: (1) obligations of the U. S. Government; or (2) obligations guaranteed as to principal and interest by the U. S. Government or any agency thereof; or (3) shall deposit such amounts in accounts fully collateralized by obligations to the U. S. Government or obligations fully guaranteed as to principal and interst by the U. S. Government or any agency thereof.

ADOPTED BY COUNCIL OF THE CITY OF BEAVER FALLS, this 12th day of October, 1976.

Nick L. Camp

Nick L. Camp, Mayor

Robert D. Yoho

Robert D. Yoho, City Clerk-Coordinator

plm

CITY OF BEAVER FALLS

BILL NO. 1

ORDINANCE NO. 1348

AN ORDINANCE AMENDING SECTION 2 AND SECTION 3 of ORDINANCE NO. 1227, PASSED AND ADOPTED FEBRUARY 27, 1967, ENTITLED "AN ORDINANCE OF THE CITY OF BEAVER FALLS IMPOSING UPON EACH PROPERTY IN THE CITY OF BEAVER FALLS, SERVED BY THE BEAVER FALLS SANITARY SEWER SYSTEM, A SEWER RENTAL CHARGE, PAYABLE BY THE OWNER AND/OR OCCUPIER OF SAID PREMISES; PROVIDING FOR THE COLLECTION THEREOF AND THE FILING OF LIENS THEREFOR; PROVIDING FOR RULES AND REGULATIONS; AND PROVIDING FOR SURCHARGES ON DELINQUENT ACCOUNTS"; AND FURTHER AMENDING SECTION 2 OF ORDINANCE NO. 1288, PASSED AND ADOPTED DECEMBER 22, 1970, WHICH INCREASED THE RATE FOR SEWER USAGE FROM 25% TO 50% OF THE WATER BILL RENDERED SAID OWNER OR OCCUPIER, AND BY CONTINUING TO PROVIDE FOR THE PAYMENT OF SAID SEWER BILLS TO THE OFFICE OF THE CITY TREASURER OF THE CITY OF BEAVER FALLS, BY HEREIN PROVIDING FOR THE FUTURE PAYMENT OF ALL SEWER BILLS TO A SEWAGE CLERK EMPLOYED BY THE PUBLIC WORKS DEPARTMENT OF THE CITY OF BEAVER FALLS, AND RESPONSIBLE TO SAID DEPARTMENT RATHER THAN TO THE CITY TREASURER AS HERETOFORE PROVIDED AND REQUIRED.

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

SECTION I. Sections 2 and 3 of Ordinance No. 1227, passed and adopted February 27, 1967, entitled " An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts", is hereby amended to read as follows:

"Section 2. The rates for said sewer usage shall be made payable to the Office of the Sewage Clerk at the City Building, who shall be employed by the Public Works Department of said City."

"Section 3. Said Sewage Clerk shall keep complete records of all amounts due, paid and unpaid, and report the status of said accounts to City Council upon request. Said Sewage Clerk shall be employed in such capacity on a regular salary basis by the City of Beaver Falls and not upon the basis of commission."

SECTION II. All other provisions of said Ordinance No. 1227, as originally enacted or subsequently amended, shall remain in full force and effect.

SECTION III. Section 2 of Ordinance No. 1288, passed and adopted December 22, 1970, which was an Ordinance amending Ordinance No. 1227 by increasing the rate for sewage usage from 25% to 50% of the water bill rendered said owner and/or occupier, and continuing to provide payment of said sewage bill to the Office of the City Treasurer of the City of Beaver Falls, is hereby amended to read as follows:

"Section 2. The rate for said sewage usage shall be 50% of the water bill rendered the owner and/or occupier by the Beaver Falls Municipal Authority, payable at the Office of the Sewage Clerk, employed by the Public Works Department of the City of Beaver Falls, by the tenth of the month following the month of issue. The Sewage Clerk so employed shall keep complete records of all amounts due, paid and unpaid, and report the status of said accounts to City Council upon request. Said Sewage Clerk shall be employed in such capacity on a regular salary basis by the City of Beaver Falls and not upon the basis of commission."

SECTION IV. All other provisions of said Ordinance No.

1288 shall remain in full force and effect.

SECTION V. All Ordinances or parts thereof inconsistent herewith are hereby specifically repealed.

SECTION VI. This Ordinance shall become effective January 28th, 1975.

PASSED FINALLY by the Council of the City of Beaver Falls this 28th day of January, 1975.

Nick L. Camp

Nick L. Camp, Mayor

ATTEST:

Robert D. Yoho

Robert D. Yoho, City Clerk-Coordinator

BILL NO. 23

ORDINANCE NO. 1288

AN ORDINANCE amending Section 2 of Ordinance No. 1227, passed February 27, 1967, entitled "An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts." by increasing the rate for sewer usage from twenty-five (25%) per cent to fifty (50%) per cent of the water bill rendered said owner or occupier.

Introduced and read at length:

Date: December 8, 1970

City Clerk

Passed finally and certified for record:

Date: December 22, 1970

City Clerk

BILL NO. 23

ORDINANCE NO. _____

AN ORDINANCE amending Section 2 of Ordinance No. 1227, passed February 27, 1967, entitled "An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts." by increasing the rate for sewer usage from twenty-five (25%) per cent to fifty (50%) percent of the water bill rendered said owner or occupier.

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls and it is hereby ordained and enacted by authority of the same as follows:

Section I. Section 2 of Ordinance No. 1227, passed February 27, 1967, entitled "An Ordinance of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts." is hereby amended to read as follows:

"Section 2. The rate for said sewer usage shall be fifty (50%) per cent of the water bill rendered said owner or occupier by the Beaver Falls Municipal Authority, payable at the office of the City Treasurer of the City of Beaver Falls by the tenth of the month following month of issue.

Section II. All other provisions of said Ordinance No. 1227 shall remain in full force and effect.

Section III. All ordinances or parts thereof inconsistent herewith are hereby repealed.

Section IV. This ordinance shall become effective January 1, 1971.

PASSED FINALLY by the Council of the City of Beaver Falls this 22 day of December 1970.

ATTEST:

City Clerk

Mayor

BILL NO. 7

ORDINANCE NO. 1227

AN ORDINANCE of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and the filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts.

Introduced and read at length:

Date: February 14, 1967

City Clerk

Passed finally and certified for record:

Date: February 28, 1967

City Clerk

BILL NO. 7

ORDINANCE NO. 1227

AN ORDINANCE of the City of Beaver Falls imposing upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system, a sewer rental charge, payable by the owner and/or occupier of said premises; providing for the collection thereof and the filing of liens therefor; providing for rules and regulations; and providing for surcharges on delinquent accounts.

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

Section 1. There is hereby imposed upon each property in the City of Beaver Falls, served by the Beaver Falls sanitary sewer system and having use thereof, an annual sewer rental charge, payable by the owner and/or the occupier of said premises as hereinafter provided, for the use, whether direct or indirect, of the sanitary sewer system, based on the rate hereinafter set forth.

Section 2. The rate for said sewer usage shall be twenty-five (25%) per cent of the water bill rendered said owner or occupier by the Beaver Falls Municipal Authority, payable at the office of the City Treasurer of the City of Beaver Falls by the tenth of the month following month of issue.

Section 3. The City Treasurer shall keep complete records of all amounts due, paid and unpaid and report the status of said accounts to City Council as requested.

Section 4. (a). For purposes of this ordinance, the amount of water supplied by the Beaver Falls Municipal Authority and billed to a property shall be prima facie evidence of water consumed thereon during any billing period.

(b). If any property served by the City sanitary sewer system shall have a source of supply of water other than, or in addition to water supplied by the Beaver Falls Municipal Authority, or should the amount of water used on said premises not bear a reasonably proportionate relationship to the amount of sewage discharged into the sewer system, then the City Engineer of the City of Beaver Falls, shall, and he is hereby authorized and empowered to determine the amount of water consumed upon said property and the amount of sewage discharged by said property into the City sewers by any recognized and expedient method, and the sewer rental charge upon such property shall be based upon such determination using the same rate as herein provided.

(c). Should meters or any other kind of installation on the premises of the owner or occupier become necessary to assist in determining the proper sewer rental charge, same shall be furnished, installed and maintained by said owner or occupier.

Section 5. Said sewer rental charge shall be a lien on the properties charged with the payment thereof and, if not paid after thirty day's notice, may be collected by an action in assumpsit in the name of the City against the owner of the property charged or by distress of personal property on the premises, or by a lien filed in the nature of a municipal lien.

Section 6. If said sewer rental charges are not paid by due date a surcharge of ten (10%) per cent of said bill shall be paid.

Section 7. The funds received by the City from the collection of sewer rental charges, and surcharges thereon as herein provided shall be segregated and kept apart from all other funds of the City and shall be used only: (1) for the payment for the operation, maintenance, repair, alteration, or extension

depreciation or other expenses, including billing and collection expense, in relation to said sanitary sewer system, (2) for the payment of any present or future indebtedness and interest thereon on said sanitary sewer system, and (3) for the creation and maintenance of a separate capital reserve fund for any anticipated legal capital expenditures in connection with said sanitary sewer system.

Section 8. Council reserves the right to, and may from time to time, adopt, revise and amend, such rules and regulations as it deems necessary and proper for the use and operation of the sewer system, which rules and regulations shall be and become a part of this ordinance.

Section 9. If any of the provisions, sections, sentences, clauses or parts of this ordinance or the application of any provision hereof shall be held invalid, such invalidity shall not affect or impair any of the remainder of this ordinance, it being the intention of the City Council that such remainder shall be and remain in full force and effect.

Section 10. All ordinances or parts of ordinances inconsistent herewith be, and the same are hereby repealed.

Section 11. This ordinance shall become effective immediately upon final passage.

PASSED FINALLY by Council this 28 day of February, 1967.

ATTEST:

Howard W. Marshall
Mayor

City Clerk

# Ordinance No. 123

An ordinance laying out and ordaining sanitary sewers in streets, lanes, alleys and through or over private property in the Borough of College Hill, County of Beaver and State of Pennsylvania, and authorizing the construction of the same; subject to the approval of the State Board of Health.

Be it enacted and ordained by the Town Council of the Borough of College Hill, County of Beaver and State of Pennsylvania, and it is hereby enacted and ordained by authority of the same:

First: That sanitary sewers, consisting of main trunk line sewers and branch sewers, be laid out in streets, lanes, alleys and through or over private property within the Borough of College Hill, conforming approximately to the following courses and distances:

1. Two (2) trunk lines connecting into Sewer System of the Borough of Beaver Falls, Pa., on 25th Street at intersection of Ninth Avenue and 24th Street extension; said two trunk lines extending northwardly along said avenue and street to the Southerly borough line of College Hill.

Also a trunk line connecting into the first aforesaid trunk line at Ninth Avenue and 26th Street, Beaver Falls, and extending Northwardly in Ninth Avenue to College Avenue, and in College Avenue to 29th Street, thence northeastwardly through property of J. T. Reeves & Company, an unnamed Street to Park Place; eastwardly along Park Place; northwardly through properties of Geneva College, McCartney Heirs, Boyle Heirs, Hunt Partington, Whiteside Plan of lots and along ridge of ground near Fourth Avenue to Fourth Avenue at the easterly end of 44th Street.

Also a trunk line connecting into the second aforesaid trunk line at the southerly Borough line of College Hill and 24th Street extension and extending in a northerly direction along Walnut Run to the westerly end of 34th Street near Eighth Avenue.

2. Also, a line from 26th Street and Eighth Avenue, Beaver Falls, thence northwardly along College Aveiue to the intersection of Ninth Avenue, Beaver Falls, extended to College Avenue.

3. Also a line in College Avenue extending from trunk line on 29th Street northwardly to 40th Street.

4. Also a line extending eastwardly from the intersection of College Avenue and 36th Street, along 36th Street to Second Avenue; along Second Avenue to 39th Street; along 39th Street to Fourth Avenue.

5. Also a line extending along 38th Street from Fourth avenue to Second Avenue.

6. Also a line extending along 40th Street from Fourth Avenue to College Avenue.

7. Also a line extending from the intersection of 25th Street and Tenth Avenue, Beaver Falls, northwardly along said Tenth Avenue to 28th Street in College Hill.

8. Also a line extending along 28th Street from College Avenue westwardly to Sixth Avenue.

9. Also a line extending from 28th Street northwardly along Fourth Avenue to the southerly line of Morado Park.

10. Also a line extending from the southerly borough line College Hill northwardly along Fifth Avenue to 37th Street.

11. Also a line extending from the southerly borough line northwardly along Sixth Avenue to 37th Street.

12. Also a line extending from 33rd Street northwardly along Seventh Avenue to 37th Street.

13. Also a line extending from 33rd Street northwardly along Eighth Avenue to 35th Street.

14. Also a line extending from College Avenue westwardly along 29th Street to Sixth Avenue.

15. Also a line extending from College Avenue westwardly along 30th Street to Sixth Avenue.

16. Also a line extending from College Avenue westwardly along 31st Street to Sixth Avenue.

17. Aso a line extending from College Avenue westwardly along 32nd Street to Sixth Avenue.

18. Also a line extending from Fourth Avenue westwardly along 33rd Street to Eighth avenue.

19. Also a line extending from Fourth Avenue westwardly along 34th Street to Eighth Avenue.

20. Also a line extending from Fourth Avenue westwardly along 34th Street to Eighth Avenue.

21. Also a line extending from Fourth Avenue westwardly along 36th Street to Eighth Avenue.

22. Also a line extending from Fourth Avenue westwardly in 37th Street to Eighth Avenue.

23. Also a line extending from Fourth Avenue westwardly along 39th Street to Penn Bridge Company property.

24. Also a line extending from Fourth Avenue westwardly in 40th Street to Penn Bridge Company property.

25. Also a line extending from Fourth Avenue westwardly along 42nd Street to Fifth Avenue.

26. Also a line extending from Fourth Avenue westwardly along 43rd Street to Pittsburgh, Fort Wayne & Chicago Railroad.

27. Also a line extending from Fourth Avenue westwardly along 44th Street to Pittsburgh, Fort Wayne & Chicago Railroad.

28. Also a line extending westwardly from Fourth Avenue along 45th Street to Pittsburgh, Fort Wayne & Chicago Railroad.

30. Also a line extending from Fourth Avenue westwardly along 46th Street to Pittsburgh, Fort Wayne & Chicago Railroad.

31. Also a line extending from 42nd Street northwardly along Fifth Avenue to Morado Park.

32. Also a line extending in Fifth Avenue from M. Smith property to Penn Bridge Company property.

33. Also a line extending from College Avenue eastwardly in first alley south of Park Place to an unnamed fifty foot street.

34. Also a line extending in Locust Street southwardly from 28th Street.

Second: That the proper borough officers are hereby empowered to make and execute a contract with the Frank George Company of Pittsburgh, Pa., for the construction of such parts of said sanitary sewers according to the plans and specifications under which said sanitary sewers are to be constructed as determined upon by said borough engineer and town council; said contract to be approved by the Town Council and Burgess and to be entered of record in the minute book of said borough; also subject to approval of the State Board of Health.

Enacted and ordained into an ordinance this 6th day of May, A. D. 1919.

H. E. SHILLITO,
President of Council.

Attest:
J. C. LEIPER,
Secretary of Council.

Approved this 14th day of May, A. D. 1919.

C. M. GRAHAM.
Burgess.

CITY OF BEAVER FALLS

ORDINANCE NO. 4044

AN ORDINANCE OF THE CITY OF BEAVER FALLS (THE "CITY"), BEAVER COUNTY, PENNSYLVANIA, ESTABLISHING REGULATIONS FOR THE OWNERSHIP AND MAINTENANCE OF LATERAL SEWER LINES WITHIN THE CITY.

WHEREAS, under the Third Class City Code, 53 P.S. § 37435, City Council has the "power to enact, make, adopt, alter, modify, repeal and enforce...ordinances, resolutions, rules and regulations, not inconsistent with or restrained by the Constitution of Pennsylvania and laws of this Commonwealth, that are either of the following: (1) expedient or necessary for the proper management, care and control of the city and its finances and the maintenance of peace, good government, safety and welfare of the city and its trade, commerce and manufactures; (2) necessary to the exercise of the powers and authority of local self-government in all municipal affairs."

WHEREAS, the City Council of the City of Beaver Falls desires to exercise its authority under the aforementioned statutory provision and other provisions of the laws of the Commonwealth of Pennsylvania to amend Ordinance No. 1688: An Ordinance of the City of Beaver Falls Setting Forth Uniform Requirements for Direct and Indirect Contributors into the Wastewater Collection and Treatment System of the City, Enabling the City to Comply with all Applicable State and Federal Laws and Prohibiting for Penalties for Violations; as follows:

SECTION I.

1. Every sewer lateral of improved property shall be maintained in a sanitary and safe operating condition.

2. The owners of any improved premises shall at his/her expense be responsible to repair, replace and/or maintain the sewer lines on the owner's property from the owner's side of the street curb line to their residence.

3. The City shall own the sewer lines from the curb to the main line and at its expense be responsible to repair, replace and/or maintain the sewer lines from the street curb line or the right-of-way line where the lateral is constructed to the main line.

That this Ordinance, when adopted, shall be incorporated in and made a part of the Codified Ordinances of the City of Beaver Falls, Pennsylvania.

PASSED AND ADOPTED by the Council of the City of Beaver Falls this 27th day of July, 2021.

ATTEST:

Paula J. Durish, City Clerk

CITY OF BEAVER FALLS:

George S. Quay III, Mayor

ORDINANCE NO. 1788

AN ORDINANCE

**AMENDING AND SUPPLEMENTING ORDINANCE NO. 1688: AN ORDINANCE OF THE CITY OF BEAVER FALLS SETTING FORTH UNIFORM REQUIREMENTS FOR DIRECT AND INDIRECT CONTRIBUTORS INTO THE WASTEWATER COLLECTION AND TREATMENT SYSTEM OF THE CITY, ENABLING THE CITY TO COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS AND PROVIDING FOR PENALTIES FOR VIOLATION; SECTION IV GENERAL DISCHARGE PRHOHIBITIONS, SUBSECTION (b) SPECIFIC PROHIBITIONS, SUBPARAGRAPH (3) OF THE CODIFIED ORDINANCES OF THE CITY OF BEAVER FALLS, PENNSYLVANIA.**

**NOW, THEREFORE, BE IT ORDAINED AND ENACTED BY THE COUNCIL OF THE CITY OF BEAVER FALLS, PENNSYLVANIA,** that the Codified Ordinances of the City of Beaver Falls, Pennsylvania, Ordinance No. 1688: An Ordinance of the City of Beaver Falls Setting Forth Uniform Requirements for Direct and Indirect Contributors into the Wastewater Collection and Treatment System of the City, Enabling the City to Comply with all Applicable State and Federal Laws and Providing for Penalties for Violation; is hereby amended as follows:

**SECTION 1.** That Subparagraph (3) of Subsection (b) Specific Prohibitions of Section IV GENERAL DISCHARGE PROHIBITIONS is hereby amended to read as follows:

(3) "Any wastewater having a pH less than 5.5 or greater than 10.5 unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW.

That this Ordinance, when adopted, shall be incorporated in and made a part of the Codified Ordinances of the City of Beaver Falls, Pennsylvania.

**INTRODUCTED** this 19th day of November, 2002.

**ADOPTED** this 3rd day of December, 2002.

**APPROVED** this 3rd day of December, 2002.

MAYOR ~~Chairman~~

**CERTIFIED** this 3rd day of December, 2002.

City Clerk

CITY OF BEAVER FALLS
ORDINANCE NO. 1688

AN ORDINANCE OF THE CITY OF BEAVER FALLS SETTING FORTH UNIFORM REQUIREMENTS FOR DIRECT AND INDIRECT CONTRIBUTORS INTO THE WASTEWATER COLLECTION AND TREATMENT SYSTEM OF THE CITY, ENABLING THE CITY TO COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS AND PROVIDING FOR PENALTIES FOR VIOLATION

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

SECTION I. PURPOSE AND POLICY.

(a) This ordinance sets forth uniform requirements for direct and indirect contributors into the Wastewater collection and treatment system of the City of Beaver Falls and enables the City to comply with all applicable State and Federal laws.

(b) The objectives of this ordinance are:

(1) To prevent the introduction of pollutants into the City's wastewater system which will interfere with the operation of the system or contaminate the resulting sludge;

(2) To prevent the introduction of pollutants into the City's wastewater system which will pass through the system, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the system;

(3) To improve the opportunity to recycle and reclaim wastewaters and sludge from the system; and

(4) To provide for equitable distribution of the cost of the City's wastewater system.

(c) This ordinance provides for the regulation of direct and indirect contributors to the City's wastewater system through the establishing of and providing for the enforcement of requirements for users, authorizes monitoring and enforcement activities, requires user reporting, assumes that existing customer's capacity will not be preempted, and

provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

(d) This ordinance shall apply to the City of Beaver Falls and to persons who are, by contract or agreement with the City, users of the City's POTW. Except as otherwise provided herein, the City shall administer, implement and enforce the provisions of this ordinance.

SECTION II. DEFINITIONS.

(a) Unless the context specifically indicates otherwise, the following terms and phrases, as used in this ordinance, shall have the meanings hereinafter designated:

(1) "Act" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.

(2) "Authorized Representative of Industrial User". An authorized representative of an industrial user may be:

A. A principal executive officer of at least the level of vice-president, if the industrial user is a corporation.

B.. A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or

C. A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

(3) "Biochemical Oxygen Demand (BOD)" means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, five days at twenty degrees (20°) centigrade, expressed in terms of parts per million (p.p.m.) or milligrams per liter (mg/l) by concentration. BOD shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water, Sewage and Industrial Wastes", published jointly by the American Public Health Association, the American Water Works Association, and the Federation of Sewage and Industrial Wastes Association, hereinafter termed an "acceptable method".

(4) "Building Sewer" means a sewer conveying wastewater from the premises of a user of the POTW.

(5) "Categorical Standards" means national categorical pretreatment standards or pretreatment standard.

(6) "City" means the City of Beaver Falls, Beaver County, Pennsylvania and it successors and assigns.

(7) "Compatible Pollutant" means biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, and such additional pollutants as are now or may be in the future specified and controlled in the City's NPDES permit, where the City's POTW is designed to pollutants to the degree required by the City's NPDES permit.

(8) "Composite Sample" means a sample consisting of several effluent portions collected during a specific time period and combined to constitute a representative sample.

(9) "Cooling Water" means the water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

(10) "Council" means the City Council of Beaver Falls, now or hereafter constituted, and any duly appointed agent or representative of the City.

(11) "Direct Discharge" means the discharge of treated or untreated wastewater directly to the waters of the Commonwealth of Pennsylvania.

(12) "Discharge" means the releasing, spilling, leaking, pumping, pouring, emitting, emptying or dumping of a pollutant into the waters of the Commonwealth or onto the land or into wells from which the pollutant might flow or drain into such waters, and includes the release of any pollutant into the City's POTW.

(13) "Domestic Wastewater" means the liquid waste or liquid borne waste resulting from the noncommercial preparation, cooking and handling of food, and/or consisting of human excrement and similar wastes from sanitary conveniences.

(14) "Dwelling Unit" means a single-family home, a single apartment or condominium with sanitary facilities, or a trailer attached to sanitary facilities, or a single unit of a duplex, even if there is only one sanitary facility for both units of the duplex.

(15) "Environmental Protection Agency", or "EPA" means the U.S. Environmental Protection Agency, or where appropriate the term may also be used as a designation for the Administrator or other duly authorized official of such agency.

(16) "Garbage" means solid wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale of food products and produce.

(17) "Grab Sample" means a sample which is taken over a period of time not to exceed fifteen minutes from a waste stream on a one-time basis with no regard to the flow in the waste stream.

(18) "Holding Tank Waste" means any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and vacuum pump tank trucks.

(19) "Incompatible Pollutant" means any pollutant which is not a "compatible pollutant" as defined in subsection (a)(7) hereof.

(20) "Indirect Discharge" means the discharge or the introduction of pollutants from any nondomestic source regulated under Section 307(b), (c) or (d) of the Act, (33 U.S.C. 1317), into the POTW, including holding tank waste discharged into the system.

(21) "Industrial Process Wastewater" means, in addition to any ground water, surface water and storm waters from the site which is introduced into a treatment works, the liquid waste or liquid borne waste resulting from the processes employed by any person identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented under one of the following divisions (Division A, B, C, D, E, G, J, K and I).

(22) "Industrial User" means any person who discharges, causes or permits the discharge of nondomestic wastewater into the treatment works and/or is a source of indirect discharge which

does not constitute a discharge or pollutants under regulations issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

(23) "Interference" means:

A. A discharge which, alone or in conjunction with a discharge or discharges from other sources or inhibits or disrupts the operation of the POTW, its treatment process or its sludge processes so as to contribute to, or cause a violation of any condition of the City's NPDES Permit under which the POTW operates, or prevent the use or disposal of sewage sludge from the City's treatment plant; or

B. Discharging industrial process wastewater which, in combination with existing domestic flows are of such volume and/or strength as to exceed the POTW design capacity; or

C. Exceeding the threshold concentrations of organic or inorganic pollutants that are inhibitory to biological treatment processes as specified in the "Federal Guidelines for State and Local Pretreatment Programs", EPA-430/9-76-017a, Volume 1, 1977 (or the latest revision thereof); or

D. Preventing the use or disposal of sludge produced by the POTW in accordance with Section 405 of the Federal Clean Water Act of 1977 (33 U.S.C. 1251 et seq.), any regulations, criteria or guidelines developed pursuant to the Federal Resource Conservation and Recovery Act of 1976 (42 U.S.C. 3251 et seq.), the Federal Clean Air Act (42 U.S.C. 7401 et seq.), the Federal Toxic Substances Control Act (15 U.S.C. 2601 et seq.), Marine Protection Research and Sanctuaries Act, or more stringent State criteria (including those contained in any state sludge management plan prepared pursuant to Title IV of the SWDA) applicable to the method of disposal or use employed by the POTW.

(24) "National Categorical Pretreatment Standard" or "Pretreatment Standard" means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b)

and (c) of the Act (33 U.S.C. 1317) which applies to a specific category of Industrial Users. (See 40 CFR Chapter 1, Subchapter N or 40 CFR 401-471).

(25) "National Pollution Discharge Elimination System or NPDES Permit" means a permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

(26) "National Prohibitive Discharge Standard or Prohibitive Discharge Standard" means any regulation developed under the authority of Section 307(b) of the Act and 40 CFR, Section 403.5.

(27) "New Source" means:

A. Any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

1. The building, structure, facility or installation is constructed at a site at which no other source is located; or

2.. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

3. The production of wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

B. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of subsections (a)(27)A.2. or 3. hereof but otherwise alters, replaces, or adds to existing process or production equipment.

C. Construction of a new source as defined under this subsection has commenced if the owner or operator has:

1. Begun, or caused to begin as part of a continuous onset construction program:

a. Any placement, assembly, or installation of facilities or equipment, or

b. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

2. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

(28) "Pass Through" means a discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, which is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

(29) "Person" means any individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their

legal representative, agents or assigns. The masculine gender includes the feminine, the singular includes the plural where indicated by the context.

(30) "pH" means the logarithm (base ten) of the reciprocal of the concentration of hydrogen ions in grams per liter of solution. Solutions with a pH greater than seven are said to be basic; solutions with a pH less than seven are said to be acidic; pH equal to seven is considered neutral. Analysis shall be performed in accordance with an approved test procedure.

(31) "Pollutant" means any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, medical wastes, biological materials, radioactive substance, thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial municipal and agricultural waste and certain characteristics of wastewater (such as pH, temperature, TSS, turbidity, color, BOD, COD, toxicity or odor).

(32) "Pollution" means the man-made or man-induced alteration of the chemical, physical, biological and radiological integrity of water.

(33) "Pretreatment or Treatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes or other means, except as prohibited by 40 CFR, Section 403.6(d).

(34) "Pretreatment Requirements" mean any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard imposed on an industrial user.

(35) "Pretreatment Standards" means prohibited discharge standards, categorical pretreatment standards and local limits.

(36) "Publicly Owned Treatment Works (POTW)" means a treatment works as defined by Section 212 of the Act (33 U.S.C. Sect. 1292) which is owned by the City. This definition includes any devices or systems used in collection, storage, treatment,

received from a user, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such user should not be considered a significant industrial user.

(41) "Significant Noncompliance" means:

A. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of wastewater measurements taken during a six month period exceed the daily maximum limit or average limit for the same pollutant parameter by any amount;

B. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six month period equals or exceeds the product of the daily maximum limit or the average limit multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);

C. Any other discharge violation that the Superintendent believes has caused, alone or in combination with other discharges, interference on pass through, including endangering the health of POTW personnel or the general public.

D. Any discharge of pollutants that has caused imminent endangerment to the public or to the environment, or has resulted in the Superintendent's exercise of its emergency authority to halt or prevent such a discharge.

(42) "Slug Load" or "Slug" means any discharge of a nonroutine episodic nature or at a flow rate or concentration which could cause a violation of the prohibited discharge standards in Section IV.

(43) "State" means the Commonwealth of Pennsylvania.

(44) "Standard Industrial Classification (SIC)" means a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972.

(45) "Storm Water" means any flow occurring during or following any form of natural precipitation and resulting therefrom.

(46) "Superintendent" means the person designated by the City to supervise the operation of the publicly owned treatment works and who is charged with certain duties and responsibilities by this ordinance, or his duly authorized representative.

(47) "Suspended Solids" means the total suspended matter that floats on the surface of, or is suspended in, water. Wastewater or other liquids, and which is removable by laboratory filtering. Quantitative determination of suspended solids shall be made by an acceptable method.

(48) "Tenant" means lessee, guest, or occupant other than owner.

(49) "Toxic Pollutant" means any pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of the Environmental Protection Agency under the provision of CWA 307(a) or other Acts.

(50) "User" means any person who contributes, causes or permits the contribution of Wastewater into the City's POTW.

(51) "Wastewater" means the liquid and water-carried wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any ground water, surface water and storm water that may be present, whether treated or untreated, which is discharged into or permitted to enter the City's treatment works.

(52) "Waters of the State" mean all streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State or any portion thereof.

(53) "Water Utility" means the Beaver Falls Municipal Authority or any other utility, public or quasi-public corporation supplying water within the territorial limits of the City.

SECTION III. ABBREVIATIONS.

The following abbreviations shall have the designated meanings:

| | |
|---|---|
| BOD | means Biochemical Oxygen Demand |
| CFR | means Code of Federal Regulations |
| DER | means PA Department of Environmental Resources |
| EPA | means Environmental Protection Agency |
| l | means Liter |
| mg | means Milligrams |
| mg/l | means Milligrams per Liter |
| NPDES | means National Pollutant Discharge Elimination System |
| POTW | means Publicly Owned Treatment Works |
| p.p.m. | means Parts Per Million |
| SIC | means Standard Industrial Classification |
| SWDA | means Solid Waste Disposal Act, 42 U.S.C. 6901 et seq. |
| USC | means United States Code |
| TSS | means Total Suspended Solids |

SECTION IV. GENERAL DISCHARGE PROHIBITIONS.

(a) General Prohibition. No user shall introduce or cause to be introduced directly or indirectly into the POTW, any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all such users of the City's POTW whether or not the user is subject to national categorical pretreatment standards or any other national, State or local pretreatment standards or requirements.

(b) Specific Prohibitions. A user may not contribute the following substances to the POTW:

(1) Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other

substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21.

(2) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining, or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes.

(3) Any wastewater having a pH less than 5.5 or greater than 9.0, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW.

(4) Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Act.

(5) Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems.

(6) Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludge or scums, to

be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria applicable to the sludge management method being used.

(7) Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards.

(8) Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.

(9) Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F).

(10) Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time period longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation.

(11) Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains.

(12) Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/l, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104°F (0° and 40°C) at the point of discharge into the POTW.

(13) Any wastewater containing any radioactive wastes or isotopes of such halflife or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations.

(14) Any wastewater which causes a hazard to human life or creates a public nuisance.

(15) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

(16) Any trucked or hauled pollutants except at discharge points designated by the POTW.

SECTION V. SPECIFIC POLLUTANT LIMITATIONS.

(a) No person shall discharge wastewater containing in excess of:

| Milligrams Per Liter | Substance |
|---|---|
| 1.0 | cyanide |
| 3.5 | chromium, total |
| 0.5 | chromium, hexavalent |
| 2.0 | copper |
| 2.0 | lead |
| 3.0 | nickel |
| 5.0 | silver |
| 2.0 | zinc |
| 1.0 | phenolic compounds |

(b) The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for "total" metal unless indicated otherwise. The City may impose mass limitations.

SECTION VI. STATE REQUIREMENTS; CITY'S RIGHT OF REVISION.

(a) State requirements and limitations on discharges shall apply in any case where they are more stringent than Federal requirements and limitations or those in this ordinance.

(b) The City reserves the right to establish by ordinance more stringent limitations or requirements on discharges to the wastewater disposal system if deemed necessary to comply with the objectives presented in Section I (b).

## SECTION VII. EXCESSIVE DISCHARGE.

No user shall ever increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the Federal Categorical Pretreatment Standards, or in any other pollutant-specific limitation developed by the City or State unless expressly authorized by an applicable pretreatment standard or requirement. The City may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases where the imposition of mass limitations is appropriate.

## SECTION VIII. CITY POWERS AND DUTIES; INSPECTION AND REMEDIAL ACTION.

(a) Sewer Capacity and Exclusion. The City reserves the right to determine the adequacy and capacity of sewers as well as exclude unpolluted waters and cooling waters from sewer systems within its service area.

(b) Right of Access for Inspection. The City shall have the right of access, at all reasonable times, to dwelling units, residences, business and other buildings, institutions, schools, churches and industrial or commercial establishments connected to the City's sewer system and/or treatment works, and to any water meters measuring water used in such places and establishments to inspect such meters, the connection with the sewer system and/or treatment works, and/or the discharge of domestic wastewater, water of any kind and industrial wastes into the sewer and/or treatment works.

(c) Regulatory Actions. The City reserves the right to refuse connection to the sewer system for the discharge of deleterious industrial wastes.

If wastewater containing any substance prohibited, exceeding prescribed limits, or violating restrictions imposed by this ordinance is discharged into the City's POTW, the City shall advise the user of the impact of the contribution on the POTW and take all actions necessary to:

(1) Prohibit the discharge of any such wastewater;

(2) Require the user to demonstrate that in-plant modifications will reduce or eliminate the discharge of such substances so as to be in conformance with this ordinance;

(3) Require pretreatment, including storage facilities, or flow equalization necessary to insure complete compliance with this ordinance;

(4) Require the person making, causing or allowing the discharge to pay all the additional cost or expense incurred by the City for any damages caused by excess loads imposed on the POTW; and

(5) Take such other remedial action, including discontinuation of service, as may be deemed to be desirable or necessary to achieve the purpose of this ordinance.

(d) Hauled and Unsewered Wastes. The City may allow wastewater which is hauled via truck or other conveyance to be discharged to the City's POTW. Prior to such discharge, the City may require a written report from the hauler describing the quantity, source of wastewater, laboratory analysis of the pollutants/constituents, and other information as deemed necessary by the City. The City shall require that written permission and discharge conditions be issued by the City to the hauler prior to discharge of any hauled wastewater. Hauled waste should only be introduced into the POTW at locations designated by the City.

(e) Garbage Disposals. The City reserves the right to approve garbage grinders or disposers; however, no private dwelling unit shall operate more than one grinder or disposer, which shall not be greater than three horsepower in size, and, when so required by the City, shall be equipped with an approved water meter and limited in use to the consumption of an average of not more than 1,500 gallons of water per day.

(f) Grease, Oil and Sand Interceptors.

(1) The City reserves the right to require that grease, oil and sand interceptors shall be provided for outlets connected with the public sanitary sewers, when, in the opinion of the City they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the City, and shall be located so as to be readily and easily accessible for cleaning and inspection.

(2) Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which when bolted in

place shall be gastight and watertight.

(3) All oil, grease and sand interceptors, where required, shall be installed and maintained by the owner or user at his expense. Such units shall be operated and maintained so that they shall be continuously efficient and shall be cleaned and repaired as required to maintain such efficient operation.

SECTION IX. ACCIDENTAL DISCHARGES; NOTICE TO CITY AND EMPLOYEES.

(a) Protection Procedures and Plan. Each user shall provide protection from accidental discharge of prohibited materials or other substances regulated by this ordinance. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner's or user's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the City for review, and shall be approved by the City before construction of the facility. All existing users shall complete such a plan within ninety days of the effective date of this section. No user who commences contribution to the POTW after the effective date of this section shall be permitted to introduce pollutants into the system until accidental discharge procedures have been improved by the City. Review and approval of such plans and operating procedures shall not relieve the industrial user from the responsibility to modify the user's facility as necessary to meet the requirements of this ordinance. In the case of an accidental discharge (intentional or accidental) that could cause a problem to the POTW, it is the responsibility of the user to immediately telephone and notify the POTW of the incident. The notification shall include location of discharge, type of waste, concentration and volume, and corrective actions. In the event the City or its agents determine a new or revised plan is necessary, the user shall complete a new plan within ninety days of notification.

(b) Written Notice. Within five days following an accidental discharge the user shall submit to the City a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage to the POTW, fish kills or any other damage to person or property; nor shall such notification relieve the user of any fines, civil penalties, or other liability which may be imposed by this ordinance or other applicable law.

(c) Notice to Employees. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a dangerous discharge. Employers shall insure that all employees who may cause such a dangerous discharge to occur, or who may suffer from such a discharge, are advised of the emergency notification procedure.

SECTION X. CHARGES AND FEES.

(a) Sewer Service Charges.

(1) Imposition of sewer service charge. There is hereby imposed upon the owners of, or the users of water in or on, all properties situated within the corporate limits of the City and served by the sewer system, an annual sewer rental charge, payable by the owner or user of said properties as hereinafter provided, for the use, whether direct or indirect, of the sewer system, based on the rates hereinafter set forth. Such owners and users shall be jointly and severally liable for the payment of the sewer service charge and the penalty herein prescribed for delinquent payment thereof.

(2) Schedule of sewer service charges. The sewer service charge for the collection, transportation, treatment and disposal of industrial and domestic wastewater in every case shall be based on the volume of water used in or on such properties, shall be reviewed annually and shall be computed as follows:

A. The total anticipated yearly flow, as reflected by the actual total sewage treated at the sewage treatment plant of all users of the preceding year, shall be divided into the total projected cost of operation and maintenance (as approved by Council) of the City's treatment works for the succeeding calendar year to determine ratio "R." Ratio "R" is expressed numerically by the following:

$$R = \frac{\text{Total Projected Operation and Maintenance Costs (\$)}}{\text{Total Sewage Treated (gallons)}}$$

B. The above rate shall be used exclusively for determination of user charges (based upon each user's water meter readings) except when the total users' metered flow is less than or greater than the actual volume of wastewater treated at the City's POTW for the preceding year. In such case, the difference of the yearly revenues generated by the rate ratio (R) (Revenue = R x total users' metered flows) and the projected total cost of operation and maintenance for the treatment works shall be determined. This difference is labeled herein as "d" and is calculated as follows:

d = (Projected Total Operation and Maintenance Cost, \$)
- R x Total Users' Metered Flows, \$)

C. To incorporate this cost difference, "d," into each user's treatment works charges, a new rate ratio "D" shall be determined and calculated as follows:

$$D = \frac{d.\$}{1 \text{ Total Users' Metered Flows, gallons}}$$

D. Therefore, the actual user billing rate ($/gallons recorded by water meter readings), D shall be determined by the summation of rate ratios R and D. The user billing rate $R_s$ can be expressed mathematically as follows:

$$R_s = R + R_1$$

(b) The rate ratios R and $R_1$ applied to each user's treatment works charges shall be reviewed annually by the City to determine the need to adjust the rate ratios based upon the actual annual operation and maintenance costs incurred by the City, the actual capacity of wastewater flow treated by the City's POTW, and the total revenue generated by the existing rate ratios. Upon evaluating the revenues required to meet the projected annual operation and maintenance costs, the rate ratios shall be adjusted periodically as determined necessary by the City to generate suitable funds to meet all operation and maintenance costs of the City's POTW.

1. Records of all information pertaining to the annual review of the rate ratios and all components utilized to determine said rate ratios shall be maintained on file and open for public review during normal working hours at the City's Municipal Building.

2. The following general items, but not limited thereto, shall be included in determining the annual operation and maintenance costs associated with the City's POTW:

   A. Wages and salaries.
   B. Materials and supplies.
   C. Utility requirements.
   D. Repairs; replacement.
   E. Administrative.
   F. Debts service charges.
   G. Reserved fund costs.

3. The basis for actually determining the operation and maintenance costs for each of the items detailed above shall be made by the

plant supervisor and approved by the Council based upon expenditures incurred for similar items over the past years of operation as well as projected expenditures for the next calendar year of operation.

(c) Sewage Clerk. A Sewage Clerk shall be employed by the City and shall keep complete records of all amounts due, paid and unpaid, and shall report the status of sewage accounts to the Council upon request. The Sewage Clerk shall be paid a salary and shall not be paid on the basis of commission.

(d) Determination of Sewer Charges.

1. For purposes of this Ordinance, the amount of water supplied by the Water Utility and billed to the a property shall be prima facie evidence of water consumed thereon during any billing period.

2. If any property served the City's sewer system shall have a source or supply of water other than, or in addition to, water supplied by a Water Utility, or should the amount of water used on the property not bear a reasonably proportionate relationship to the amount of sewage discharged into the sewer system, then the City Engineer of the City shall, and he is hereby authorized and empowered to, determine the amount of water consumed upon said property and the amount of sewage discharged by said property into the City sewers by any recognized and expedient method, and the sewer charge upon such property shall be based upon such determination using the same rate as herein provided.

3. Should meters or any other kind of installation on the premises of the owner or user become necessary to assist in determining the proper sewer charge, the same shall be furnished, installed and maintained at the sole cost of the owner or user.

(d) Sewer Charge Constitutes Lien Against Property. The sewer charges provided for herein shall be a lien on the properties charged with the payment thereof and, if not paid after thirty (30) days' notice, may be collected by an action in assumpsit in the name of the City against the owner of the property charged or by distress and sale of personal property on the property, or by the filing of a municipal lien.

(e) Use of Sewer Rental Charges and Surcharges.

1. The funds received by the City from the collection of sewer charges, and the surcharges thereof as herein provided, shall be segregated and kept apart from all other funds of the City and shall be used only for:

   A. The payment for the operation , maintenance, repair, alteration, inspection, depreciation or other expenses, including billing and collection expense, in relation to the sewer system.

   B. The payment of any present or future indebtedness and interest thereon on the sewer system.

   C. The creation and maintenance of a separate capital reserve fund for any anticipated legal capital expenditures in connection with the sewer system.

2. Notwithstanding the foregoing, sewer charges and surcharges may be applied to the general fund of the City at the discretion of the Council.

(e) Industrial Wastewater Records. The City reserves the right to require every person discharging any industrial wastewater into the public sanitary sewer or sewers connected thereto, to keep and maintain records to consist of the following minimum information:

A. Name and address.

B. Title of official making report.

C. Location of establishment.

D. The nature of the business conducted in such establishment.

E. The volume of industrial wastewater and domestic wastewater discharged by each establishment to sanitary sewers and to storm sewers respectively.

F. The average daily number of employees employed in each establishment by shifts.

G. The source of water supply of each establishment and the volume of water used by each establishment, daily.

H. Such additional information as is deemed applicable to ascertain the volume, nature and composition of the waste so discharged.

Such records shall be available for inspection during regular business hours by authorized representatives or employees of the City, upon presenting written credentials of their City, and such representatives or employees shall be permitted to make and retain copies of such records.

(f) Testing. The City may conduct such tests as are necessary to enforce this ordinance, and employees of the City may enter upon any property for the purpose of taking samples, obtaining information or conducting surveys or investigations relating to such enforcement. Entry shall be made during operating hours unless circumstances require otherwise. In all cases where tests are conducted by the City for the purpose of checking to determine if a previously found violation of this ordinance has been corrected, the cost of such tests shall be charged to the user's sewer charge. In those cases where the City determines that the nature of volume of a particular user's wastewater requires more frequent than normal testing, the City may charge such user for the tests, after giving the user ten days written notice of its intention to do so and the cost thereof shall be added to the user's sewer charge. In any case where industrial wastes are discharged to a public sewer, the City may require the user, at his own expense, to test his discharge on a regular basis and to report the test results to the City within a reasonable time. All such tests shall be as ordered by the City and shall be conducted by qualified personnel in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater" and also Regulation 40 CFR, Part 136, Guidelines Establishing Test Procedures for Analysis of Pollutants.

(g) Surcharges for BOD and SS. There shall be a surcharge imposed upon the owners of, and the users of water in or on, all properties discharging or permitting to be discharged or infiltrated into the sewer system and/or treatment works abnormal industrial wastewater, which surcharge is intended to cover the additional cost to the sewer system and/or the treatment works resulting from the treatment and disposal of such abnormal industrial wastewater. Such surcharges shall be in addition to the regular sewer service charge set forth in subsection (a)(2) hereof, and shall be payable as hereinafter provided in the amount hereinafter provided.

(1) Sampling to Determine Waste Strength for Surcharge. The strength of any industrial wastewater, the discharge of which is subject to surcharge, shall be determined monthly, or more frequently, from samples taken either at the monitoring facility referred to in Section XV or at any other sampling point mutually agreed upon by the City and the producer of such wastewater.

The frequency and duration of the sampling period shall be such as, in the opinion of the City, will permit a reasonably reliable determination of the average composition of such wastewater, exclusive of storm water runoff, surface water and ground water. Samples shall be collected by the City in proportion to the flow of wastewater, exclusive of storm water runoff, surface water and ground water, and composited for analysis in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater" as published by the American Public Health Association. Except as hereinafter provided, the strength of such wastewater so found by analysis shall be used for establishing the surcharge or surcharges. The City may, if it so elects, accept the results of routine sampling and analysis by the producer of such wastewater in lieu of making its own sampling and analysis.

(2) BOD Surcharge Rate and Determination. In the event any sample has a BOD in excess of 300 p.p.m., the owners of and the users of water in or on, the property from which such wastewater is discharged shall be surcharged an amount equal to the product of:

A. The actual volume of wastewater in thousand gallons per billing period, exclusive of storm water runoff, surface water and ground water, discharged to the sewer system and/or the treatment works; and

B. The "BOD Surcharge Rate". The "BOD Surcharge Rate" shall be determined by the following formula:

$$Rc = 0.00834\ P\ (C - 300)$$

Where Rc = the BOD surcharge rate in cents per 1,000 gallons of waste discharged.

P = the average annual fixed, operating and maintenance cost of treatment processes per pound of BOD received at the treatment works, including chlorination.

C = the average BOD of the industrial wastewater expressed in p.p.m. as determined in accordance with subsection (b)(1) hereof.

The figure 300 appearing in the above formula corresponds to the maximum BOD permissible without surcharge. The figure 0.00834 is the factor to convert parts per million to pounds per 1,000 gallons. No discount shall be permitted for domestic or industrial wastewaters having a BOD less than 300 p.p.m.

(3) Suspended Solids Surcharge Rate and Determination. In the event any sample has an average suspended solids concentration in excess of 275 p.p.m., the owner of, and the users of water in or on, the property from which such wastewater is discharged shall be surcharged an amount equal to the product of:

A. The actual volume of wastewater in thousand gallons per billing period, exclusive of storm water runoff, surface water and ground water, discharged to the sewer system, and/or the treatment works; and

B. The "suspended solids surcharge rate". The "suspended solids surcharge rate" shall be determined by the following formula:

Rs = 0.00934 x B (S - 275)

Rs = the suspended solids surcharge rate in cents per 1,000 gallons of wastewater discharged.

B = the average annual fixed, operating and maintenance cost of the sludge digestion, sludge drying and sludge disposal operations per pound of suspended solids received at the treatment works.

S = the average suspended solids concentration of the abnormal industrial wastewater expressed in the p.p.m.

The figure 275 appearing in the above formula corresponds to the maximum suspended solids concentration permissible without surcharge. The figure 0.00834 is the factor to convert parts per million to pounds per 1,000 gallons. No discount shall be permitted for domestic or industrial wastewaters having a suspended solids concentration less than 275 p.p.m.

(4) Surcharge Additional. The surcharges provided for in this subsection (b) shall be added to the service charges set forth in subsection (a) hereof. They shall be billed monthly or quarterly, as the City determines and shall be due at the same time and subject to the same penalty asset forth in subsection (j) hereof.

(h) Surcharge for Pretreatment. There shall be a surcharge imposed upon the industrial users of the City's treatment works to provide for the recovery of costs expended by the City in connection with any pretreatment required by this ordinance. This surcharge shall be added to the service charges set forth in subsection (a)(1) and (2) hereof and any applicable surcharges as set forth in subsection (b) hereof, and shall include, but not be limited to, the following charges and fees:

(1) Fees for monitoring, inspections and surveillance procedures;

(2) Fees for reviewing accidental discharge procedures and construction;

(3) Fees for consistent removal by the City of pollutants otherwise subject to Federal pretreatment standards;

(4) Other fees as the City may deem necessary to carry out the requirements contained herein.

Such fees and charges shall be based on each individual discharge or application for actual costs incurred by the City. An estimate of such costs shall be placed in a separate escrow account with the City or the City may enter into an agreement with such users for payment of costs. All funds remaining in the escrow account upon completion of work by the City shall be returned to such users. If ongoing costs for monitoring and testing are required, an annual cost will be estimated which will be funded by such users based on the estimate the first year and actual costs for each year thereafter.

## SECTION XI. WASTEWATER DISCHARGES COMPLIANCE.

No person shall discharge without a permit to any natural outlet or in any area under the jurisdiction of the City, and/or to the POTW any wastewater except as authorized by

the City in accordance with the provisions of this ordinance. Analysis completed for all industrial user reports shall be in accordance with 40 CFR Part 136 or with procedures approved by EPA. Sample results shall be representative of daily operations.

## SECTION XII. WASTEWATER DISCHARGE APPROVAL REQUIRED.

All significant users proposing to connect to or to contribute to the POTW shall obtain approval from the City before connecting to or contributing to the POTW. Any existing significant user connected to or contributing to the POTW who has not obtained such approval shall not cause or allow discharges to continue. The City may require other users to obtain the City's approval as necessary to carry out the purpose of this ordinance.

## SECTION XIII. APPROVAL REQUIREMENTS.

(a) Users subject to the requirements of Section XII of this ordinance shall complete and file with the City, an application in the form and within the time frame prescribed by the City, and accompanied by a fee of three hundred dollars ($300.00). Existing users shall apply for approval permit immediately upon notification. Proposed new users shall apply at least ninety days prior to connecting to or contributing to the POTW. In support of the application, the user shall submit, in units and terms appropriate for evaluation, the following information:

(1) Name, address, and location, (if different from the address);

(2) SIC number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended, and a list of any environmental control permits held by or for the facility;

(3) Wastewater constituents and characteristics including but not limited to any substance which if otherwise disposed of would be hazardous if required by 40 CFR 403.12(p) and to those mentioned in Section II all of which are to be determined by a reliable analytical laboratory; sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR Part 136, as amended;

(4) Time and duration of contribution;

(5) Average daily and thirty minute peak wastewater flow rates to the POTW, including daily, monthly and seasonal variations, if any, and any other streams, as necessary to allow use of the combined waste stream formula set out in 40 CFR 403.1(e);

(6) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by size, location and elevation;

(7) Description of activities, facilities, and plant process on the premises including all materials which are or could be discharged;

(8) Where known, the nature and concentration of any pollutants in the discharge from each regulated process which are limited by any local, state or federal pretreatment standards, and a statement regarding whether or not the pretreatment standards are being met on a consistent basis and if not, whether additional operation and maintenance (O & M) and/or additional pretreatment is required for the user to meet applicable pretreatment standards.

(9) If additional pretreatment and/or O & M will be required to meet the pretreatment standards; the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. The following conditions shall apply to this schedule:

A. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (e.g. hiring an engineer, completing preliminary plans, completing final plans, executing contract

for major components, commencing construction, completing construction, etc.)

B. No increments referred to in subsection (a)(9)(A). hereof shall exceed nine months.

C. Not later than fourteen days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the City including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reasons for delay, and the steps being taken by the user to return the construction to the schedule established. In no event shall more than nine months elapse between such progress reports to the City.

(10) Each product produced by type, amount, process or processes and rate of production;

(11) Type and amount of raw material processed including average and maximum per day;

(12) Number and type of employees, and hours of operation of plant and proposed or actual hours of operation of pretreatment system;

(13) Any other information as may be deemed by the City to be necessary to evaluate the permit application or is required by 40 CFR Section 403.12(p).

(b) Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

(c) The City will evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished, the City may issue or deny a wastewater discharge permit subject to terms and conditions provided herein.

## SECTION XIV. HAZARDOUS WASTE AND CHANGES IN WASTEWATER CHARACTERISTICS.

Any industrial user shall notify the City, the EPA Regional Waste Management Divisional Director, and the State hazardous waste authorities of any discharge of a substance which, if otherwise disposed, would be a hazardous waste (providing it is required under 40 CFR 403.12(p)), of any new introduction of wastewater constituents; or any substantial change in the volume or character of the wastewater constituents, including hazardous waste, and receive the City's approval prior to it being introduced into the wastewater treatment system. The user shall comply with all requirements of 40 CFR 403.12 for hazardous waste.

## SECTION XV. MONITORING FACILITIES.

(a) The City may require to be provided and operated at the user's own expense, monitoring facilities to allow inspection, sampling and flow measurement of the building sewer, internal drainage systems, and/or any other point of discharge of process water. The monitoring facility shall normally be situated on the user's premises, but they City may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.

(b) There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. Monitoring facilities shall be located and operated at appropriate times so as to collect samples representative of the user's discharge of process wastes to the POTW.

(c) Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the City's requirements and all applicable local construction standards and specifications. Construction shall be completed within ninety days following written notification by the City.

## SECTION XVI. INSPECTION AND SAMPLING.

(a) The City shall inspect the facilities of any user to ascertain whether the purpose of this ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the City or their representative ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records examination or copying, or in the performance of any of their duties.

(b) The City and EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations. Where a user has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the City and EPA shall be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

## SECTION XVII. PRETREATMENT.

(a) Users shall provide necessary wastewater treatment as required to comply with this ordinance and shall achieve compliance with all Federal Categorical Pretreatment Standards within the time limitations as specified by the Federal Pretreatment regulations. Any facilities required to pretreat wastewater to a level acceptable to the City shall be provided, operated and maintained at the user's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be submitted to the City for review and shall be acceptable to the City before construction of the facility. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the City under the provisions of this ordinance. Any subsequent changes in the pretreatment facilities or method of operation shall be reported to and be acceptable to the City prior to the user's initiation of the changes.

(b) All records relating to compliance with pretreatment standards shall be made available to officials of the EPA upon request.

## SECTION XVIII. CONFIDENTIAL INFORMATION.

(a) Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the City that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user.

(b) When requested by the person furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available upon proper request to government agencies for uses related to this ordinance, the National Pollutant Discharge Elimination System (NPDES) Permit, State disposal system and/or the pretreatment programs.

(c) Information accepted by the City as confidential will only be transmitted to the EPA or their agents upon proper request. The EPA is regulated by Section 308(a) of the Clean Water Act which prescribes penalties for disclosure of confidential information under the act. The information shall not be transmitted to any other governmental agency or to the general public by the City until and unless a ten day notification is given to the user.

## SECTION XIX. RECORDS RETENTION.

(a) All industrial users subject to this ordinance shall retain and preserve for no less than three years, any records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to monitoring, sampling and chemical analysis made by or in behalf of a user in connection with its discharge.

(b) All sampling records shall include:

(1) The date, exact place, method and time of sampling and the names of the person or persons taking the samples;

(2) The dates analysis were performed;

(3) Who performed the analysis;

(4) The analytical techniques/methods used; and

(5) The results of such analysis.

(c) All records which pertain to matters which are the subject to any enforcement or litigation activities brought by the City or EPA pursuant hereto shall be retained and preserved by the user until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

SECTION XX. APPLICATION AND REPORT SIGNATURES AND CERTIFICATION.

All wastewater discharge applications and user reports shall be signed by an authorized representative of the user and contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

SECTION XXI. ENFORCEMENT; SERVICE SUSPENSION.

(a) Misdemeanor. Any person violating a provision of this ordinance shall be guilty of a misdemeanor.

(b) Harmful Contributions.

(1) The City may suspend the wastewater treatment service when such suspension is necessary, in the opinion of the City in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health and welfare of persons, to the environment, causes interference to the POTW or causes the City to violate any condition of its NPDES permit. In the event the users actions are such as to prevent the City from making such determination the City may also suspend service and/or the permit until the user permits the City to make a determination on the potential of the endangerment.

(2) Any person notified of a suspension of the wastewater treatment service shall immediately stop or eliminate the contribution. In the event of a failure of the person to comply voluntarily with the suspension order, the City shall take such steps as deemed necessary including immediate severance of the sewer connection, to prevent or minimize damage to the POTW system or endangerment to any individuals. The City shall reinstate the wastewater treatment service upon proof of the elimination of the noncomplying discharge. A detailed written statement submitted by the user describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the City within fifteen days of the date of occurrence or prior to the date of any show cause or termination hearing.

## SECTION XXII. APPROVAL REVOCATION.

Any user who violates the following conditions of this ordinance, or applicable State and Federal regulations, is subject to having his approval revoked in accordance with the procedures of Sections XX through XXIV.

(a) Failure of a user to factually report the wastewater constituents and characteristics of his discharge;

(b) Failure of the user to report significant changes in operations or wastewater constituents and characteristics;

(c) Refusal of reasonable access to the user's premises for the purpose of inspection of monitoring; or

(d) Violation of conditions of the approval.

## SECTION XXIII. VIOLATION NOTICE.

Whenever the City finds that any user has violated or is violating this ordinance, wastewater discharge permit, or any prohibition, limitation or requirement contained herein, the City may serve upon such person a written notice stating the nature of the violation. Within thirty days of the date of the notice, a plan for the satisfactory correction thereof shall be submitted to the City by the user.

## SECTION XXIV. ORDERS.

The City may, at its discretion, order the user to accomplish certain steps within a specified time frame to comply with EPA pretreatment regulations and may assess administrative penalties for reasons described in Section XXIII(b).

## SECTION XXV. LEGAL ACTION.

If any person discharges domestic or industrial wastewater or other wastes into the City's POTW which causes personal injury or property damage; or is contrary to the provisions of this ordinance, Federal or State Pretreatment Requirements, or any order of the City; or, if any person

does not comply with any pretreatment standard or requirement or any permit condition, the City's attorney may commence an action for appropriate legal and/or equitable relief in the appropriate court of this country including the issuance of a temporary or permanent injunction.

## SECTION XXVI. SEVERABILITY.

If any provision, paragraph, word, section or ordinance of this ordinance is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections and chapters shall not be affected and shall continue in full force and effect.

## SECTION XXVII. CONFLICT.

All other ordinances and parts of other ordinances inconsistent or conflicting with any part of this ordinance are hereby repealed to the extent of such inconsistency or conflict.

## SECTION XXIII. PENALTY.

(a) Civil Penalties. Any user who is found to have violated an order of the City or who failed to comply with any provisions of this ordinance, and the orders, rules, regulations and approvals issued hereunder, shall be fined no more than one thousand dollars ($1,000.00) for each offense. Each day on which a violation occurs or continues shall be deemed a separate and distinct offense. In addition to the penalties provided herein, the City may recover reasonable attorney's fees, court costs, court reporters' fees and other expenses of litigation by appropriate suit at law against the person found to have violated this ordinance or the order, rules, regulations and permits issued hereunder. The City may also seek or assess criminal and administrative penalties for noncompliance.

(b) Administrative Penalties. When the City finds that a user has violated, or continues to violate, any provision of this ordinance, the City may fine such user in an amount not to exceed one thousand dollars ($1,000.00). Such fines shall be assessed on a per violation, per day basis. In the case of monthly or other long-term average discharge limits, fines shall be assessed for each day during the period of violation.

(c) Falsifying Information. Any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this ordinance, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this ordinance, shall upon conviction, be punished by a fine of not more than one thousand dollars ($1,000.00) or by imprisonment for not more than six months, or both.

SECTION XXIX. This Ordinance shall take effect immediately upon final passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 10th day of February, 1998.

ATTEST:

Robert T. Grimm
City Manager

CITY OF BEAVER FALLS:

Mayor

**CITY OF BEAVER FALLS**
**ORDINANCE NUMBER** 2033

**AN ORDINANCE OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, AMENDING ORDINANCE NO. 1781, WHICH ESTABLISHED THE JOINT SEWER USERS PROPORTIONAL SHARE OF THE CAPITAL COST FOR THE SEWER PLANT AND INTERCEPTOR LINE IN THE FORM OF A CAPACITY COMPONENT TO BE PART OF THE TOTAL SERVICE CONNECTION FEE IMPOSED ON ANY NEW RESIDENTIAL CONNECTION**

**WHEREAS**, the City previously adopted Ordinance No. 1781 and now desires to amend the same in accordance with Act 203, which permits the City to recover a portion of embedded fixed capital investment costs from new customers served by the City's sewage treatment plant services to include outlying municipalities known as the Joint Sewer Users;

**WHEREAS**, it has been determined that sewage tap-in regulations need to be addressed and enforced by the City with respect to the Joint Sewer Users;

**BE IT ORDAINED AND ENACTED** by the Council of the City of Beaver Falls, a Third Class City under the laws of the Commonwealth of Pennsylvania, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

SECTION IX. Joint Sewer Users must be notified of all tap-ins, including residential, commercial and industrial prior to approval of the tap-in.

SECTION X. Applicants for any tap-in must obtain appropriate discharge permits, if any are required, from the City's Engineer.

SECTION XI. All fees for tap-ins and permits must be paid in full to Joint Sewer Users, to include engineering, legal and administrative fees if any, prior to the approval of a tap-in.

SECTION XII. The names and addresses of all tap-ins must be supplied to the Joint Sewer Users and the City for accurate record keeping.

SECTION XIII. Any violation of this Ordinance shall be deemed a summary offense and, upon conviction thereof in a summary proceeding, a person or persons as convicted in proceeding before a district magistrate or court of competent jurisdiction shall be sentenced to a fine of not less than One Hundred ($100.00) dollars, nor more than Three Hundred ($300.00) dollars for each violation, together with costs, and in default of payment thereof or any part of said fine and costs, to undergo imprisonment of not more than thirty (30) days.

Each day a violation is continued, or each violation which occurs of a provision of this Ordinance shall be deemed a separate offence and be subject to a separate fine and imprisonment for each offence. All fines shall be collectible in accordance with the Third Class City Code, and Act 57 of 2003 and fines collected shall be repaid to the Joint Sewer Users.

SECTION XIV. All ordinances or parts thereof inconsistent herewith are hereby specifically repealed.

SECTION XV. This Ordinance shall become effective immediately upon final passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 25th day of February, 2014.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS:

By: George S. Quay III
George S. Quay III, Mayor

CITY OF BEAVER FALLS
ORDINANCE NO. 1781

AN ORDINANCE OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, ESTABLISHING THE JOINT SEWER USERS PROPORTIONAL SHARE OF THE CAPITAL COST FOR THE SEWER PLANT AND INTERCEPTOR LINE IN THE FORM OF A CAPACITY COMPONENT TO BE PART OF THE TOTAL SERVICE CONNECTION FEE IMPOSED ON ANY NEW RESIDENTIAL CONNECTION.

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, a Third Class City under the laws of the Commonwealth of Pennsylvania, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

SECTION I. That on December 19, 1990, Act 203 became law. The purpose of the Act is to provide Municipalities and Authorities with a uniform methodology for determining fees on a fair, just and reasonable basis.

SECTION II. That the concept of Act 203 is to recover a portion of embedded fixed capital investment costs from new customers. The fee(s) charged to new customers should reflect the initial costs required to provide service, as well as recover a portion of the embedded capacity available to provide service.

SECTION III. That the City of Beaver Falls authorized Widmer Engineer, Inc. to prepare recommendations relating to the Connection Fee and Tapping Fee Components pursuant to the provisions of Act 203.

SECTION IV. That Widmer Engineering, Inc., as part of the Connection Fee, examined the Capacity Component of that Fee which is intended to provide for cost sharing of general system facilities, including both existing and future service facilities. The Capacity Component

is restricted to the cost of such facilities, less any outstanding debt and contribution-in-aid-of-construction.

SECTION V. That Widmer Engineering, Inc. recommended as part of the Act 203 Study that the City of Beaver Falls impose on all joint sewer users a $214.00 Capacity Component as part of a total service connection fee to be imposed upon any new connection to an existing or developer installed sanitary sewer system.

SECTION VI. That said $214.00 Capacity Component is to be collected by the respective joint sewer user municipality and forwarded onto the City of Beaver Falls prior to connection, which, upon receipt, is to be deposited into the Joint Sewer User Account only.

SECTION VII. All Ordinances or parts thereof inconsistent herewith are hereby specifically repealed.

SECTION VIII. This Ordinance shall become effective immediately upon final passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 16th day of August, 2002.

ATTEST:

City Coordinator

CITY OF BEAVER FALLS:

By:

Karl Boak, Mayor

CITY OF BEAVER FALLS
RESOLUTION 1210

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS ESTABLISHING THE RATE OF THE SEWER TAP-IN FEES FOR BOTH JOINT SEWER USERS AND PROPERTY OWNERS IN THE CITY OF BEAVER FALLS.

WHEREAS, the Council of the City of Beaver Falls pursuant to the Third Class City Code is empowered to establish and adjust certain fees collected by the City of Beaver Falls; and

WHEREAS, it has been determined that the sewage tap-in fees collected by the City of Beaver Falls need adjusted; and

WHEREAS, the City of Beaver falls Sewage treatment plant services not only City users but also outlying municipalities known as Joint Sewer Users.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Beaver falls, and it is hereby resolved by virtue of the authority of the same as follows:

1. The tap-in fee for property owners within the municipalities that are part of the Joint Sewer Users is hereby set at Six Hundred and Fifty ($ 650.00) Dollars per tap-in.

2. The tap-in fee for property owners within the City of Beaver Falls is hereby set at Two Thousand ($ 2,000.00) Dollars per tap-in.

3. Any Resolution conflicting with the provisions of this Resolution is hereby repealed so far as the same affects this Resolution.

4. This Resolution shall be effective immediately upon passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th Day of September, 2009.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS

Mayor

CITY OF BEAVER FALLS
RESOLUTION NO. 1209

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA APPROVING THE IMPOSITION OF A LATE FEE ON ALL JOINT SEWER USER MUNICIPALITIES TO BE APPLIED THE DAY FOLLOWING THE PAYMENT'S DUE DATE AND TO BE ADDED TO THE FOLLOWING QUARTERLY BILL.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Beaver Falls, Beaver County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

1. In order to insure prompt receipt of fees due and owing from Joint Sewer User municipalities, it has become necessary to implement a late fee.

2. That said late fee is to be assessed in an amount equal to the five percent (5%) of the outstanding and late bill. The late fee will be imposed the day after the bill was due and will be incorporated into the following quarterly bill.

3. That this Resolution shall be effective immediately.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th day of Sept., 2009.

ATTEST:

Paula J. Burdine
City Clerk

CITY OF BEAVER FALLS:

By: [signature]
Mayor

CITY OF BEAVER FALLS
ORDINANCE NO. 1652

AN ORDINANCE OF THE CITY OF BEAVER FALLS AMENDING CHAPTER 18, PART 3 OF THE CODE OF ORDINANCES OF THE CITY PROHIBITING THE DISCHARGE OF STORM WATER RUNOFF INTO SANITARY SEWERS

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

Section 1. Chapter 18, Part 3 of the Code of Ordinances of the City is hereby amended by adding thereto the following:

**§302. Exclusion of Storm Water Runoff.**

**A. The discharge of storm water runoff into sanitary sewers is prohibited.**

**B. No person owning any occupied building connected to a sanitary sewer shall connect any roof drain or foundation drain thereto or permit any such drains to remain connected thereto, nor shall he permit, allow or cause to enter into any sanitary sewer, any storm water, spring water or surface water from any other source.**

**C. The provisions of this Part do not prohibit the present or future discharge of storm water runoff to storm sewers or to natural watercourses.**

Section 2. All ordinances or parts of ordinances which are inconsistent herewith are hereby repealed.

Section 3. If any sentence, clause, section, or part of this ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of this ordinance. It is hereby declared as the intent of the City of Beaver Falls that this ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

Section 4. This Ordinance shall take effect immediately upon final passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 16th day of April, 1996.

ATTEST:

City Clerk

CITY OF BEAVER FALLS:

By: Thomas G. Berger
Mayor

# EXHIBIT I1

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear Customer:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

**Aqua Wastewater Customers**

| Rate Class | Average Usage | Estimated Monthly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 4,000 gal/month | $2.60 | 3.08% |
| Commercial/Public | 8,330 gal/month | $4.13 | 3.08% |
| Industrial | 1,500 gal/month | $1.41 | 3.08% |

**Aqua Water Customers**

| Rate Class | Average Usage | Estimated Monthly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 4,000 gal/month | $0.19 | 0.24% |
| Commercial/Public | 33,380 gal/month | $1.07 | 0.24% |
| Industrial | 200,150 gal/month | $5.17 | 0.24% |

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

# EXHIBIT I2

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear Customer:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding estimated incremental rate effect of the proposed rate base addition on Beaver Falls' wastewater customers, which include estimates with and without cost sharing. Aqua has sought cost sharing in later rate filings for acquired systems and therefore we are providing both scenarios in this notice:

**Beaver Falls Customers rates assuming costs are shared with other Aqua customers**

| Rate Class | Average Usage | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 9,490 | $115.98 | 119.27% |
| Commercial | 39,870 | $422.57 | 119.27% |
| Industrial | 96,710 | $332.05 | 119.27% |
| Public | 69,260 | $719.17 | 119.27% |
| Bulk Other (Dalton) | 440,530 | $7,951.38 | 119.27% |

**Beaver Falls Customers rates assuming no costs are shared with other Aqua customers**

| Rate Class | Average Usage | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 9,490 | $169.28 | 174.09% |
| Commercial | 39,870 | $616.78 | 174.09% |
| Industrial | 96,710 | $484.66 | 174.09% |
| Public | 69,260 | $1,049.70 | 174.09% |
| Bulk Other (Dalton) | 440,530 | $11,605.89 | 174.09% |

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138

# EXHIBIT I3

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear [Contributing Municipality]:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers.

Aqua is required to provide a non-binding estimated incremental rate effect of the proposed rate base addition to customers. Aqua's estimates, based on average quarterly usage of 6,354,460 of the Contributing Municipalities[1] to the Beaver Falls system, quarterly rates could increase $50,223.20 per quarter (or 174.09%), assuming no cost sharing with other Aqua customers. If costs are shared with other Aqua customers, the projected rate impact could be $34,408.71 per quarter (or 119.27%). Aqua would like to discuss these potential rate impacts further with you and the bulk wastewater service agreement to establish uniform service for all the Contributing Municipalities.

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates

[1] Big Beaver Borough, Eastvale Borough, North Sewickley Township, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township.

the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138

# EXHIBIT J1

# CITY OF BEAVER FALLS

~ ~ ~ ~ ~

FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2020

# CITY OF BEAVER FALLS

BEAVER COUNTY, PENNSYLVANIA

FINANCIAL STATEMENTS

WITH REPORT OF

CERTIFIED PUBLIC ACCOUNTANT

## FOR THE YEAR ENDED DECEMBER 31, 2020

**CITY OF BEAVER FALLS**

**TABLE OF CONTENTS**


**PAGE**

**INDEPENDENT AUDITOR'S REPORT** ..... i-iii

**BASIC FINANCIAL STATEMENTS**

**EXHIBIT A** – STATEMENT OF NET POSITION ..... 1

**EXHIBIT B** – STATEMENT OF ACTIVITIES ..... 2

**EXHIBIT C** – BALANCE SHEET – Governmental Funds ..... 3

**EXHIBIT D** - STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN IN FUND BALANCES- Governmental Funds ..... 4

**EXHIBIT E** - STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN IN FUND BALANCES, BUDGET AND ACTUAL - Governmental Funds ..... 5

**EXHIBIT F**– STATEMENT OF NET POSITION – Proprietary Funds ..... 6

**EXHIBIT G** - STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION – Proprietary Funds ..... 7

**EXHIBIT H** - STATEMENT OF CASH FLOWS – Proprietary Funds ..... 8

**EXHIBIT I**– STATEMENT OF FIDUCIARY NET POSITION – Fiduciary Funds ..... 9

**EXHIBIT J**- STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – Fiduciary Funds .... 10

**NOTES TO THE FINANCIAL STATEMENTS** ..... 11-33

**SUPPLEMENTARY INFORMATION**

**SCHEDULE 1** – DETAIL SCHEDULE OF BUDGET AND ACTUAL REVENUES – General Fund ..... 34-35

**SCHEDULE 2** – DETAIL SCHEDULE OF BUDGET AND ACTUAL EXPENDITURES – General Fund ..... 36-41

**SCHEDULE 3** – COMBINING BALANCE SHEET – Non-Major Governmental Funds ..... 42

**SCHEDULE 4** – COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES – Non-Major Governmental Funds ..... 43

# *Mark C. Turnley*

*Certified Public Accountant*

*1000 3rd Avenue*
*New Brighton, Pennsylvania 15066*
*(724) 384-1081*
*FAX (724) 384-8908*


**Members of Council**
**City of Beaver Falls**

## Independent Auditor's Report

### Report on Financial Statements

I have audited the accompanying basic financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Beaver Falls as of and for the year ended December 31, 2020, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

My responsibility is to express opinions on these financial statements based on my audit. I conducted my audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the City's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, I express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinions.

## Opinions

### *Basis for Adverse Opinion on Governmental Activities*

As described in Note 1, the City of Beaver Falls prepares its statement of net position (Exhibit A) and statement of activities (Exhibit B) for governmental activities using the modified accrual basis of accounting which is a comprehensive basis of accounting other than generally accepted accounting principles. Generally accepted accounting principles requires the preparation of these government-wide financial statements using the full accrual basis of accounting, including capitalizing and depreciating fixed assets and recognizing long-term debt obligations. The amount by which this departure would affect the assets, liabilities, net position, revenues and expenses of the governmental activities is not reasonably determinable.

### *Adverse Opinion*

In my opinion, because of the significance of the matter described in the "Basis for Adverse Opinion on Governmental Activities" paragraph, the statement of net position (Exhibit A) and statement of activities (Exhibit B) referred to above do not present fairly, in conformity with accounting principles generally accepted in the United States of America, the financial position of the governmental activities of the City of Beaver Falls as of December 31, 2020, and the changes in financial position thereof for the year then ended.

### *Unmodified Opinion*

In my opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities, each major fund and the aggregate remaining fund information of the City of Beaver Falls as of December 31, 2020, and the respective changes in financial position and cash flows, where applicable, thereof and the budgetary comparison for the General Fund for the year then ended in conformity with accounting principles generally accepted in the United States of America.

## Other Matters

### *Other Information*

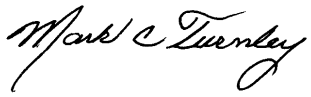
Management has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States requires to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. My opinion on the basic financial statements is not affected by this missing information.

### *Supplementary Information*

My audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City of Beaver Falls' basic financial statements. The supplementary information (Schedules 1-4) is presented for purposes of additional analysis and is not a required part of the basic financial statements.

***Supplementary Information (Continued)***

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records use to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In my opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole. The 'memorandum only 2019' column on pages 34-41 for the year ended December 31, 2019 (Schedules 1-2) were audited by me, and I expressed an unmodified opinion on them in my report dated September 28, 2020, but I have not performed any auditing procedures since that date on these statements.



Mark C. Turnley, CPA

September 30, 2021
New Brighton, Pennsylvania

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**DECEMBER 31, 2020**

**EXHIBIT A**

| | Governmental Activities | Business-Type Activities | Total |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and Cash Equivalents | $ 1,265,001 | $ 1,904,108 | $ 3,169,109 |
| Taxes Receivable (net) | 124,521 | - | 124,521 |
| Accounts Receivable - Sanitation/Sewage | - | 216,453 | 216,453 |
| Due From Other Governments | 136,048 | - | 136,048 |
| Other Receivables | 68,842 | 89,309 | 158,151 |
| Internal Balances | 65,891 | (65,891) | - |
| Prepaid Expenses | 86,462 | - | 86,462 |
| **Total Current Assets** | **$ 1,746,765** | **$ 2,143,979** | **$ 3,890,744** |
| **Noncurrent Assets:** | | | |
| Buildings and Improvements | $ - | $ 10,010,405 | $ 10,010,405 |
| Office Equipment | - | 90,240 | 90,240 |
| Vehicles | - | 299,503 | 299,503 |
| Machinery & Equipment | - | 410,644 | 410,644 |
| Infrastructure | - | 2,487,544 | 2,487,544 |
| Accumulated Depreciation | - | (7,272,228) | (7,272,228) |
| **Total Noncurrent Assets** | **$ -** | **$ 6,026,108** | **$ 6,026,108** |
| **TOTAL ASSETS** | **$ 1,746,765** | **$ 8,170,087** | **$ 9,916,852** |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts Payable | $ 211,378 | $ 23,126 | $ 234,504 |
| Payroll Liabilities | 53,682 | - | 53,682 |
| Due to Other Governments | 42,512 | - | 42,512 |
| Customer Deposits | 98,867 | - | 98,867 |
| **Total Current Liabilities** | **$ 406,439** | **$ 23,126** | **$ 429,565** |
| **TOTAL LIABILITIES** | **$ 406,439** | **$ 23,126** | **$ 429,565** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ - | $ 6,026,108 | $ 6,026,108 |
| Restricted (Note 1) | 815,959 | - | 815,959 |
| Unrestricted | 524,367 | 2,120,853 | 2,645,220 |
| **TOTAL NET POSITION** | **$ 1,340,326** | **$ 8,146,961** | **$ 9,487,287** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 1,746,765** | **$ 8,170,087** | **$ 9,916,852** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF ACTIVITIES
## FOR THE YEAR ENDED DECEMBER 31, 2020

| Functions/Programs | Expenses | Program Revenues: Charges for Services | Program Revenues: Operating Grants and Contributions | Program Revenues: Capital Grants and Contributions | Net (Expense) Revenue and Changes in Net Position: Governmental Activities | Net (Expense) Revenue and Changes in Net Position: Business-Type Activities | Total |
|---|---|---|---|---|---|---|---|
| **Governmental Activities:** | | | | | | | |
| Administration | $ 519,633 | $ 103,171 | $ 39,055 | $ - | $ (377,407) | | $ (377,407) |
| Public Safety - Police | 1,695,888 | 325,743 | 440,520 | - | (929,625) | | (929,625) |
| Public Safety - Fire | 876,439 | 85,919 | 142,991 | - | (647,529) | | (647,529) |
| Public Safety - Code | 10,800 | 254,919 | - | - | 244,119 | | 244,119 |
| Health and Welfare | 43,237 | - | - | - | (43,237) | | (43,237) |
| Rental Registration | 47,561 | - | - | - | (47,561) | | (47,561) |
| Public Works - Sanitation | 641,065 | 782,478 | 1,346 | - | 142,759 | | 142,759 |
| Public Works - Highways | 1,061,941 | 585,912 | 358,082 | - | (117,947) | | (117,947) |
| Public Works - Wastewater System | 427,450 | 827,144 | - | - | 399,694 | | 399,694 |
| Culture and Recreation | 15,745 | - | - | - | (15,745) | | (15,745) |
| Debt Service and Refunds | 1,308,669 | 60,800 | - | - | (1,247,869) | | (1,247,869) |
| Insurance | 1,052,265 | - | - | - | (1,052,265) | | (1,052,265) |
| Miscellaneous Expenses | 1,811,318 | - | - | - | (1,811,318) | | (1,811,318) |
| **Total Governmental Activities** | **$ 9,512,011** | **$ 3,026,086** | **$ 981,994** | **$ -** | **$ (5,503,931)** | | **$ (5,503,931)** |
| **Business-Type Activities:** | | | | | | | |
| Joint Sewer Users | $ 1,467,600 | $ 1,521,310 | $ - | $ - | | $ 53,710 | $ 53,710 |
| City Sewer Users | 1,402,560 | 1,507,615 | - | - | | 105,055 | 105,055 |
| **Total Business-Type Activities** | **$ 2,870,160** | **$ 3,028,925** | **$ -** | **$ -** | | **$ 158,765** | **$ 158,765** |
| **Total Primary Government** | **$ 12,382,171** | **$ 6,055,011** | **$ 981,994** | **$ -** | **$ (5,503,931)** | **$ 158,765** | **$ (5,345,166)** |
| **General Revenues:** | | | | | | | |
| Taxes: | | | | | | | |
| Property Taxes, Levied for General Purposes | | | | | $ 1,932,544 | $ - | $ 1,932,544 |
| Act 511 Taxes | | | | | 1,073,167 | - | 1,073,167 |
| Earned Income Tax Levied for Pension Obligations | | | | | 954,041 | - | 954,041 |
| PURTA/Beverage Licenses/Payments in Lieu of Taxes | | | | | 38,985 | - | 38,985 |
| Cable Franchise Fees | | | | | 120,384 | - | 120,384 |
| Investment Earnings | | | | | 13,479 | 9,510 | 22,989 |
| Miscellaneous | | | | | 162,829 | - | 162,829 |
| Proceeds from Loan | | | | | 600,000 | - | 600,000 |
| **Total General Revenues** | | | | | **$ 4,895,429** | **$ 9,510** | **$ 4,904,939** |
| **Change in Net Position** | | | | | **$ (608,502)** | **$ 168,275** | **$ (440,227)** |
| Net Position — January 1, 2020 | | | | | 1,948,828 | 7,978,686 | 9,927,514 |
| **Net Position — December 31, 2020** | | | | | **$ 1,340,326** | **$ 8,146,961** | **$ 9,487,287** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**BALANCE SHEET**
**GOVERNMENTAL FUNDS**
**DECEMBER 31, 2020**

**EXHIBIT C**

| | GENERAL FUND | CAPITAL PROJECTS FUND | NON-MAJOR GOVERNMENTAL FUNDS | TOTAL GOVERNMENTAL FUNDS |
|---|---|---|---|---|
| **ASSETS:** | | | | |
| Cash and Cash Equivalents | $ 554,009 | $ 601,950 | $ 109,042 | $ 1,265,001 |
| Taxes Receivable, net | 124,521 | - | - | 124,521 |
| Due From Other Funds | 68,825 | - | - | 68,825 |
| Due From Other Governments | 136,048 | - | - | 136,048 |
| Other Receivables | 68,842 | - | - | 68,842 |
| Prepaid Expenses | 85,930 | 532 | - | 86,462 |
| **TOTAL ASSETS** | **$ 1,038,175** | **$ 602,482** | **$ 109,042** | **$ 1,749,699** |
| **LIABILITIES AND FUND BALANCES** | | | | |
| **LIABILITIES:** | | | | |
| Accounts Payable | $ 191,865 | $ 19,513 | $ - | $ 211,378 |
| Payroll Liabilities | 53,682 | - | - | 53,682 |
| Due to Other Funds | 2,934 | - | - | 2,934 |
| Due to Other Governments | 42,512 | - | - | 42,512 |
| Customer Deposits | 98,867 | - | - | 98,867 |
| **TOTAL LIABILITIES** | **$ 389,860** | **$ 19,513** | **$ -** | **$ 409,373** |
| **FUND BALANCES:** | | | | |
| Non-spendable (Note 1) | $ 85,930 | $ 532 | $ - | $ 86,462 |
| Restricted (Note 1) | 124,480 | 582,437 | 109,042 | 815,959 |
| Unassigned | 437,905 | - | - | 437,905 |
| **TOTAL FUND BALANCES** | **$ 648,315** | **$ 582,969** | **$ 109,042** | **$ 1,340,326** |
| **TOTAL LIABILITIES AND FUND BALANCES** | **$ 1,038,175** | **$ 602,482** | **$ 109,042** | **$ 1,749,699** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES**
**GOVERNMENTAL FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | GENERAL FUND | CAPITAL PROJECTS FUND | NON-MAJOR GOVERNMENTAL FUNDS | TOTAL GOVERNMENTAL FUNDS |
|---|---|---|---|---|
| **REVENUES** | | | | |
| Taxes | $ 3,959,753 | $ - | $ - | $ 3,959,753 |
| Licenses and Permits | 386,703 | - | - | 386,703 |
| Fines and Forfeitures | 125,388 | - | 7,102 | 132,490 |
| Interest and Rents | 35,380 | 2,606 | 153 | 38,139 |
| Intergovernmental | 800,382 | - | 269,381 | 1,069,763 |
| Charges for Services | 2,517,647 | - | - | 2,517,647 |
| Miscellaneous | 192,934 | - | 2,677 | 195,611 |
| **Total Revenue** | **$ 8,018,187** | **$ 2,606** | **$ 279,313** | **$ 8,300,106** |
| **EXPENDITURES** | | | | |
| General Government | $ 474,997 | $ 44,589 | $ 47 | $ 519,633 |
| Public Safety | 2,493,228 | 82,210 | 7,689 | 2,583,127 |
| Health and Human Services | 43,237 | - | - | 43,237 |
| Rental Registration | 47,561 | - | - | 47,561 |
| Public Works | 2,129,872 | 584 | - | 2,130,456 |
| Culture and Recreation | 12,595 | 3,150 | - | 15,745 |
| Debt Service | 699,253 | 1,500 | 607,916 | 1,308,669 |
| Insurance | 1,052,265 | - | - | 1,052,265 |
| Miscellaneous Expenses (Pension/Employer Taxes) | 1,808,320 | - | - | 1,808,320 |
| **Total Expenditures** | **$ 8,761,328** | **$ 132,033** | **$ 615,652** | **$ 9,509,013** |
| **Excess ( Deficiency) of Revenue over Expenditures** | **$ (743,141)** | **$ (129,427)** | **$ (336,339)** | **$ (1,208,907)** |
| **OTHER FINANCING SOURCES (USES)** | | | | |
| Refund of Prior Year Expenses | $ 3,403 | $ - | $ - | $ 3,403 |
| Refund of Prior Year Revenues | (2,998) | - | - | (2,998) |
| Proceeds - Tax Anticipation Loan | 600,000 | - | - | 600,000 |
| Operating Transfers In | 320,239 | - | 607,560 | 927,799 |
| Operating Transfers Out | (607,560) | (85,846) | (234,393) | (927,799) |
| **Total Other Financing Sources (Uses)** | **$ 313,084** | **$ (85,846)** | **$ 373,167** | **$ 600,405** |
| **NET CHANGE IN FUND BALANCES** | **$ (430,057)** | **$ (215,273)** | **$ 36,828** | **$ (608,502)** |
| FUND BALANCE - JANUARY 1, 2020 | 1,078,372 | 798,242 | 72,214 | 1,948,828 |
| **FUND BALANCE - DECEMBER 31, 2020** | **$ 648,315** | **$ 582,969** | **$ 109,042** | **$ 1,340,326** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES, BUDGET AND ACTUAL**
**GOVERNMENTAL FUNDS - GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | Budgeted Amounts | | Actual | Variance with Final Budget Positive |
|---|---|---|---|---|
| | Original | Final | (Budgetary Basis) | (Negative) |
| **REVENUES** | | | | |
| Taxes | $ 4,097,350 | $ 4,097,350 | $ 3,959,753 | $ (137,597) |
| Licenses and Permits | 337,460 | 337,460 | 386,703 | 49,243 |
| Fines and Forfeitures | 98,010 | 98,010 | 125,388 | 27,378 |
| Interest and Rents | 33,660 | 33,660 | 35,380 | 1,720 |
| Intergovernmental | 487,154 | 487,154 | 800,382 | 313,228 |
| Charges for Services | 2,630,603 | 2,630,603 | 2,517,647 | (112,956) |
| Miscellaneous | 175,100 | 175,100 | 192,934 | 17,834 |
| **Total Revenues** | **$ 7,859,337** | **$ 7,859,337** | **$ 8,018,187** | **$ 158,850** |
| **EXPENDITURES** | | | | |
| Legislative | $ 18,700 | $ 18,700 | $ 18,734 | $ (34) |
| Executive | 217,517 | 217,517 | 273,725 | (56,208) |
| Financial Administration | 50,913 | 50,913 | 76,426 | (25,513) |
| Tax Collection | 68,311 | 68,311 | 34,578 | 33,733 |
| Legal | 32,500 | 32,500 | 31,239 | 1,261 |
| Data Processing | 15,000 | 15,000 | 15,194 | (194) |
| Municipal Building | 30,000 | 30,000 | 25,101 | 4,899 |
| Public Safety - Police | 1,606,186 | 1,606,186 | 1,633,425 | (27,239) |
| Public Safety - Fire | 774,970 | 774,970 | 859,803 | (84,833) |
| Emergency Management | 1,000 | 1,000 | - | 1,000 |
| Health and Human Services | 66,007 | 66,007 | 43,237 | 22,770 |
| Rental Registration | 59,232 | 59,232 | 47,561 | 11,671 |
| Public Works - Sanitation | 684,500 | 684,500 | 641,065 | 43,435 |
| Public Works - Highways | 1,023,391 | 1,023,391 | 1,061,357 | (37,966) |
| Public Works - Wastewater System | 422,643 | 422,643 | 427,450 | (4,807) |
| Culture and Recreation | 13,700 | 13,700 | 12,595 | 1,105 |
| Debt Service | 697,150 | 697,150 | 699,253 | (2,103) |
| Insurance | 1,045,156 | 1,045,156 | 1,052,265 | (7,109) |
| Miscellaneous Expenses (Pension/Employer Taxes) | 1,351,392 | 1,351,392 | 1,808,320 | (456,928) |
| **Total Expenditures** | **$ 8,178,268** | **$ 8,178,268** | **$ 8,761,328** | **$ (583,060)** |
| **Excess ( Deficiency) of Revenues over Expenditures** | **$ (318,931)** | **$ (318,931)** | **$ (743,141)** | **$ (424,210)** |
| **OTHER FINANCING SOURCES (USES)** | | | | |
| Refund of Prior Year Expenses | $ 2,618 | $ 2,618 | $ 3,403 | $ 785 |
| Refund of Prior Year Revenues | - | - | (2,998) | (2,998) |
| Proceeds - Tax Anticipation Loan | 600,000 | 600,000 | 600,000 | - |
| Operating Transfers In | 340,410 | 340,410 | 320,239 | (20,171) |
| Operating Transfers Out | (597,917) | (597,917) | (607,560) | (9,643) |
| **Total Other Financing Sources (Uses)** | **$ 345,111** | **$ 345,111** | **$ 313,084** | **$ (32,027)** |
| **NET CHANGE IN FUND BALANCES** | **$ 26,180** | **$ 26,180** | **$ (430,057)** | **$ (456,237)** |
| FUND BALANCE - JANUARY 1, 2020 | - | - | 1,078,372 | 1,078,372 |
| **FUND BALANCE - DECEMBER 31, 2020** | **$ 26,180** | **$ 26,180** | **$ 648,315** | **$ 622,135** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
# STATEMENT OF NET POSITION
# PROPRIETARY FUNDS
# DECEMBER 31, 2020

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 1,725,909 | $ 178,199 | $ 1,904,108 |
| Due from Other Fund | - | 2,934 | 2,934 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 216,453 | 216,453 |
| Other | 89,309 | - | 89,309 |
| **Total Current Assets** | **$ 1,815,218** | **$ 397,586** | **$ 2,212,804** |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 78,355 | 11,885 | 90,240 |
| Vehicles | 150,933 | 148,570 | 299,503 |
| Machinery & Equipment | - | 410,644 | 410,644 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (6,540,156) | (732,072) | (7,272,228) |
| **Total Noncurrent Assets** | **$ 5,400,009** | **$ 626,099** | **$ 6,026,108** |
| **TOTAL ASSETS** | **$ 7,215,227** | **$ 1,023,685** | **$ 8,238,912** |
| **LIABILITIES AND NET POSITION** | | | |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 22,752 | $ 374 | $ 23,126 |
| Due to other funds | 68,825 | - | 68,825 |
| **Total Current Liabilities** | **$ 91,577** | **$ 374** | **$ 91,951** |
| **TOTAL LIABILITIES** | **$ 91,577** | **$ 374** | **$ 91,951** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,400,009 | $ 626,099 | $ 6,026,108 |
| Unrestricted | 1,723,641 | 397,212 | 2,120,853 |
| **TOTAL NET POSITION** | **$ 7,123,650** | **$ 1,023,311** | **$ 8,146,961** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,215,227** | **$ 1,023,685** | **$ 8,238,912** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,516,345 | $ 1,506,821 | $ 3,023,166 |
| Tap-In Fees | 3,510 | - | 3,510 |
| Miscellaneous | 1,455 | 794 | 2,249 |
| **TOTAL OPERATING REVENUES** | **$ 1,521,310** | **$ 1,507,615** | **$ 3,028,925** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 676,100 | $ 676,100 |
| Wages and Benefits | 726,870 | 200,000 | 926,870 |
| Administrative | 30,210 | 240,000 | 270,210 |
| Office | 5,315 | - | 5,315 |
| Repair and maintenance | 171,933 | 21,734 | 193,667 |
| Billing expense | - | 20,015 | 20,015 |
| Depreciation | 203,920 | 35,546 | 239,466 |
| Engineering | 4,005 | 3,569 | 7,574 |
| Utilities | 137,700 | - | 137,700 |
| Chemicals/Chlorine | 24,286 | - | 24,286 |
| Sludge/grit removal | 61,270 | - | 61,270 |
| Janitorial Supplies | 2,995 | - | 2,995 |
| Gas and Oil | 1,721 | - | 1,721 |
| Equipment | 8,195 | - | 8,195 |
| Small Tools | - | 4,745 | 4,745 |
| Uniforms | 2,317 | - | 2,317 |
| Permits and testing | 16,150 | 500 | 16,650 |
| Certification & Training | 440 | - | 440 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | - | 351 | 351 |
| Line Rental Expense | 40,000 | - | 40,000 |
| Sewer-Line Reimbursement | - | 200,000 | 200,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,467,600** | **$ 1,402,560** | **$ 2,870,160** |
| **OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES)** | **$ 53,710** | **$ 105,055** | **$ 158,765** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 7,431 | $ 2,079 | $ 9,510 |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ 7,431** | **$ 2,079** | **$ 9,510** |
| **CHANGE IN NET POSITION** | **$ 61,141** | **$ 107,134** | **$ 168,275** |
| NET POSITION - January 1, 2020 | 7,062,509 | 916,177 | 7,978,686 |
| **NET POSITION - December 31, 2020** | **$ 7,123,650** | **$ 1,023,311** | **$ 8,146,961** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF CASH FLOWS
## PROPRIETARY FUNDS
## FOR THE YEAR ENDED DECEMBER 31, 2020

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,541,705 | $ 1,506,900 | $ 3,048,605 |
| Miscellaneous Revenue | 1,455 | 794 | 2,249 |
| Cash Paid to Vendors for Goods and Services | (1,008,059) | (1,545,637) | (2,553,696) |
| **Net cash provided (used) by operating activities** | **$ 535,101** | **$ (37,943)** | **$ 497,158** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ (87,357) | $ - | $ (87,357) |
| **Net cash provided (used) by capital and related financing activities** | **$ (87,357)** | **$ -** | **$ (87,357)** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 7,431 | $ 2,079 | $ 9,510 |
| **Net cash provided by investing activities** | **$ 7,431** | **$ 2,079** | **$ 9,510** |
| **Net increase (decrease) in cash and cash equivalents** | **$ 455,175** | **$ (35,864)** | **$ 419,311** |
| **CASH AND CASH EQUIVALENTS - January 1, 2020** | 1,270,734 | 214,063 | 1,484,797 |
| **CASH AND CASH EQUIVALENTS - December 31, 2020** | **$ 1,725,909** | **$ 178,199** | **$ 1,904,108** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 53,710 | $ 105,055 | $ 158,765 |
| **Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:** | | | |
| Depreciation | 203,920 | 35,546 | 239,466 |
| **Changes in assets and liabilities:** | | | |
| (Increase) decrease in sewer/refuse receivables | - | 79 | 79 |
| (Increase) decrease in other accounts receivable | 21,850 | - | 21,850 |
| (Increase) decrease in due from other funds | 176,039 | (2,934) | 173,105 |
| Increase (decrease) in accounts payable | 10,874 | 350 | 11,224 |
| Increase (decrease) in due to other funds | 68,708 | (176,039) | (107,331) |
| **Net cash provided (used) by operating activities** | **$ 535,101** | **$ (37,943)** | **$ 497,158** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF FIDUCIARY NET POSITION
## FIDUCIARY FUNDS
## DECEMBER 31, 2020

| | POLICE PENSION FUND | FIREFIGHTERS PENSION FUND | CITY EMPLOYEES PENSION FUND | TOTAL |
|---|---|---|---|---|
| **ASSETS** | | | | |
| Cash and Cash Equivalents | $ 214,171 | $ 480,310 | $ 225,091 | $ 919,572 |
| Investments, at Fair Value: | | | | |
| U.S. Treasury Securities | 272,808 | 94,462 | - | 367,270 |
| U.S. Agency Securities | 67,340 | - | | 67,340 |
| Municipal Bonds | 432,310 | 117,347 | - | 549,657 |
| Corporate Bonds | 364,528 | 76,278 | - | 440,806 |
| Money Market Funds | 821,279 | 128,404 | 94,367 | 1,044,050 |
| Mutual Funds | 9,027,047 | 4,036,421 | 7,802,293 | 20,865,761 |
| Exchange Traded Products | 909,714 | 412,870 | 662,565 | 1,985,149 |
| Accrued Interest | 8,596 | 2,118 | - | 10,714 |
| Other Accounts Receivable | 400 | - | - | 400 |
| **TOTAL ASSETS** | **$ 12,118,193** | **$ 5,348,210** | **$ 8,784,316** | **$ 26,250,719** |
| **LIABILITIES** | | | | |
| Accounts Payable | $ 823 | $ 1,200 | $ 1,200 | $ 3,223 |
| **TOTAL LIABILITIES** | **$ 823** | **$ 1,200** | **$ 1,200** | **$ 3,223** |
| **NET POSITION** | | | | |
| Held in Trust for Pension Benefits | $ 12,117,370 | $ 5,347,010 | $ 8,783,116 | $ 26,247,496 |
| **TOTAL NET POSITION** | **$ 12,117,370** | **$ 5,347,010** | **$ 8,783,116** | **$ 26,247,496** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**
**FIDUCIARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | POLICE PENSION FUND | FIREFIGHTERS PENSION FUND | CITY EMPLOYEES PENSION FUND | TOTAL |
|---|---|---|---|---|
| **ADDITIONS** | | | | |
| Contributions | | | | |
| Employer | $ 951,284 | $ 470,793 | $ 243,388 | $ 1,665,465 |
| Plan Members | 77,975 | 27,035 | 63,374 | 168,384 |
| **Total Contributions** | **$ 1,029,259** | **$ 497,828** | **$ 306,762** | **$ 1,833,849** |
| Investment Earnings | | | | |
| Net Increase <Decrease> in Fair Value of Investments | $ 822,579 | $ 359,487 | $ 650,717 | $ 1,832,783 |
| Interest and Dividends | 331,646 | 146,093 | 264,764 | 742,503 |
| Total Investment Earnings | $ 1,154,225 | $ 505,580 | $ 915,481 | $ 2,575,286 |
| Less Investment Expense | - | - | - | - |
| **Net Investment Earnings** | **$ 1,154,225** | **$ 505,580** | **$ 915,481** | **$ 2,575,286** |
| **Total Additions** | **$ 2,183,484** | **$ 1,003,408** | **$ 1,222,243** | **$ 4,409,135** |
| **DEDUCTIONS** | | | | |
| Benefits | $ 653,124 | $ 322,008 | $ 317,327 | $ 1,292,459 |
| Member Refunds (Lump Sum) | 159 | - | 29,920 | 30,079 |
| Administrative Expenses | 49,797 | 29,070 | 43,463 | 122,330 |
| Miscellaneous | - | - | 3,395 | 3,395 |
| **Total Deductions** | **$ 703,080** | **$ 351,078** | **$ 394,105** | **$ 1,448,263** |
| **CHANGE IN NET POSITION** | **$ 1,480,404** | **$ 652,330** | **$ 828,138** | **$ 2,960,872** |
| NET POSITION - JANUARY 1, 2020 | 10,636,966 | 4,694,680 | 7,954,978 | 23,286,624 |
| **NET POSITION - DECEMBER 31, 2020** | **$ 12,117,370** | **$ 5,347,010** | **$ 8,783,116** | **$ 26,247,496** |

The accompanying notes are an integral part of these financial statements

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### REPORTING ENTITY

The City of Beaver Falls was incorporated on December 3, 1928, under the provisions governing the creation of municipal corporations in the Commonwealth of Pennsylvania. The administration of the City consists of four (4) Councilmen and a City Mayor. Members of City Council are elected by the voting public. City Council appoints a City Manager to administer the day-to-day operations of the City. The major functions of the City include public safety, maintenance of City infrastructure (roads), sanitation and sewage control, maintenance of parks and other recreational facilities for use by City residents and general administrative functions necessary to facilitate City resident needs and responsibilities.

A reporting entity is comprised of the primary government, component units and other organizations that are included to ensure the financial statements are not misleading. The primary government of the City of Beaver Falls consists of all funds, departments, boards, and agencies that are not legally separate from the City. Generally accepted accounting standards defines component units are legally separate entities that are included in the City's reporting entity because of the significance of their operating or financial relationships with the City. The City of Beaver Falls has no component units.

### FINANCIAL STATEMENT PRESENTATION

**GOVERNMENT-WIDE FINANCIAL STATEMENTS** – The statement of net position (Exhibit A) and the statement of activities (Exhibit B) report information about the City as a whole. These financial statements combine all of the financial activity of the primary government excluding fiduciary funds. As a general rule, the effect of inter-fund activity has been removed from these statements. Governmental activities, which normally are supported by taxes, intergovernmental revenues, and other nonexchange transactions, are recorded separately from business-type activities, which rely to a significant extent on fees and charges for services.

The government-wide statement of activities presents a comparison between direct expenses and program revenues for each function of the City's governmental activities. Direct expenses are those that are specifically associated with a service, program, or department and are therefore clearly identifiable to a particular function. Program revenues include charges paid by the recipient of the goods or services offered by the program, and grants, subsidies, and contributions that are restricted to meeting the operational or capital requirements of a particular program.

**FUND FINANCIAL STATEMENTS** – Fund financial statements report detailed information about the City. Under generally accepted accounting standards, the focus of governmental fund financial statements is on major funds rather than reporting funds by type. Major funds represent the City's most important funds and are determined based on a percentage of assets, liabilities, revenues, and expenditures/expenses. For the City of Beaver Falls the General Fund always considered a major fund. Each major governmental fund is presented in a separate column. Non-major governmental funds, if any, are segregated and combined in a single column. Fiduciary funds are reported separately.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### BASIS OF ACCOUNTING AND MEASUREMENT FOCUS

The basis of accounting determines when transactions are recorded in the financial records and reported in the financial statements. The governmental activities on the government-wide financial statements are presented in conformity with the modified accrual basis of accounting, which is a basis of accounting other than generally accepted accounting standards. The governmental fund financial statements of the City of Beaver Falls are presented on the modified accrual basis of accounting, in accordance with accounting standards generally accepted in the United States of America (GAAP) established by the Government Accounting Standards Board (GASB). Business-type activities on the government-wide financial statements, the proprietary fund financial statements, and the Fiduciary Fund financial statements use the accrual basis of accounting in conformity with GAAP.

Revenue resulting from exchange transactions, in which the City receives value without directly giving equal values in return, includes property taxes, grants and contributions. On the modified accrual basis, revenue from current year property taxes is recognized when received, and within sixty days subsequent to year-end if they are both measurable and available to fund current year general operations. Revenues from grants and contributions are recognized in the calendar year in which all eligibility requirements have been satisfied. On the modified accrual basis, revenue from non-exchange transactions must also be 'available' before it can be recognized.

The management of the City of Beaver Falls has determined that the revenues most susceptible to accrual at December 31, 2020 are **1)** current real estate taxes estimated to be collected within 60 days, **2)** delinquent real estate taxes earned by the City in December of 2020, **3)** deed transfer taxes and vehicle violations earned by the City in December of 2020, **4)** certain taxpayer assessed Act 511 taxes, **5)** solid waste and sewage fees billed to City residents, **6)** cable franchise fees earned during the year, and **7)** other miscellaneous revenues estimable and available to the City for 2020 but not as yet collected at December 31, 2020. On the governmental fund financial statements, receivables that will not be collected within the 'available' period have been reported as 'deferred inflows of resources'.

On the modified accrual basis of accounting, expenses are recognized at the time they are incurred. The measurement focus of governmental fund accounting is on decreases in net financial resources (expenditures) rather than expenses. Expenditures, with certain exceptions, are recognized in the accounting period in which the related fund liability is incurred, if measurable. The primary expenditures deemed susceptible to accrual at December 31, 2020, are those for which the City's intention was to expense these items as budgeted for in the 2020 official budget, and for which the City has incurred an obligation during 2020 but has not paid as of December 31, 2020.

### FUND ACCOUNTING

Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain City functions or activities. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts. Funds are classified into three categories: governmental, proprietary, and fiduciary. Fund categories are defined as follows:

**Governmental Funds** – Governmental funds focus on the sources, uses and balances of current financial resources. Expendable assets are assigned to the various governmental funds according to the purposes for which they may or must be used. Current liabilities are assigned to the fund from which they will be paid. The difference between governmental fund assets and liabilities is reported as fund balance. The following are the City's major and non-major governmental funds:

**NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

**FUND ACCOUNTING (Continued)**

**MAJOR GOVERNMENTAL FUNDS:**

**GENERAL FUND** - Established under 'The Third-Class City Code' of the Commonwealth of Pennsylvania and is used for the general operations of the City. Income in this fund is derived mainly from assessed revenues such as real estate taxes, local taxes established under Act 511, charges for sanitation service and other miscellaneous revenues not designated for other restricted fund purposes. These revenues are used for general ongoing government services such as public safety, public works, general administration of the City and other miscellaneous operating expenses.

**CAPITAL PROJECTS FUND** - Established from the proceeds of a portion of the City's General Obligation Bonds – Series of 2017 to fund capital projects of the City.

**NON-MAJOR GOVERNMENTAL FUNDS:**

**HIGHWAY AID FUND** - Established and restricted under Act 655 of the Commonwealth of Pennsylvania. Funding is received from the Commonwealth and is restricted in use for the maintenance, repair and construction of roads, streets, and bridges for which the City is responsible.

**LOCAL DRUG INVESTIGATIVE FUND** - Established to account for monies received primarily from the Local Drug Enforcement Agency for forfeited drug funds to be used for training and other allowable expenses.

**K-9 FUND** - Established to account for monies received through donations to be used for K-9 expenses.

**CRIMEWATCH FUND** - Established to account for monies received through donations to be used for Crimewatch expenses.

**DEBT SERVICE FUND** - Established from the proceeds of the City's General Obligation Bonds – Series of 2017. The main purpose of the fund is to pay the principal and interest due on the City's general obligation bonds and notes. Funding is received through transfers from the General Fund.

**Proprietary Funds** - used to account for activities similar to those found in the private sector, where the determination of net income is necessary and useful to sound financial administration. Goods or services from such activities can be provided either to outside parties (enterprise funds) or to other departments or agencies within the City (internal service funds). The City maintains two (2) proprietary funds: **1)** City Sewer Users Fund and **2)** Joint Sewer Users Fund. Based on the criteria for determining major funds as set forth in GASB Statement No. 34, each of the City's proprietary funds are considered major funds.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### FUND ACCOUNTING (Continued)

**Fiduciary Funds** – Fiduciary fund reporting focuses on net position and changes in net position. The fiduciary fund category is split into four classifications: pension trust funds, investment trust funds, private-purpose trust funds and custodial funds. Trust funds are used to account for assets held by the City under a trust agreement for individuals, private organizations, or other governments and are therefore not available to support the City's own programs. Custodial funds report fiduciary activities that are not held in a Trust or equivalent arrangement that meets specific criteria. The City has three pension trust funds (police pension, firefighter's pension, and non-uniform service employee's pension). The City does not maintain any other type of fiduciary fund.

### ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires the City's management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

### BUDGETS

In December of 2019, the City of Beaver Falls adopted its 2020 annual budget for its General Fund totaling $8,776,185 in accordance with the provisions of the Third-Class City Code. The budget is prepared utilizing the modified accrual method of accounting in accordance with generally accepted accounting principles. Budgetary transfers among various expenditure line items are performed as approved by the City Council. The original and adjusted budgetary amounts are reflected in these financial statements (Exhibit E). Actual expenditures of the General Fund exceeded budgeted expenditures for 2020. All annual appropriations of the general fund lapse at year-end.

The City uses the following procedures in establishing this budgetary data:

a. In accordance with the Third-Class City Code, each year at the last stated meeting in November, the chief fiscal officer shall, on behalf of Council, present to Council for introduction a proposed budget ordinance. The proposed budget ordinance shall show the estimated receipts, expenditures, and liabilities for the ensuing year, with the balance of unexpended appropriations and all other information of value as a basis for fixing the levy and tax rate for the next calendar year. Council shall upon introducing the proposed budget ordinance, fix a date or adoption, which shall be not later than December 31 of that year.

b. When the proposed budget ordinance is submitted to Council and has been introduced, the City Clerk shall immediately make the prosed budget ordinance available for public inspection at the City Clerk's office and shall publish a notice to that effect once in a newspaper of general circulation that states the date fixed by Council for enactment of the proposed budget ordinance. The notice shall be published at least 20 days prior to the time fixed by Council for enactment of the proposed budget ordinance. The proposed budget ordinance shall be available for public inspection at the City Clerk's office for at least 10 days after the newspaper notice is published.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### BUDGETS (Continued)

c. Council shall, after making the changes and modifications as appear proper, enact the budget and any appropriation measures required to put it into effect upon the date fixed for enactment. Any budget revisions whereby total expenditures would be increased by more than 10%, or more than 25% in any individual lie-item over the proposed budget, the proposed budget shall not be enacted unless made available for public inspection for a period of at least 10 days after notice to that effect is published.

### CASH AND CASH EQUIVALENTS

For the purposes of these basic financial statements, cash and cash equivalents include amounts in demand deposit accounts and all highly liquid short-term investments with original maturity terms of less than three months.

### INVESTMENTS

Provisions of the Third-Class City Code authorize the following investments:

**I.** Obligations of (a) the United States of American or any of its agencies or instrumentalities backed by the full faith and credit of the United States of America, (b) the Commonwealth of Pennsylvania or any of its agencies or instrumentalities backed by the full faith and credit of the Commonwealth of Pennsylvania, or (c) of any political subdivision of the Commonwealth of Pennsylvania or any of its agencies or instrumentalities backed by the full faith and credit of the political subdivision.

**II.** Deposits in savings accounts, time deposits and share accounts of institutions insured by the Federal Deposit Insurance Corporation (FDIC) to the extent that such accounts are so insured and, for any amounts above the insured maximum, provided that approved collateral, as provided by law, is pledged by the depository.

**III.** U.S. government obligations, short-term commercial paper issued by a public corporation, and banker's acceptances.

**IV.** Shares of an investment company registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933.

Fiduciary fund type investments include investments consisting of fixed income securities, U.S. Treasury securities, mutual funds and exchange-traded products held by Hefren-Tillotson, Inc. for the benefit of the City's pension plans (Trust Funds). Investments are stated at fair value. The City's portfolio is in compliance with these statutes at December 31, 2020.

### RECEIVABLES

Sanitation, sewage, and other receivables are reflected at net realizable value as of December 31, 2020.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### SHORT-TERM INTERFUND RECEIVABLES/PAYABLES

During the course of operations, numerous transactions occur between individual funds for goods provided or services rendered. These receivables and payables are classified as 'due from/to other funds' on the governmental funds balance sheet. For the purposes of the government-wide statement of Net position, governmental inter-fund receivables and payables have been eliminated. Amounts due between governmental activities and business-type activities are offset as 'Internal Balances' on the Statement of Net position.

### CAPITAL ASSETS AND DEPRECIATION

All capital assets of the City's business-type activities are recorded at cost (or estimated historical cost). Donated fixed assets are recorded at fair value at the time of receipt. The City does not maintain a specific dollar threshold for fixed asset capitalization. The cost of infrastructure is included in the government-wide statement of net position for business-type activities and the proprietary fund financial statements. Routine repair and maintenance costs that do not add to the value of the asset or extend its useful life are charged as an expense.

All reported capital assets for business-type activities, except land, are depreciated using the straight-line method over the following useful lives:

| CATEGORY | BUSINESS-TYPE ACTIVITIES |
|---|---|
| Buildings and Improvements | 10-50 years |
| Office Equipment | 5-7 years |
| Vehicles | 5-15 Years |
| Infrastructure | 50 Years |

The accounting and reporting treatment applied to the capital assets associated with a fund are determined by its measurement focus. All governmental funds are accounted for on a spending or 'financial flow' measurement focus. This means that only the current assets and current liabilities are generally included on their balance sheets. Their reported fund balance (net current assets) is considered a measure of 'available resources'. Governmental operating statements present increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Accordingly, they are said to present a summary of sources and uses of 'available spendable resources' during a period. Under the modified accrual method of accounting, capital assets purchased by governmental funds are recorded as expenditures in the fund financial statements (Exhibit D). The City does not capitalize and depreciate the cost of its governmental activities fixed asset purchases in accordance with generally accepted accounting principles.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### ACCRUED LIABILITIES AND LONG-TERM OBLIGATIONS

All payables, accrued liabilities and long-term obligations are reported in the government-wide financial statements for business-type activities only. In general, payables and accrued liabilities that will be paid from governmental funds are reported on the governmental fund financial statements regardless of whether they will be liquidated with current resources. However, the non-current portion that will be paid from governmental funds are reported as a liability in the fund financial statements only to the extent that they will be paid with current, expendable, available financial resources. In general, liabilities that mature or come due for payment within 60 days of the end of the fiscal year-end, are considered to be paid with current available financial resources. Notes and other long-term obligations that will be paid from governmental funds are not recognized as a liability in the fund financial statements when due. The City's General Fund and Debt Service Fund are typically used to liquidate long-term liability obligations.

### LONG-TERM DEBT FINANCING COSTS

Bond and note issue costs are recorded as expenditures in the governmental or proprietary fund financial statements in the year paid. During the 2020 calendar year, the City incurred no bond/note issuance costs.

### COMPENSATED ABSENCES

In accordance with the terms of its various collective bargaining unit agreements, the City is responsible to pay eligible employees at the rate of $10 per day for each accumulated unused sick day upon separation of service from the City. For governmental fund financial statements under the modified accrual method of accounting, compensated absences are recorded as expenditures when paid rather than accrued when earned.

### NET POSITION

Net position is classified into three categories according to external donor or legal restrictions or availability of assets to satisfy City obligations. Net position is classified as follows:

- **Net Investment in Capital Assets** – This component of net position consists of capital assets net of accumulated depreciation, and reduced by the outstanding balances of debt that is attributable to the acquisition, construction and improvement of the capital assets, plus deferred outflows of resources less deferred inflows of resources related to those assets.

- **Restricted Net Position** –This component of net position consists of restricted assets reduced by liabilities and deferred inflows related to those assets. Restricted net position consists of the following:

    - Act 205 Earned Income Taxes for pension obligations - $124,480
    - Highway Aid Funds restricted under Act 655 for highway/road projects - $53,468
    - Capital Project funds restricted for City capital improvements - $582,437
    - Drug Investigative Fund restricted for police public safety costs - $49,094
    - K-9 Fund restricted for police public safety costs - $6,358
    - Crimewatch Fund restricted for police safety costs - $122.

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### NET POSITION (Continued)

- **Unrestricted** – Consists of net position that does not meet the definition of 'restricted' or 'net investment in capital assets'.

When an expense is incurred that can be paid using either restricted or unrestricted resources (net position), the City's policy is to first apply the expense toward restricted resources and then toward unrestricted resources

### FUND EQUITY

In the Balance Sheet – Governmental Funds (Exhibit C), fund balances are reported in specific categories to make the nature and extent of the constraints placed on any entity's fund balance more transparent in accordance with GASB No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*. The following classifications describe the relative strength of the spending constraints placed on the purposes for which resources can be used:

- **Non-spendable fund balance** – amounts that are not in spendable form (such as prepaid) or are required to be maintained intact – The City's non-spendable fund balance is comprised of prepaid expenses paid in calendar year 2020 for the benefit of future periods totaling $86,462.

- **Restricted fund balance** – amounts constrained to specific purposes by their providers (such as grantors, bondholders, and high levels of government), through constitutional provisions, or by enabling legislation. Restricted fund balance of $815,959 is detailed above under restricted net position.

- **Committed fund balance** – amount constrained to specific purposes by the City itself, using its highest level of decision-making authority; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest-level action to remove or change the constraint.

- **Assigned fund balance** – amounts the City intends to use for a specific purpose; intent can be expressed by the governing body or by an official or body to which the governing body delegates the authority.

- **Unassigned fund balance** – amount that are available for any purpose.

### OPERATING REVENUES AND EXPENSES

Proprietary fund operating revenues are those revenues that are generated directly from the primary activity of the City's Joint Sewer User's Fund and City Sewer User's Fund. For the City, these revenues are sewer user charges, tap-in fees, and miscellaneous revenues directly related to the operations of these two funds. Operating expenses are the necessary costs incurred to operate the City's two proprietary funds. Non-operating revenues of the City consist of interest income.

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### ADOPTION OF GASB PRONOUNCEMENTS

The requirements of the following GASB Statements were adopted for the City's 2020 financial statements. Except where noted, the adoption of these pronouncements did not have a significant impact on the City's financial statements.

**GASB Statement No. 83***, 'Certain Asset Retirement Obligations'*. The primary objective of this Statement is to provide financial statement users with information about 'asset retirement obligations (ARO) that were not addressed in GASB Standards by establishing uniform accounting and financial reporting requirements for these obligations.

**GASB Statement No. 84**, *'Fiduciary Activities'*. The primary objective of this Statement is to enhance the consistency and comparability of fiduciary activity reporting by state and local governments. This Statement also is intended to improve the usefulness of fiduciary activity information primarily for assessing the accountability of governments in their roles as fiduciaries.

**GASB Statement No. 90***, 'Majority Equity Interests (an amendment of GASB Statements No. 14 and No. 61'*. The primary objectives of this Statement are to improve consistency in the measurement and comparability of the financial statement presentation of majority equity interests in legally separate organizations and to improve the relevance of financial statement information for certain component units.

### PENDING GASB PRONOUNCEMENTS

**GASB Statement No. 87***, 'Leases'*. The primary objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases; enhancing the comparability of financial statements between governments; and also enhancing the relevance, reliability (representational faithfulness), and consistency of information about the leasing activities of governments. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

**GASB Statement No. 89***, 'Accounting for Interest Cost Incurred before the end of a Construction Period'*. The primary objectives of this Statement are (a) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and, (b) to simplify accounting for certain interest costs. The provisions of this Statement are effective for the City's December 31, 2021 financial statements.

**GASB Statement No. 91***, 'Conduit Debt Obligations'*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### PENDING GASB PRONOUNCEMENTS (Continued)

**GASB Statement No. 92**, *'Omnibus 2020'.* The primary objectives of this statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of GASB Statement Nos. 73, 74, 84, and 87. In addition the Statement addresses various topics and includes specific provisions concerning the following:

- Measurement of liabilities (and assets, if any) related to asset retirement obligations (ARO') in a government acquisition
- Reporting by entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments

The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

**GASB Statement No. 93***, 'Replacement of Interbank Offered Rates'*. The primary objectives of this Statement are to address the accounting and financial reporting implications that result from the replacement of an interbank offering rate (IBOR). The provisions of this Statement are effective for the City's December 31, 2021 financial statements.

**GASB Statement No. 94***, 'Public-Private and Public-Public Partnerships and Availability Payment Arrangements'*. The primary objectives of this Statement are to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs), and provide guidance for accounting and financial reporting for availability payment arrangements (APAs). The provisions of this Statement are effective for the City's December 31, 2023 financial statements.

**GASB Statement No. 96***, 'Subscription-Based Information Technology Arrangements (SBITA)'*. The primary objectives of this Statement are as follows:

- Defines a SBITA
- Establishes that a SBITA results in a right-to-use subscription asset – an intangible asset – and a corresponding subscription liability
- Provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA
- Requires note disclosures regarding a SBITA

The provisions of this Statement are effective for the City's December 31, 2023 financial statements.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### PENDING GASB PRONOUNCEMENTS (Continued)

**GASB Statement No. 97***, 'Certain Component Unit Criteria and Accounting and Financial Report for Internal Revenue Code Section 457 Deferred Compensation Plans'.* The primary objectives of this Statement are to 1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; 2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and 3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

The effects of implementing these Statements on the City's financial statements have not yet been determined.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS

### CASH DEPOSITS

At December 31, 2020, the City of Beaver Falls had the following carrying values on its cash and cash equivalent accounts held with its depositories:

| | Bank Balance | (Memo Only) Book Balance |
|---|---|---|
| General Fund | $ 602,672 | $ 554,009 |
| Capital Projects Fund | 614,250 | 601,950 |
| Non-Major Governmental Funds | 109,042 | 109,042 |
| Proprietary Funds | 1,905,451 | 1,904,108 |
| Fiduciary Funds | 1,623,952 | 919,572 |
| TOTAL | **$ 4,855,367** | **$ 4,088,681** |

The difference between the bank balance and the book balance represents year-end reconciling items such as deposits in transit and outstanding checks. The Federal Deposit Insurance Corporation (FDIC) coverage threshold for government account $250,000 per official custodian. This coverage includes checking and savings accounts, money market deposit accounts, and certificates of deposit.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS (Continued)

### CASH DEPOSITS (Continued)

#### Custodial Credit Risk:

Custodial credit risk is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City does not have a separate policy for custodial credit risk in addition to the requirements of the Third-Class City Code. As of December 31, 2020, $4,355,367 of the City's bank balance total is exposed to custodial credit risk as this amount represents uninsured deposits collateralized with securities held by the pledging financial institution or by its trust department or agent, but not in the City's name. In accordance with Act Number 72-1971 Session of the Commonwealth of Pennsylvania, the aforementioned deposits, in excess of $250,000, are collateralized by securities pledged to a pooled public funds account with the Federal Reserve System.

### INVESTMENTS:

The fair value and maturity term of the City's fiduciary fund investments as of December 31, 2020, is as follows:

| | Fair Value | No Stated Maturity | 1-5 Years | 6-10 Years | 11-15 Years | 16-30 Years |
|---|---|---|---|---|---|---|
| U.S. Agencies | $ 67,340 | $ - | $ 2,747 | $ - | $ 16,834 | $ 47,759 |
| U.S. Treasury | 367,270 | - | 284,185 | - | - | 83,085 |
| Municipal Bonds | 549,657 | - | 174,344 | 284,899 | 90,414 | - |
| Corporate Bonds | 440,806 | - | 259,232 | 162,181 | - | 19,393 |
| Mutual Funds | 20,865,761 | 20,865,761 | - | - | - | - |
| Exchange Traded | 1,985,149 | 1,985,149 | - | - | - | - |
| Money Funds | 1,044,050 | 1,044,050 | - | - | - | - |
| | **$ 25,320,033** | **$ 23,894,960** | **$ 720,508** | **$ 447,080** | **$ 107,248** | **$ 150,237** |

Investments classified as U.S. Agencies are securities of agencies of the U.S. Government that have an implied but not explicit guarantee.

#### Custodial Credit Risk:

For an investment, custodial risk is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral security that are in the possession of an outside party. The City's investments in mutual funds and money funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form. The City does not have a specific policy that would limit its investment choices to those with certain credit ratings.

#### Credit Risk:

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The City has no formal investment policy, in addition to the requirements of the Third-Class City Code that and the Intergovernmental Cooperation Act, that limits its investment choices based on credit ratings by nationally recognized rating organizations. As of December 31, 2020, investments in U.S. Agencies, U.S. Treasury, Municipal Bonds, and Corporate Bonds of the City's pension plans are rated individually by nationally recognized statistical rating agencies (Moody's and S&P) as follows:

**NOTE 2 - CASH DEPOSITS AND INVESTMENTS (Continued)**

**INVESTMENTS (Continued)**

**Credit Risk: (Continued)**

| Bond Quality | Market Value |
|---|---|
| Aaa | $ 367,270 |
| AAA | 84,622 |
| AA+ | 92,121 |
| AA | 419,769 |
| AA- | 22,346 |
| A- | 27,524 |
| A2 | 92,979 |
| BBB+ | 98,964 |
| BBB | 102,719 |
| Not Rated | 116,759 |
| | **$ 1,425,073** |

**Interest Rate Risk:**

The City does not have a formal investment policy that limits investments maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

**Concentration of Credit Risk:**

The City places no limit on the amount it may invest in any one issuer.

**Fair Value Measurements:**

The City of Beaver Fall's investments are reported at fair value within the fair value hierarchy established by generally accepted accounting principles. Generally accepted accounting standards establishes a three-level fair value hierarchy that prioritizes the inputs to measure fair value. The hierarchy provides the highest priority to unadjusted quoted prices for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable (level 3 measurements). The three levels of the fair value hierarchy are described below:

- **Level 1** – Observable inputs that reflect quoted prices for identical assets or liabilities in active markets such as stock quotes
- **Level 2** – Includes inputs other than level 1 inputs that are directly or indirectly observable in the marketplace such as yield curves or other market data
- **Level 3** – Unobservable inputs which reflect the reporting entity's assessment of the assumptions that market participants would use in pricing the asset or liability including assumptions about risk such as bid/ask spreads and liquidity discounts.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS (Continued)

### INVESTMENTS (Continued)

### Fair Value Measurement: (Continued)

The following schedule presents the Investments of the City by level within the fair value hierarchy:

| | Value at 12/31/20 | Fair Value Measurements Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| U.S. Treasury | $ 367,270 | $ 367,270 | $ - | $ - |
| U.S. Agencies | 67,340 | 67,340 | - | - |
| Municipal Bonds | 549,657 | 549,657 | - | - |
| Corporate Bonds | 440,806 | 440,806 | - | - |
| Mutal Funds | 20,865,761 | 20,865,761 | - | - |
| Exchange Traded Products | 1,985,149 | 1,985,149 | - | - |
| | **$ 24,275,983** | **$ 24,275,983** | **$ -** | $ - |

## NOTE 3 - PROPERTY TAXES

The City of Beaver Falls levies property taxes March 1st of each calendar year. The calendar dates for payment of these taxes are as follows:

**PAYMENT PERIOD**

| | |
|---|---|
| February 1 – March 31, 2020 | (Discount period) |
| April 1 – May 31, 2020 | (Face period) |
| June 1 – March 31, 2021 | (Penalty period) |

Taxpayers are entitled to a 2% discount if taxes are paid prior to May 1st. Collections after June 30st are assessed a 10% penalty. Taxes unpaid as of April of the year following levy are liened through Beaver County. As of December 31, 2020, the City had $391,564 in unpaid 2020 property taxes which represents 18% of the total assessed property taxes for the current year.

The tax millage assessment for the 2020 calendar year is 34 mills on the assessed value of land and buildings, which represents $34.00 of revenue for every $1,000 of assessed value. The total millage includes 24.5928 dedicated for general revenue purposes, 9.1747 dedicated for debt service and .2325 mills dedicated for the maintenance and operation of recreation places. No provision has been made for amounts estimated to be uncollectable.

Taxes receivables, as reflected in Exhibit A and C, consist of the following at December 31, 2020:

| | |
|---|---|
| Delinquent Real Estate | 39,524 |
| Act 511 Taxes | 84,997 |
| | **$ 124,521** |

## NOTE 4 – INTERFUND TRANSACTIONS

Interfund receivable and payable obligations, as reflected in Exhibit C and Exhibit F, are comprised of the following at December 31, 2020:

| | DUE FROM OTHER FUNDS | DUE TO OTHER FUNDS |
|---|---|---|
| General Fund | $ 68,825 | $ 2,934 |
| Joint Sewer Users | - | 68,825 |
| City Sewer Users | 2,934 | - |
| | **$ 71,759** | **$ 71,759** |

During the 2020 calendar year, the following transfers were made between funds:

- General Fund transferred $607,560 to the Debt Service Fund for the Series of 2012 General Obligation Bond principal and interest payments
- Highway Aid Fund transferred $234,393 to the General Fund for street lighting
- Capital Projects Fund transferred $85,846 to the General Fund for the General Obligation Bond Series B of 2017 principal and interest payments

## NOTE 5 - DUE FROM OTHER GOVERNMENTAL UNITS

The 'due from other governmental units' total of $136,048, as reflected in Exhibits A and C for governmental activities and governmental funds, represents amounts earned by and due the City of Beaver Falls for 2020 from other governmental agencies as follows:

| | |
|---|---|
| Fines - Magistrate | $ 4,725 |
| Reimbursements from School District | 20,550 |
| Beaver County Housing Authority | 25,310 |
| County of Beaver | 14,400 |
| Penndot - Winter Agreement | 45,912 |
| Reimbursements for Police Services | 25,151 |
| | **$ 136,048** |

## NOTE 6 – OTHER RECEIVABLES

Other receivables, as reflected in Exhibit A and C, consist of the following at December 31, 2020:

| | GOVERNMENTAL ACTIVITIES | BUSINESS-TYPE ACTIVITIES |
|---|---|---|
| Cable Franchise Fees | $ 30,558 | $ - |
| Sewage | - | 216,453 |
| Columbia Gas (Street Opening) | 30,450 | - |
| Miscellaneous | 7,834 | - |
| | **$ 68,842** | **$ 216,453** |

## NOTE 7 – BUSINESS-TYPE FIXED ASSETS

A summary of the business-type fixed asset activity for the 2020 calendar year was as follows:

| | Balance 1/1/2020 | Additions | Deductions | Balance 12/31/2020 |
|---|---|---|---|---|
| Building and Improvements | $ 10,010,405 | $ - | $ - | $ 10,010,405 |
| Office Equipment | 45,590 | 44,650 | - | 90,240 |
| Vehicles | 256,796 | 42,707 | - | 299,503 |
| Machinery & Equipment | 410,644 | - | - | 410,644 |
| Infrastructure | 2,487,544 | - | - | 2,487,544 |
| | $ 13,210,979 | $ 87,357 | $ - | $ 13,298,336 |
| **Less: Accumulated depreciation** | | | | |
| Building and Improvements | $ (5,531,610) | $ (163,365) | $ - | $ (5,694,975) |
| Office Equipment | (43,136) | (1,478) | - | (44,614) |
| Vehicles | (250,901) | (6,132) | - | (257,033) |
| Machinery & Equipment | (286,093) | (19,934) | - | (306,027) |
| Infrastructure | (921,022) | (48,557) | - | (969,579) |
| | $ (7,032,762) | $ (239,466) | $ - | $ (7,272,228) |
| **Business-Type Activities Capital Assets, Net** | **$ 6,178,217** | **$ (152,109)** | **$ -** | **$ 6,026,108** |

## NOTE 8 – LONG TERM DEBT OBLIGATIONS

### BONDS PAYABLE – GENERAL OBLIGATION BONDS SERIES B OF 2017

In November of 2017, the City of Beaver Falls issued General Obligation Bonds, Series B of 2017 in the amount of $2,380,000. Proceeds from the sale of the bonds will be used to provide funds for and towards the costs of planning, designing, acquiring, constructing, furnishing, and equipping additions and improvements to the City's capital improvement plan and pay the costs of issuing and insuring the bonds. The bonds were issued in denominations of $5,000 with interest payable on May 15 and November 15 each year through maturity. Interest rates range between 1.55% and 3.375%, with the bonds scheduled to mature on November 15, 2034. The bonds provide for early redemption options for the city as more fully described in the detailed Official Statement.

### DEFAULT PROVISIONS

The Bonds are general obligations of the City, payable from its tax and other general revenues, which taxing power presently includes ad valorem taxes which may be levied on all taxable real property within the City presently without limitation as to rate or amount. The City has covenanted that it will provide in its budget for each year, and will appropriate from its general revenues in each such year, the amount of debt service on the Bonds for such year, and will duly and punctually pay or cause to be paid from its Sinking Fund , as hereinafter defined, or any other of its revenues or funds, the principal of every maturity of the Bonds and the interest thereon at the dates and place and in the manner stated on the Bonds, and for such budgeting, appropriation and payment the City irrevocably has pledged its full faith, credit and taxing power.

**NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)**

**BONDS PAYABLE – GENERAL OBLIGATION BONDS SERIES B OF 2017 (Continued)**

**DEFAULT PROVISIONS (Continued)**

In the event of default of the payment of principle or interest with respect to the Bonds when all or some becomes due, any owner of the Bonds shall have a claim under the applicable Bond Insurance Policy (the "Policy") for such payments. However, in the event of any acceleration of the date of such principal by reason of mandatory or optional redemption or acceleration resulting from default or otherwise, other than any advancement of maturity pursuant to a mandatory sinking fund payment, the payments are to be made in such amounts and at such times as such payments would have been due had there not been any such acceleration. The Policy does not insure payment of redemption premium, if any. The payment of principal and interest in connection with mandatory or optional prepayment of the Bonds by the City which is recovered by the City from the bond owner as a voidable preference under applicable bankruptcy law is covered by the insurance policy, however, such payments will be made by the bond insurer at such time and in such amounts as would have been due absence such prepayment by the City unless the bond insurer chooses to pay such amounts at an earlier date. Under most circumstances, default of payment of principal and interest does not obligate acceleration of the obligations of the bond insurer without appropriate consent. The bond insurer may direct and must consent to any remedies that that Paying Agent exercises and the bond insurer's consent may be required in connection with amendments to the Ordinance. In the event the bond insurer is unable to make payment of principal and interest as such payments become due under the Policy, the Bonds are payable solely from the monies received by the Paying Agent pursuant to the Ordinance. In the event the bond insurer becomes obligated to make payments with respect to the Bonds, no assurance is given that such event will not adversely affect the market price of the Bonds or the marketability (liquidity) for the Bonds.

The bonds carry a commitment from Build America Mutual Assurance Corporation (BAM) under which a Municipal Bond Insurance Policy will be issued at the time of delivery of the bonds, which policy assure the payment of the principal and interest to the registered owners of the Bonds.

A summary of the City of Beaver Fall's General Obligation Bonds outstanding at December 31, 2020, is as follows:

| Year End Dec 31 | PRINCIPAL | INTEREST | Total |
|---|---|---|---|
| 2021 | $ 10,000 | 75,646 | $ 85,646 |
| 2022 | 10,000 | 75,446 | 85,446 |
| 2023 | 10,000 | 75,226 | 85,226 |
| 2024 | 10,000 | 74,926 | 84,926 |
| 2025 | 10,000 | 74,626 | 84,626 |
| 2026-2030 | 50,000 | 368,630 | 418,630 |
| 2031-2034 | 2,230,000 | 187,222 | 2,417,222 |
| | **$ 2,330,000** | **$ 931,722** | **$ 3,261,722** |

**NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)**

**NOTES PAYABLE – GENERAL OBLIGATION NOTES SERIES A OF 2017**

In November of 2017, the City of Beaver Falls issued General Obligation Notes, Series A of 2017 in the amount of $5,880,000. Proceeds from the sale of the notes were used to currently refund the City's outstanding General Obligation Bonds, Series of 2012, and pay the costs of issuing and insuring the bonds. The notes were issued in denominations of $5,000 with interest payable on May 15 and November 15 each year through maturity. Interest rates range between 1.55% and 3.0%, with the notes scheduled to mature on November 15, 2030. The notes provide for early redemption options for the city as more fully described in the detailed Official Statement. Default provisions as described herein Note 8 (Bonds Payable) apply to the City's General Obligation Notes Series A of 2017.

A summary of the City of Beaver Fall's Series A of 2017 General Obligation Notes outstanding at December 31, 2020, is as follows:

| Year End Dec 31 | PRINCIPAL | INTEREST | Total |
|---|---|---|---|
| 2021 | $ 400,000 | 119,170 | $ 519,170 |
| 2022 | 410,000 | 111,170 | 521,170 |
| 2023 | 420,000 | 102,150 | 522,150 |
| 2024 | 430,000 | 92,175 | 522,175 |
| 2025 | 440,000 | 111,425 | 551,425 |
| 2026-2030 | 2,385,000 | 217,575 | 2,602,575 |
| | **$ 4,485,000** | **$ 753,665** | **$ 5,238,665** |

**NOTES PAYABLE – FIRST NATIONAL BANK (DIRECT BORROWING)**

In December of 2019, the City of Beaver Falls borrowed $600,000 from First National Bank for the following purposes 1) refinancing existing indebtedness and providing additional funds for economic revitalization, and 2) financing the closing costs and attorneys' fees in connection with the loan. The terms of the loan call for 120 monthly principal and interest payments of $6,237.52 at an interest rate of 4.5%. The note is scheduled to mature in December of 2029. The outstanding balance on the loan as of December 31, 2020, is $547,174.

**DEFAULT PROVISIONS**

The City represents, warrants, and covenants to the Bank that the full faith, credit, and taxing power of the City has been irrevocably pledged to the Bank to secure the payment of this Note. In the event of default, under the Loan Agreement occurs and is continuing upon demand the Bank or any future Registered Owner of this Note, the outstanding principal sum, together with any unpaid accrued interest, will be due and payable in full.

## NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)

### NOTES PAYABLE – FIRST NATIONAL BANK (DIRECT BORROWING) (Continued)

A summary of the City of Beaver Fall's 2019 General Obligation Note outstanding with First National Bank at December 31, 2020, is as follows:

| Year End Dec 31 | Principal | Interest | Total |
|---|---|---|---|
| 2021 | $ 51,276 | $ 23,574 | $ 74,850 |
| 2022 | 53,632 | 21,218 | 74,850 |
| 2023 | 56,096 | 18,754 | 74,850 |
| 2024 | 58,673 | 16,177 | 74,850 |
| 2025 | 61,368 | 13,482 | 74,850 |
| 2026-2029 | 266,129 | 24,420 | 290,549 |
| | **$ 547,174** | **$ 117,625** | **$ 664,799** |

### TAX ANTICIPATION NOTE – SERIES 2020

In January of 2020, the City of Beaver Falls issued a Tax Anticipation Note – Series of 2020 in the amount of $600,000 to WesBanco Bank at an interest rate of 2.65%. The City repaid the note as of December 31, 2020.

## NOTE 9 – CHANGES IN LONG-TERM DEBT

The following represents the changes in the City's long-term debt during 2020:

| | Balance 1/1/2020 | Additions | Reductions | Balance 12/31/2020 | Due Within One Year |
|---|---|---|---|---|---|
| General Obligation Bonds | $ 2,340,000 | $ - | $ 10,000 | $ 2,330,000 | $ 10,000 |
| General Obligation Notes | 4,880,000 | - | 395,000 | 4,485,000 | 400,000 |
| Direct Borowings: | | | | | |
| Note Obligations | 600,000 | - | 52,826 | 547,174 | 51,276 |
| | **$ 7,820,000** | **$ -** | **$ 457,826** | **$ 7,362,174** | **$ 461,276** |

## NOTE 10 - CITY PENSION PLANS

The following is a summary of the City's police, fire, and non-uniform pension plans

**POLICE PENSION PLAN** - The City of Beaver Falls' Police Pension Plan is a single-employer defined benefit pension plan established May 12, 1941, as amended April 26, 2016, to provide retirement and death benefits to qualified police department employees under the provisions governing pension plans in the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of this plan are determined under the Entry Age Normal Actuarial Cost Method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Hefren Tillotson, Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls police department who have attained the age of 21.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 25 years of aggregate service as a City employee and have attained the age of 50.

**BENEFITS** – Benefit is equal to 50% of the greater of monthly pay at retirement or average monthly pay, plus a service increment, if any.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING –** Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 4% of monthly earnings plus $1.00 to provide for service increments. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

**FIREMEN'S PENSION PLAN** - The City of Beaver Falls' Fireman's pension Plan is a single-employer defined benefit pension plan established February 23, 1948, as amended October 25, 2015, to provide retirement and death benefits to qualified fire department employees under the provisions governing firemen's pension plans in the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of the plan are determined under the Entry Age Normal Actuarial Cost method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Merrill Lynch and Hefren Tillotson Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls fire department who have attained the age of 21.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 25 years of aggregate service as a City employee and have attained the age of 50.

**NOTE 10 - CITY PENSION PLANS (Continued)**

**FIREMEN'S PENSION PLAN (Continued)**

**BENEFITS** – Benefit is equal to 50% of average pay at retirement, plus a service increment, if any. For employees hired on or after 8/5/93, lump sum payments for sick pay and vacation pay are not included.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING** – Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 4% of monthly earnings plus $1.00 to provide for service increments. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

**GENERAL EMPLOYEES PENSION PLAN** - The City of Beaver Falls' Employee's pension Plan is a single-employer defined benefit pension plan established January 1, 1960, as amended October 22, 1996, to provide retirement and death benefits to qualified non-uniformed service employees under the provisions of Act 205 of the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of the plan are determined under the Entry Age Normal Actuarial Cost method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Hefren-Tillotson, Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls other than police or firemen.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 20 years of aggregate service as a City employee and have attained the age of 60.

**BENEFITS** – Benefit is equal to 50% of monthly average compensation.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING** – Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 5% of monthly salary. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

**NOTE 10 - CITY PENSION PLANS (Continued)**

Plan membership as of January 1, 2019, was comprised of:

| | Police | Firemen | Employees |
|---|---|---|---|
| Active employees (non-vested) | 18 | 7 | 24 |
| Retirees and beneficiaries currently receiving benefits | 28 | 18 | 16 |
| Terminated employees entitled to benefits but not yet receiving them | - | - | - |
| Total | **46** | **25** | **40** |

**NOTE 11 - COMMITMENTS AND CONTINGENT LIABILITIES**

**LEGAL MATTERS**

The City of Beaver Falls, in the normal course of operations, is party to various legal matters normally associated with municipalities such as real estate tax assessment appeals, personnel wage and benefits, and other miscellaneous legal matters. The City is unaware of any pending claims or litigations that would be material to the financial position of the City of Beaver Falls.

**FEDERAL AND STATE FUNDING**

The City of Beaver Falls' state and federally funded programs, including its pension funds, are subject to program compliance audits by various governmental agencies. The audit scopes of these program compliance audits are different than the scope of financial audits performed by an outside, independent certified public accounting firm. The City is potentially liable for any expenditure disallowed by the results of these program compliance audits. Management is not aware of any material items of noncompliance which would result in the disallowance of program expenditures.

**COVID**

Early in 2020, a new strain of the coronavirus (COVID-19) began its global pandemic spread, including the United States, negatively affecting many aspects of society and the economy. The impact of the virus is on-going and varies from region to region and from day to day, and any significant additional spreading of the virus could adversely affect the City of Beaver Falls' operations and finances. The outbreak of the COVID-19 virus is likely to have a negative impact in 2021 on the global and local economy and, might impact the City's financial results in 2021 and beyond. Given the dynamic nature of this pandemic, however, the extent to which the COVID-19 virus impacts the City's results will depend on future developments, which remain highly uncertain and cannot be predicted at this time.

## NOTE 12 - RISK MANAGEMENT

The City of Beaver Falls is exposed to various risks of loss related to tort; theft of, damage to, and destruction of assets, errors and omissions; injuries to employees; and natural disasters. These risks are covered by commercial insurance purchased from independent third parties. Settled claims for these risks have not exceeded commercial insurance coverage for the past three years.

## NOTE 13 – SUBSEQUENT EVENTS

In January of 2021, the City of Beaver Falls issued a $500,000 Tax and Revenue Anticipation Note to Wesbanco Bank at an interest rate of 2.25%. The note is expected to be repaid by December 31, 2021.

Management has determined that there are no other subsequent events after December 31, 2020, through the September 30, 2021 date of the “Independent Auditor’s Report’ date, which is the date the financial statements were available to be issued, that requires disclosure in the financial statements.

# *SUPPLEMENTARY INFORMATION*

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL REVENUES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **TAXES:** | | | |
| Real estate - current | $ 1,700,000 | $ 1,644,726 | $ 1,682,248 |
| Real estate - prior | 50,000 | 32,631 | 36,891 |
| Real estate - delinquent | 235,000 | 261,809 | 252,774 |
| Deed transfer | 48,500 | 53,813 | 54,285 |
| Per capita and residence | 20,200 | 19,157 | 19,872 |
| Per capita- prior | 1,350 | 1,240 | 1,353 |
| Per capita - delinquent | 13,000 | 7,576 | 12,286 |
| Earned income - city | 630,000 | 595,502 | 634,758 |
| Earned income - Act 205 | 1,020,000 | 937,973 | 1,043,439 |
| Earned income - prior | - | 16,069 | 24,391 |
| Mercantile tax | 93,800 | 90,100 | 78,914 |
| EMS | 126,000 | 120,397 | 126,656 |
| Business privilege tax | 159,500 | 178,760 | 124,324 |
| **TOTAL TAXES** | **$ 4,097,350** | **$ 3,959,753** | **$ 4,092,191** |
| **LICENSES AND PERMITS:** | | | |
| Amusement licenses | $ 14,000 | $ 11,400 | $ 17,100 |
| Cable franchise fee | 118,000 | 120,384 | 118,580 |
| Building permits | 20,000 | 79,339 | 22,627 |
| Demolition permits | 600 | 510 | 650 |
| Plumbing licenses | 2,360 | 2,260 | 1,225 |
| Zoning Permits | 1,000 | 2,500 | 2,125 |
| Zoning variances | 4,000 | 6,235 | 7,815 |
| Vacant Property Fees | 2,500 | 765 | 2,305 |
| Rental registration | 125,000 | 98,568 | 126,670 |
| Code Enforcement misc. receipts | 30,000 | 33,592 | 36,742 |
| Street opening permits | 20,000 | 31,150 | 46,300 |
| **TOTAL LICENSES AND PERMITS** | **$ 337,460** | **$ 386,703** | **$ 382,139** |
| **FINES AND FORFEITURES:** | | | |
| Magistrate and Clerk of Courts | $ 63,500 | $ 85,101 | $ 71,670 |
| Code Restitution | 500 | 1,048 | - |
| Rental Restitution | 1,800 | 854 | 2,725 |
| State police fines | 4,500 | 3,958 | 4,285 |
| Warrant server fees | 450 | 440 | 358 |
| Incarceration fees | 7,500 | 11,855 | 9,675 |
| Police reports | 2,500 | 3,192 | 2,290 |
| Parking Authority collections | 17,000 | 18,890 | 17,251 |
| Miscellaneous | 260 | 50 | 860 |
| **TOTAL FINES AND FORFEITURES** | **$ 98,010** | **$ 125,388** | **$ 109,113** |
| **INTEREST AND RENTS:** | | | |
| Investment interest | $ 9,000 | $ 10,720 | $ 19,640 |
| Other Interest | - | - | 1,878 |
| DEP rent | 21,660 | 21,660 | 21,660 |
| Other Rents | 3,000 | 3,000 | 3,000 |
| **TOTAL INTEREST AND RENTS** | **$ 33,660** | **$ 35,380** | **$ 46,178** |
| **INTERGOVERNMENTAL:** | | | |
| PA recycling grants | $ 1,480 | $ 1,346 | $ 2,970 |
| PA State pension aid | 370,000 | 369,287 | 373,796 |
| PA State A205 Fire Relief | 25,300 | 24,622 | 25,153 |
| PA Cola refund | 5,400 | 5,550 | 5,550 |
| PENNDOT agreement - snow removal | 31,000 | 45,912 | 31,890 |
| DOJ Police Grants | - | - | 6,092 |
| DCED Grant | - | 63,165 | - |
| Other PA Grants | - | 13,016 | 32,769 |
| Covid | - | 223,656 | - |
| PURTA Tax Refund | 3,300 | 2,699 | 2,453 |
| Alcoholic beverage tax | 3,300 | 3,150 | 3,350 |
| Act13 Gas Well Fees | 16,000 | 14,843 | 16,404 |
| PILOT - County Building | 30,795 | 30,795 | 30,795 |
| PILOT - Reimbursement to school county | (20,671) | (20,671) | (20,671) |
| PILOT - Morado, Brodhead, Harmony | 22,425 | 23,645 | 20,998 |
| PILOT - Reimbursement to school district | (4,890) | (4,348) | (3,752) |
| PILOT - Current Real Estate | 3,715 | 3,715 | 3,715 |
| **TOTAL INTERGOVERNMENTAL** | **$ 487,154** | **$ 800,382** | **$ 531,512** |

**CITY OF BEAVER FALLS** **SCHEDULE 1**

**DETAILED SCHEDULE OF BUDGETED AND ACTUAL REVENUES**

**GENERAL FUND**

**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **CHARGES FOR SERVICES:** | | | |
| Miscellaneous revenue | $ 21,300 | $ 22,942 | $ 24,661 |
| School Reimbursement | 68,000 | 67,111 | 65,609 |
| Housing Authority reimbursements | 45,000 | 47,581 | 45,595 |
| Eastvale | 12,299 | 12,299 | 11,940 |
| West Mayfield Patrol | 63,339 | 63,339 | 61,494 |
| Police Reimbursements | 98,469 | 47,134 | 127,925 |
| Fire Dept receipts | - | 80 | 60 |
| Fire Service Ins. Reimbursement | 2,400 | 5,825 | 3,032 |
| Fire Hydrant Fees | 68,422 | 73,680 | 48,627 |
| Eastvale Fire Protection | 6,334 | 6,334 | 6,149 |
| Parking Authority | 27,100 | 21,700 | 24,676 |
| Street Dept Receipts | 1,300 | - | - |
| Water Pollution Control - Joint Sewer Users | 800,000 | 787,144 | 752,900 |
| Water Pollution Control - Line Rental | 50,000 | 40,000 | 40,000 |
| Solid Waste Admin Fee | 100,000 | 100,000 | 40,000 |
| Solid Waste | 726,640 | 682,478 | 621,326 |
| City SU Admin Exp Reimb | 140,000 | 140,000 | 140,000 |
| City SU Sewer Line Reimb | 200,000 | 200,000 | 200,000 |
| City SU Wage Reimbursement | 200,000 | 200,000 | 200,000 |
| **TOTAL CHARGES FOR SERVICES** | **$ 2,630,603** | **$ 2,517,647** | **$ 2,413,994** |
| **MISCELLANEOUS:** | | | |
| Insurance claims | $ 1,000 | $ 4,116 | $ 2,220 |
| Civil Service Testing | 500 | 1,200 | - |
| Worker's Comp Refunds | - | 3,297 | - |
| Workman's Compensation dividend | 110,000 | 115,736 | 110,037 |
| Donations | 2,800 | 7,785 | 2,550 |
| County lease agreement | 60,800 | 60,800 | 60,800 |
| **TOTAL MISCELLANEOUS** | **$ 175,100** | **$ 192,934** | **$ 175,606** |
| **OTHER FINANCING SOURCES:** | | | |
| Sale of property - fixed assets | $ - | $ - | $ 43,163 |
| Liquid Fuels | 264,564 | 234,393 | 272,600 |
| Joint Sewer Users Fund | - | - | 373,619 |
| City Sewer Users | - | - | 340,362 |
| Bond Fund | 75,846 | 85,846 | 96,246 |
| Tax Anticipation Loan | 600,000 | 600,000 | 600,000 |
| Refund prior year expenses | 2,618 | 3,403 | 2,219 |
| Proceeds from Loans | - | - | 600,000 |
| **TOTAL OTHER FINANCING SOURCES** | **$ 943,028** | **$ 923,642** | **$ 2,328,209** |
| **TOTAL REVENUES AND OTHER FINANCING SOURCES** | **$ 8,802,365** | **$ 8,941,829** | **$ 10,078,942** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **GENERAL GOVERNMENT:** | | | |
| **LEGISLATIVE:** | | | |
| Salary - director | $ 15,000 | $ 15,000 | $ 15,000 |
| Salary - controller | 2,500 | 2,500 | 2,500 |
| Council & Mayor Expenses | - | 250 | 250 |
| COG Payment | 1,200 | 984 | 984 |
| **TOTAL LEGISLATIVE** | **$ 18,700** | **$ 18,734** | **$ 18,734** |
| **EXECUTIVE:** | | | |
| Admin Coord/City Clerk Salary | $ 62,094 | $ 64,440 | $ 60,748 |
| City Manager's Salary | 49,798 | 55,522 | 49,806 |
| Admin Secretary Salary | 3,400 | 265 | 2,766 |
| Admin Comm Development Coord | 23,000 | 24,476 | 19,824 |
| Admin Contracted Sick Days | 1,400 | 700 | 700 |
| Admin Longevity | 2,150 | 2,150 | 2,100 |
| Administration supplies | 3,800 | 4,604 | 6,478 |
| Copy machine supplies | 11,900 | 13,102 | 10,699 |
| Audit | 7,350 | 7,683 | 7,600 |
| Telephone | 7,700 | 9,115 | 7,242 |
| City clerk postage | 9,200 | 11,818 | 9,833 |
| Printing and legal ads | 5,000 | 7,628 | 6,634 |
| Taxes on City Owned Property | 9,075 | 7,235 | 9,075 |
| Miscellaneous administrative expense | 1,200 | 159 | 204 |
| Accountant - Part-time | 17,500 | 22,976 | 18,535 |
| Planning commission | 50 | - | - |
| Civil service commission expense | 1,500 | 1,507 | - |
| Public Relations | 1,250 | 161 | 1,066 |
| Comm Dev Public Relations | - | 40,184 | 19,442 |
| City Manager's Expenses | 150 | - | 58 |
| **TOTAL EXECUTIVE** | **$ 217,517** | **$ 273,725** | **$ 232,810** |
| **FINANCIAL ADMINISTRATION:** | | | |
| Salary - treasurer | $ 8,000 | $ 43,577 | $ 8,000 |
| Salary - treasurer commission | 4,000 | - | 3,454 |
| Salary-treasurer- BPT Commission | 3,000 | - | 2,641 |
| Salary - treasurer sick wages | - | 1,500 | 4,562 |
| Salary - treasurer - vacation wages | - | 4,370 | 3,790 |
| Salary - bookkeeper | - | 20,149 | - |
| Salary - treasurer's clerk | 32,703 | 1,746 | 28,669 |
| Salary - treasurer office assistant | - | - | 3,736 |
| Treasury - FMLA Wages | - | 780 | - |
| Treasurer's ofc contracted sick | 700 | 700 | 1,400 |
| Treasurer's ofc longevity | 1,000 | 1,000 | 950 |
| Treasurer's ofc supplies | 1,200 | 1,929 | 1,194 |
| Treasurer's ofc computer exp | - | 675 | - |
| Treasurer's ofc copy machine | 310 | - | 310 |
| **TOTAL FINANCIAL ADMINISTRATION** | **$ 50,913** | **$ 76,426** | **$ 58,706** |
| **TAX COLLECTION:** | | | |
| Salary - tax collector | $ 30,000 | $ 1,154 | $ 30,000 |
| Real estate tax cards | 3,700 | 3,691 | 3,697 |
| Earned income tax commission | 12,500 | 10,309 | 11,257 |
| EMS income tax commission | 2,550 | 2,799 | 2,637 |
| Earned income tax commission act 205 | 16,400 | 15,480 | 16,226 |
| Tax Commission - Act 511 Taxes | 1,300 | 54 | 518 |
| Bonds - Treasurers office | 1,861 | 1,091 | 1,861 |
| **TOTAL TAX COLLECTION** | **$ 68,311** | **$ 34,578** | **$ 66,196** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **GENERAL GOVERNMENT (Continued):** | | | |
| **LEGAL:** | | | |
| Salary - solicitor | $ 18,000 | $ 18,000 | $ 18,000 |
| Legal fees | 12,000 | 11,300 | 16,895 |
| Appraisal | - | 830 | 805 |
| Engineering Services | 2,500 | 1,109 | 1,274 |
| **TOTAL LEGAL** | **$ 32,500** | **$ 31,239** | **$ 36,974** |
| **DATA PROCESSING:** | | | |
| Data processing - computer maintenance | $ 10,000 | $ 9,624 | $ 9,471 |
| Data processing - computer upgrade | 5,000 | 5,570 | 6,803 |
| **TOTAL DATA PROCESSING** | **$ 15,000** | **$ 15,194** | **$ 16,274** |
| **MUNICIPAL BUILDING:** | | | |
| City Building - electric | $ 22,000 | $ 16,570 | $ 24,024 |
| City Building - gas | 6,000 | 5,820 | 5,626 |
| City Building - water | 2,000 | 2,711 | 1,551 |
| **TOTAL MUNICIPAL BUILDING** | **$ 30,000** | **$ 25,101** | **$ 31,201** |
| **TOTAL GENERAL GOVERNMENT** | **$ 432,941** | **$ 474,997** | **$ 460,895** |
| **PUBLIC SAFETY:** | | | |
| **POLICE:** | | | |
| Salary - chief | $ 80,698 | $ 71,950 | $ 67,594 |
| Police Sick Wages | - | 45,088 | 50,388 |
| Police Vacation Wages | - | 96,837 | 87,008 |
| Salary - captain | 274,255 | 194,993 | 225,651 |
| Salary - sargeant | 191,116 | 121,103 | 154,774 |
| Salary - non-ranked policemen | 515,159 | 456,880 | 432,902 |
| Police Vehicle Repair Wages | - | 145 | 71 |
| Police Acting OIC wages | 6,386 | 7,121 | 3,555 |
| Police Health Insurance Comp | 9,000 | 9,481 | 14,251 |
| Salary - jailers | 36,375 | 31,228 | 29,190 |
| Jailers | 3,500 | 3,520 | 3,125 |
| Police Jailers Sick Pay | - | 1,108 | 1,562 |
| Meter Patrols | 21,216 | 19,673 | 19,075 |
| Parking Maintenance | 5,000 | 7,170 | 6,952 |
| Police Jailer Vacation Hourly | - | 4,979 | 4,404 |
| Pkg & Jailer Longevity | 750 | 1,950 | 700 |
| Overtime - Major Cases | 9,000 | 21,460 | 6,978 |
| Overtime - Jailer (police) | 13,250 | 17,485 | 17,016 |
| Overtime - Special Events | 13,000 | 5,964 | 1,568 |
| Contracted sick days | 1,000 | 1,500 | - |
| Longevity - police | 12,950 | 10,650 | 12,200 |
| Overtime | 130,000 | 163,753 | 150,336 |
| Shift differential | 7,931 | 7,615 | 7,831 |
| Holiday pay | 53,520 | 57,344 | 50,854 |
| Court time | 95,800 | 136,841 | 149,056 |
| Education pay | 1,500 | 1,800 | 1,800 |
| Housing authority policing | 35,000 | 38,990 | 35,618 |
| Police schools | 15,000 | 13,246 | 12,511 |
| Uniforms | 9,650 | 10,714 | 14,200 |
| Police Tuition Reimbursement | 700 | 350 | 350 |
| Police Training Expenses | 700 | 950 | 1,605 |
| Police Heart & Lung Benefit | - | 5,778 | - |
| Employment costs - policemen | - | 3,299 | 2,260 |
| Office supplies | 2,900 | 3,961 | 3,216 |
| Weight equipment | 300 | - | - |
| Ammunition | 8,000 | 11,273 | 5,690 |
| Criminal investigation | 2,300 | 2,381 | 205 |
| K-9 supplies | 2,100 | 1,032 | 1,320 |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **PUBLIC SAFETY (Continued):** | | | |
| **POLICE (Continued):** | | | |
| K-9 veterinarian expenses | 250 | - | - |
| Breathalyzer supplies | 230 | 200 | 140 |
| K-9 Equipment & Training | 250 | - | - |
| Police Miscellaneous Expense | - | 2,056 | 2,629 |
| Fuel | 22,000 | 10,146 | 19,148 |
| Vehicle maintenance | 8,000 | 11,579 | 10,016 |
| Camera Security System | - | - | 741 |
| Computer maintenance expense | 12,000 | 13,792 | 15,245 |
| Phone - police station | 2,400 | 2,104 | 2,442 |
| Printing | 650 | 707 | 408 |
| Ticket printing | - | 1,941 | - |
| Range - electric | 1,400 | 1,140 | 1,413 |
| Publications | 300 | - | - |
| Meter Equipment & Repair | 500 | - | - |
| Uniforms | 150 | - | - |
| Miscellaneous Expense | - | 148 | - |
| **TOTAL POLICE** | **$ 1,606,186** | **$ 1,633,425** | **$ 1,627,996** |
| | | | |
| **FIRE DEPARTMENT:** | | | |
| Salary - chief | $ 70,699 | $ 70,109 | $ 60,177 |
| Sick Hourly Wages | - | 52,210 | 18,851 |
| Vacation Hourly Wages | - | 50,805 | 41,351 |
| Salary - captain | 176,856 | 108,820 | 131,833 |
| OIC pay | 1,500 | 5,146 | 2,042 |
| Salary - firefighters | 203,903 | 194,998 | 168,884 |
| Part-Time Firefighters | 20,000 | 16,296 | 17,636 |
| Health Insurance Comp | 29,000 | 19,801 | 19,544 |
| Off-Duty Training Wages | 12,000 | 9,371 | 5,028 |
| Contracted sick days | 2,500 | 2,500 | 2,000 |
| Longevity | 4,000 | 4,300 | 3,650 |
| Overtime - double rate | 44,000 | 73,848 | 53,390 |
| Holiday pay | 28,702 | 35,903 | 28,519 |
| Off-duty fire calls | 43,860 | 47,114 | 45,588 |
| Fire school | 3,500 | 2,902 | 3,855 |
| Education pay | 450 | 450 | 450 |
| Uniforms | 5,700 | 4,733 | 4,594 |
| Physicals | 3,400 | 2,544 | 2,862 |
| Contracted training | 1,800 | 1,546 | 750 |
| Heart & Lung Benefits | - | 1,540 | 888 |
| Office supplies | 1,600 | 1,121 | 1,250 |
| Cleaning supplies | 750 | 1,315 | 944 |
| Fuel and lubrication | 10,500 | 6,598 | 9,121 |
| Truck repairs | 18,500 | 17,295 | 21,473 |
| Tire Replacement | 2,200 | 45 | 1,629 |
| Miscellaneous equipment | 2,400 | 1,231 | 2,357 |
| Protective clothing | 2,800 | 2,161 | 2,800 |
| Hose replacement | 2,200 | 1,226 | 2,142 |
| Mask repair parts | 3,400 | 3,854 | 5,105 |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **PUBLIC SAFETY:** | | | |
| **FIRE DEPARTMENT (Continued):** | | | |
| Replacement Fire Gear | 8,000 | 5,625 | (1,674) |
| Fire Arson Investigation | 1,400 | - | - |
| Compressor maintenance | - | 2,209 | 1,989 |
| SCUBA Equipment | 1,000 | 970 | 118 |
| Volunteer fire time | 12,300 | 18,720 | 12,976 |
| Telephone | 2,600 | 2,446 | 3,156 |
| Radio repairs | 700 | 1,616 | 436 |
| BFMA hydrant rental | 21,700 | 21,429 | 27,450 |
| #3 Station - electric | 1,150 | 1,113 | 1,381 |
| #3 Station - gas/Pleasantview | 1,500 | 3,503 | 1,401 |
| #3 Station - Water | 300 | 341 | 257 |
| Fire Act205 Relief to VFD | 25,300 | 24,622 | 25,153 |
| Fire Grant Expenses | - | 37,427 | 13,444 |
| Fire Major Equip Repair/Replace | 2,800 | - | 3,641 |
| **TOTAL FIRE DEPARTMENT** | **$ 774,970** | **$ 859,803** | **$ 748,438** |
| | | | |
| **EMERGENCY MANAGEMENT:** | | | |
| Emergency Mgmt Fee | $ 1,000 | $ - | $ - |
| **TOTAL EMERGENCY MANAGEMENT** | **$ 1,000** | **$ -** | **$ -** |
| | | | |
| **TOTAL PUBLIC SAFETY** | **$ 2,382,156** | **$ 2,493,228** | **$ 2,376,434** |
| | | | |
| **HEALTH AND WELFARE:** | | | |
| Health and enforcement salary | $ 22,913 | $ 3,506 | $ 22,529 |
| Sick Pay | - | 1,781 | 2,219 |
| Vacation Hourly | - | 5,570 | 5,102 |
| Code Clerical Wages | 23,394 | 10,081 | 16,666 |
| Code FMLA Wages | - | 1,439 | - |
| Code Longevity | 1,250 | 1,250 | 1,150 |
| Printing and supplies | 1,200 | 451 | 1,175 |
| BOCA Code books | 500 | - | 379 |
| Code enforcement | 800 | 455 | 810 |
| Training - Code Enforcement | 200 | - | 555 |
| Inspection Certification | 1,000 | 390 | 1,036 |
| Zoning Hearing Expense | 6,000 | 11,674 | 7,498 |
| Code BasicGov Program | 6,500 | 5,586 | 5,586 |
| Gas and repairs | 1,000 | 136 | 1,369 |
| Telephone | 650 | 728 | 647 |
| Code Uniforms | 600 | 190 | 407 |
| **TOTAL HEALTH AND WELFARE** | **$ 66,007** | **$ 43,237** | **$ 67,129** |
| | | | |
| **RENTAL REGISTRATION:** | | | |
| Rental Reg FMLA Wages | $ - | $ 3,713 | $ - |
| Rental Reg Coordinator | 23,394 | 7,628 | 22,209 |
| Rental Reg Clerk | 27,638 | 27,002 | 24,110 |
| Rental Admin Vacation | - | 2,476 | 1,667 |
| Rental Admin Sick Pay | - | 584 | 1,303 |
| Rental Printing & Supplies | 200 | 127 | 489 |
| Rental ICC Publication | 600 | - | - |
| Misc Expense | 600 | 445 | 781 |
| Rental BasicGov Software | 5,800 | 5,586 | 5,586 |
| Rental Vehicle Gas & Repairs | 1,000 | - | - |
| **TOTAL RENTAL REGISTRATION** | **$ 59,232** | **$ 47,561** | **$ 56,145** |
| | | | |
| **PUBLIC WORKS:** | | | |
| **SANITATION:** | | | |
| Landfill fees | $ 79,000 | $ 113,355 | $ 77,463 |
| Outside contracting fees | 487,500 | 512,633 | 351,084 |
| Recycling Fees | 118,000 | 13,717 | 117,997 |
| Replacement Cart Cost | - | 1,360 | 480 |
| **TOTAL SANITATION** | **$ 684,500** | **$ 641,065** | **$ 547,024** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **PUBLIC WORKS (Continued):** | | | |
| **STREET DEPARTMENT:** | | | |
| Salary - superintendent | $ 76,927 | $ 75,124 | $ 70,336 |
| Sick Wages | - | 15,906 | 3,189 |
| Vacation Wages | - | 39,576 | 35,634 |
| Maintenance/ Utility Wages | 45,163 | 43,361 | 41,371 |
| Salary - skilled laborer and vactor operator | 90,327 | 82,705 | 76,597 |
| Salary - mechanics/operators | 50,098 | 44,866 | 43,783 |
| Salary - sweeper operator | 44,514 | 41,892 | 21,451 |
| Salary - skilled laborer helper | 43,843 | 33,537 | 39,984 |
| Salary - vactor helper | - | 36,850 | 4,628 |
| Salary - labor pool | 85,609 | 76,402 | 104,203 |
| Street FMLA Wages | - | 1,686 | - |
| St Health Insurance Comp | 30,000 | 29,702 | 29,316 |
| Contracted sick days | 6,300 | 5,600 | 6,300 |
| Longevity | 7,850 | 7,900 | 7,550 |
| Overtime | 36,000 | 39,056 | 54,027 |
| Shift differential | 1,400 | 1,857 | 1,343 |
| Higher wages | 1,000 | 7,785 | 20,471 |
| Sewer OT | 1,500 | 2,338 | 1,314 |
| Uniforms | 3,000 | 5,087 | 4,385 |
| Drug and alcohol testing | 700 | 854 | 512 |
| Office supplies | 760 | 1,080 | 674 |
| Property maintenance | 22,500 | 27,333 | 23,366 |
| Weed Cutting | 3,000 | 2,611 | 818 |
| City Building Repairs | 28,000 | 33,761 | 29,082 |
| Telephone | 8,100 | 7,073 | 7,808 |
| Utilities - electric | 5,000 | 4,459 | 5,221 |
| Utilities - gas | 12,000 | 8,550 | 12,494 |
| Utilities - water | 500 | 531 | 544 |
| Street lights | 218,000 | 213,606 | 212,473 |
| Traffic signals electricity | - | - | - |
| 7th Avenue lights | 2,800 | 2,985 | 2,214 |
| Traffic signal repairs | 4,000 | 3,621 | 517 |
| Salary - snow control | 9,000 | 9,829 | 7,879 |
| Snow control expenses - supplies | 111,000 | 88,731 | 94,638 |
| Snow Supply Reimbursements | (4,500) | (3,240) | (4,316) |
| Street signs | 4,800 | 4,229 | 4,596 |
| Storm sewer maintenance | 1,500 | 1,512 | 1,623 |
| Street Maintenance Fuel | 24,000 | 21,433 | 30,133 |
| Street vehicles maintenance | 23,200 | 16,679 | 27,263 |
| Street sweeper maintenance | 10,000 | 8,831 | 14,471 |
| Tools and new equipment | 3,000 | 1,995 | 638 |
| Safety equipment | 500 | 887 | 490 |
| Road patching material | 10,000 | 10,998 | 10,564 |
| Road painting | 2,000 | 1,779 | 1,909 |
| **TOTAL STREET DEPARTMENT** | **$ 1,023,391** | **$ 1,061,357** | **$ 1,051,490** |
| **WATER SYSTEM:** | | | |
| Sick Wages | $ - | $ 10,647 | $ 3,960 |
| Vacation Wages | - | 37,813 | 32,405 |
| Manager Salary | 79,198 | 78,848 | 66,799 |
| Operator 1 | 50,087 | 48,712 | 45,498 |
| Mechanic 1 | 50,087 | 46,593 | 41,917 |
| Mechanic 2 | 45,157 | 23,739 | 40,117 |
| Mechanic Laborer | 44,512 | 41,730 | 40,259 |
| Mechanic/OP Trainee | 90,314 | 78,162 | 84,031 |
| Higher wages | 3,600 | 3,204 | 3,624 |
| Secretary - WPCP | 20,938 | 19,013 | 15,535 |
| Contracted sick days | 3,500 | 3,500 | 2,800 |
| Longevity | 6,200 | 6,350 | 6,000 |
| Overtime | 19,000 | 18,295 | 10,765 |
| Shift differential | 650 | 717 | 726 |
| Holidays | 9,400 | 10,127 | 9,471 |
| **TOTAL WATER SYSTEM** | **$ 422,643** | **$ 427,450** | **$ 403,905** |
| **TOTAL PUBLIC WORKS** | **$ 2,130,534** | **$ 2,129,872** | **$ 2,002,420** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2019 |
|---|---|---|---|
| **CULTURE AND RECREATION:** | | | |
| **PARKS & PLAYGROUNDS:** | | | |
| Parks Repairs & Maintenance | $ 2,600 | $ 4,407 | $ 2,910 |
| Recreation payment | 6,500 | 2,371 | 3,835 |
| Parks and playgrounds - utilities | 4,600 | 5,817 | 5,436 |
| **TOTAL PARKS & PLAYGROUNDS** | **$ 13,700** | **$ 12,595** | **$ 12,181** |
| **TOTAL CULTURE AND RECREATION** | **$ 13,700** | **$ 12,595** | **$ 12,181** |
| **DEBT SERVICE:** | | | |
| Credit Card Fees | $ - | $ 125 | $ - |
| Bank Fees | 3,500 | 1,747 | 3,599 |
| TAN - Principal | 600,000 | 600,000 | 600,000 |
| TAN - Interest | 18,000 | 15,193 | 17,542 |
| FNB Loan Payment | 74,850 | 81,088 | 181,189 |
| Bond & Debt Svc Admin Fees | 800 | 1,100 | 1,100 |
| **TOTAL DEBT SERVICE** | **$ 697,150** | **$ 699,253** | **$ 803,430** |
| **INSURANCE:** | | | |
| Workers Comp Ins | $ 169,028 | $ 164,983 | $ 179,119 |
| General Ins | 109,768 | 128,876 | 118,880 |
| Employee Hospital/Life Ins | 837,000 | 828,387 | 795,037 |
| Employee Ins Cont. | (62,400) | (62,580) | (55,920) |
| Health Ins Reimbursements | (8,240) | (7,401) | (8,238) |
| **TOTAL INSURANCE** | **$ 1,045,156** | **$ 1,052,265** | **$ 1,028,878** |
| **MISCELLANEOUS EXPENSES:** | | | |
| Non-Uniform Pension Contribution | $ 169,530 | $ 169,530 | $ 145,760 |
| State Pension Transfer | 370,000 | 369,287 | 373,796 |
| Manager's Pension Contribution | 2,806 | 2,914 | 2,806 |
| Uniform Pension Contribution | 487,097 | 737,097 | 448,875 |
| Fireman's Pension Contribution | 189,550 | 389,550 | 199,136 |
| Social Security - other | 83,373 | 85,334 | 83,433 |
| Medicare | 49,036 | 50,510 | 49,204 |
| Unemployment Comp | - | 4,098 | 17,393 |
| **TOTAL MISCELLANEOUS EXPENSES** | **$ 1,351,392** | **$ 1,808,320** | **$ 1,320,404** |
| **OTHER FINANCING USES:** | | | |
| Refund Prior Year Revenues | $ - | $ 2,998 | $ 94 |
| Transfer to Local Drug Investigative Fund | - | - | 6,092 |
| Transfer to Debt Service | 597,917 | 607,560 | 722,820 |
| **TOTAL OTHER FINANCING USES** | **$ 597,917** | **$ 610,558** | **$ 729,006** |
| **TOTAL EXPENDITURES AND OTHER FINANCING USES** | **$ 8,776,185** | **$ 9,371,886** | **$ 8,856,921** |

**CITY OF BEAVER FALLS**
**COMBINING BALANCE SHEET**
**NON-MAJOR GOVERNMENTAL FUNDS**
**DECEMBER 31, 2020**

**SCHEDULE 3**

| | HIGHWAY AID FUND | LOCAL DRUG INVESTIGATIVE FUND | K-9 FUND | CRIMEWATCH FUND | DEBT SERVICE FUND | TOTAL NON-MAJOR GOVERNMENTAL FUNDS |
|---|---|---|---|---|---|---|
| **ASSETS:** | | | | | | |
| Cash and Cash Equivalents | $ 53,468 | $ 49,094 | $ 6,358 | $ 122 | $ - | $ 109,042 |
| **TOTAL ASSETS** | **$ 53,468** | **$ 49,094** | **$ 6,358** | **$ 122** | **$ -** | **$ 109,042** |
| **LIABILITIES AND FUND BALANCES** | | | | | | |
| **LIABILITIES:** | | | | | | |
| Due to Other Funds | $ - | $ - | $ - | $ - | $ - | $ - |
| **TOTAL LIABILITIES** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** |
| **FUND BALANCES:** | | | | | | |
| Restricted | $ 53,468 | $ 49,094 | $ 6,358 | $ 122 | $ - | $ 109,042 |
| **TOTAL FUND BALANCES** | **$ 53,468** | **$ 49,094** | **$ 6,358** | **$ 122** | **$ -** | **$ 109,042** |
| **TOTAL LIABILITIES AND FUND BALANCES** | **$ 53,468** | **$ 49,094** | **$ 6,358** | **$ 122** | **$ -** | **$ 109,042** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES**
**NON-MAJOR GOVERNMENTAL FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | HIGHWAY AID FUND | LOCAL DRUG INVESTIGATIVE FUND | K-9 FUND | CRIMEWATCH FUND | DEBT SERVICE FUND | TOTAL NON-MAJOR GOVERNMENTAL FUNDS |
|---|---|---|---|---|---|---|
| **REVENUES** | | | | | | |
| Interest and Rents | $ 137 | $ 15 | $ - | $ - | $ 1 | $ 153 |
| Fines & Forfeitures | - | 7,102 | - | - | - | 7,102 |
| Intergovernmental | 269,381 | - | - | - | - | 269,381 |
| Donations | - | - | 2,677 | - | - | 2,677 |
| **Total Revenue** | **$ 269,518** | **$ 7,117** | **$ 2,677** | **$ -** | **$ 1** | **$ 279,313** |
| **EXPENDITURES** | | | | | | |
| General Government | $ - | $ - | $ - | $ 47 | $ - | $ 47 |
| Public Safety | - | 7,414 | 275 | - | - | 7,689 |
| Debt Service | - | - | - | - | 607,916 | 607,916 |
| **Total Expenditures** | **$ -** | **$ 7,414** | **$ 275** | **$ 47** | **$ 607,916** | **$ 615,652** |
| **Excess ( Deficiency) of Revenue over Expenditures** | **$ 269,518** | **$ (297)** | **$ 2,402** | **$ (47)** | **$ (607,915)** | **$ (336,339)** |
| **OTHER FINANCING SOURCES (USES)** | | | | | | |
| Operating Transfers In | $ - | $ - | $ - | $ - | $ 607,560 | $ 607,560 |
| Operating Transfers Out | (234,393) | - | - | - | - | (234,393) |
| **Total Other Financing Sources (Uses)** | **$ (234,393)** | **$ -** | **$ -** | **$ -** | **$ 607,560** | **$ 373,167** |
| **NET CHANGE IN FUND BALANCES** | **$ 35,125** | **$ (297)** | **$ 2,402** | **$ (47)** | **$ (355)** | **$ 36,828** |
| FUND BALANCE - JANUARY 1, 2020 | 18,343 | 49,391 | 3,956 | 169 | 355 | 72,214 |
| **FUND BALANCE - DECEMBER 31, 2020** | **$ 53,468** | **$ 49,094** | **$ 6,358** | **$ 122** | **$ -** | **$ 109,042** |

The accompanying notes are an integral part of these financial statements

# EXHIBIT J2

# CITY OF BEAVER FALLS

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FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2021




***Mark C. Turnley***

*Certified Public Accountant*

# CITY OF BEAVER FALLS

BEAVER COUNTY, PENNSYLVANIA

FINANCIAL STATEMENTS

WITH REPORT OF

CERTIFIED PUBLIC ACCOUNTANT

**FOR THE YEAR ENDED DECEMBER 31, 2021**

## CITY OF BEAVER FALLS

## TABLE OF CONTENTS


PAGE

**INDEPENDENT AUDITOR'S REPORT** ..... i-iii

**BASIC FINANCIAL STATEMENTS**

**EXHIBIT A** – STATEMENT OF NET POSITION ..... 1

**EXHIBIT B** – STATEMENT OF ACTIVITIES ..... 2

**EXHIBIT C** – BALANCE SHEET – Governmental Funds ..... 3

**EXHIBIT D** - STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN IN FUND BALANCES- Governmental Funds ..... 4

**EXHIBIT E** - STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN IN FUND BALANCES, BUDGET AND ACTUAL - Governmental Funds ..... 5

**EXHIBIT F**– STATEMENT OF NET POSITION – Proprietary Funds ..... 6

**EXHIBIT G** - STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION – Proprietary Funds ..... 7

**EXHIBIT H** - STATEMENT OF CASH FLOWS – Proprietary Funds ..... 8

**EXHIBIT I**– STATEMENT OF FIDUCIARY NET POSITION – Fiduciary Funds ..... 9

**EXHIBIT J**- STATEMENT OF CHANGES IN FIDUCIARY NET POSITION – Fiduciary Funds .... 10

**NOTES TO THE FINANCIAL STATEMENTS** ..... 11-33

**SUPPLEMENTARY INFORMATION**

**SCHEDULE 1** – DETAIL SCHEDULE OF BUDGET AND ACTUAL REVENUES – General Fund ..... 34-35

**SCHEDULE 2** – DETAIL SCHEDULE OF BUDGET AND ACTUAL EXPENDITURES – General Fund ..... 36-41

**SCHEDULE 3** – COMBINING BALANCE SHEET – Non-Major Governmental Funds ..... 42

**SCHEDULE 4** – COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES – Non-Major Governmental Funds ..... 43

**Mark C. Turnley**

*Certified Public Accountant*

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*New Brighton, Pennsylvania 15066*
*(724) 384-1081*
*FAX (724) 384-8908*

**To the City Council**
**City of Beaver Falls, Pennsylvania**

## Independent Auditor's Report

### Adverse and Unmodified Opinions

I have audited the accompanying financial statements of the governmental activities, business-type activities, each major fund and the aggregate remaining fund information of City of Beaver Falls, Pennsylvania as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise City of Beaver Falls' basic financial statements as listed in the table of contents.

*Summary of Opinions*

| Opinion Unit | Type of Opinion |
|---|---|
| Governmental Activities | Adverse |
| Business-Type Activities | Unmodified |
| Governmental Fund -General Fund | Unmodified |
| Aggregate Remaining Fund Information | Unmodified |

*Adverse Opinion on Governmental Activities*

In my opinion, because of the significance of the matter described in the Basis for Adverse and Unmodified Opinions section of my report, the financial statements referred to above do not present fairly the financial position (Exhibit A) of the governmental activities of City of Beaver Falls as of December 31, 2021 or the changes in financial position (Exhibit B) for the year then ended in accordance with accounting principles generally accepted in the United States of America.

*Unmodified Opinions on Each Major Fund and Aggregate Remaining Fund Information*

In my opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of each major fund and the aggregate remaining fund information of City of Beaver Falls as of December 31, 2021 and the respective changes in financial position, and the budgetary comparison for the General Fund thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### Basis for Adverse and Unmodified Opinions

I conducted my audit in accordance with auditing standards generally accepted in the United States of America. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am required to be independent of City of Beaver Falls, and to meet my other ethical responsibilities, in accordance with the relevant ethical requirements relating to my audit. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my adverse and unmodified audit opinions.



*American Institute of Certified Public Accountants*

*Pennsylvania Institute of Certified Public Accountants*

*Matter Giving Rise to Adverse Opinion on Governmental Activities*

As described in Note 1 to the financial statements, City of Beaver Falls prepares its statement of net position (Exhibit A) and statement of activities (Exhibit B) for governmental activities using the modified accrual basis of accounting which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America. Accounting principles generally accepted in the United States of America require the preparation of these government-wide financial statements using the full accrual basis of accounting, including capitalizing and depreciating fixed assets and recognizing long-term debt obligations, which would increase the assets, liabilities and net position and change the expenses of the governmental activities. The amount by which this departure would affect the assets, liabilities, net position, revenues and expenses of the governmental activities has not been determined.

**Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about City of Beaver Falls' ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

**Auditor's Responsibilities for the Audit of the Financial Statements**

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, I:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of City of Beaver Falls' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in my judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about City of Beaver Falls' ability to continue as a going concern for a reasonable period of time.

I am required to communicate with those charged with governance regarding, among other matters, the planed scope and timing of the audit, significant audit findings, and certain internal control-related matters that I identified during the audit.

**Supplementary Information**

My audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise City of Beaver Falls, Pennsylvania's basic financial statements. The supplementary information (Schedules 1 through 4) is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records use to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In my opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Mark C. Turnley, CPA

October 15, 2022
New Brighton, Pennsylvania

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**DECEMBER 31, 2021**

**EXHIBIT A**

| | Governmental Activities | Business-Type Activities | Total |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and Cash Equivalents | $ 1,847,206 | $ 2,095,477 | $ 3,942,683 |
| Taxes Receivable (net) | 191,926 | - | 191,926 |
| Accounts Receivable - Sanitation/Sewage | - | 208,116 | 208,116 |
| Due From Other Governments | 153,977 | - | 153,977 |
| Other Receivables | 44,819 | 383,278 | 428,097 |
| Internal Balances | 241,216 | (241,216) | - |
| Prepaid Expenses | 93,046 | - | 93,046 |
| **Total Current Assets** | **$ 2,572,190** | **$ 2,445,655** | **$ 5,017,845** |
| **Noncurrent Assets:** | | | |
| Buildings and Improvements | $ - | $ 10,010,405 | $ 10,010,405 |
| Office Equipment | - | 98,523 | 98,523 |
| Vehicles | - | 299,503 | 299,503 |
| Machinery & Equipment | - | 415,645 | 415,645 |
| Infrastructure | - | 2,487,544 | 2,487,544 |
| Accumulated Depreciation | - | (7,460,986) | (7,460,986) |
| **Total Noncurrent Assets** | **$ -** | **$ 5,850,634** | **$ 5,850,634** |
| **TOTAL ASSETS** | **$ 2,572,190** | **$ 8,296,289** | **$ 10,868,479** |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts Payable | $ 184,206 | $ 27,567 | $ 211,773 |
| Payroll Liabilities | 51,546 | - | 51,546 |
| Due to Other Governments | 47,411 | - | 47,411 |
| Unearned Revenue | 250 | - | 250 |
| Customer Deposits | 115,341 | - | 115,341 |
| **Total Current Liabilities** | **$ 398,754** | **$ 27,567** | **$ 426,321** |
| **TOTAL LIABILITIES** | **$ 398,754** | **$ 27,567** | **$ 426,321** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ - | $ 5,850,634 | $ 5,850,634 |
| Restricted (Note 1) | 495,072 | - | 495,072 |
| Unrestricted | 1,678,364 | 2,418,088 | 4,096,452 |
| **TOTAL NET POSITION** | **$ 2,173,436** | **$ 8,268,722** | **$ 10,442,158** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 2,572,190** | **$ 8,296,289** | **$ 10,868,479** |

The accompanying notes are an integral part of these financial statements

EXHIBIT B

# CITY OF BEAVER FALLS
## STATEMENT OF ACTIVITIES
## FOR THE YEAR ENDED DECEMBER 31, 2021

| Functions/Programs | Expenses | Program Revenues: Charges for Services | Program Revenues: Operating Grants and Contributions | Program Revenues: Capital Grants and Contributions | Net (Expense) Revenue and Changes in Net Position: Governmental Activities | Net (Expense) Revenue and Changes in Net Position: Business-Type Activities | Total |
|---|---|---|---|---|---|---|---|
| **Governmental Activities:** | | | | | | | |
| Administration | $ 630,513 | $ 121,106 | $ 65,173 | $ - | $ (444,234) | | $ (444,234) |
| Public Safety - Police | 2,035,933 | 459,743 | 206,412 | - | (1,369,778) | | (1,369,778) |
| Public Safety - Fire | 952,649 | 92,402 | 107,324 | - | (752,923) | | (752,923) |
| Public Safety - Code | 33,827 | 87,757 | - | - | 53,930 | | 53,930 |
| Public Safety - Other | 599 | - | - | - | (599) | | (599) |
| Health and Welfare | 45,860 | - | 2,785 | - | (43,075) | | (43,075) |
| Rental Registration | 43,772 | 120,705 | - | - | 76,933 | | 76,933 |
| Public Works - Sanitation | 676,588 | 930,130 | 2,268 | - | 255,810 | | 255,810 |
| Public Works - Highways | 1,315,277 | 597,422 | 320,150 | - | (397,705) | | (397,705) |
| Public Works - Wastewater System | 374,147 | 801,395 | - | - | 427,248 | | 427,248 |
| Culture and Recreation | 14,266 | - | - | - | (14,266) | | (14,266) |
| Debt Service and Refunds | 1,191,219 | 60,800 | 436,052 | - | (694,367) | | (694,367) |
| Insurance | 1,113,437 | - | - | - | (1,113,437) | | (1,113,437) |
| Miscellaneous Expenses | 1,249,260 | - | - | - | (1,249,260) | | (1,249,260) |
| **Total Governmental Activities** | **$ 9,677,347** | **$ 3,271,460** | **$ 1,140,164** | **$ -** | **$ (5,265,723)** | | **$ (5,265,723)** |
| **Business-Type Activities:** | | | | | | | |
| Joint Sewer Users | $ 1,455,726 | $ 1,525,223 | $ - | $ - | | $ 69,497 | $ 69,497 |
| City Sewer Users | 1,508,110 | 1,557,666 | - | - | | 49,556 | 49,556 |
| **Total Business-Type Activities** | **$ 2,963,836** | **$ 3,082,889** | **$ -** | **$ -** | | **$ 119,053** | **$ 119,053** |
| **Total Primary Government** | **$ 12,641,183** | **$ 6,354,349** | **$ 1,140,164** | **$ -** | **$ (5,265,723)** | **$ 119,053** | **$ (5,146,670)** |
| **General Revenues:** | | | | | | | |
| Taxes: | | | | | | | |
| Property Taxes, Levied for General Purposes | | | | | $ 2,069,072 | $ - | $ 2,069,072 |
| Act 511 Taxes | | | | | 1,136,698 | - | 1,136,698 |
| Earned Income Tax Levied for Pension Obligations | | | | | 1,021,933 | - | 1,021,933 |
| PURTA/Beverage Licenses/Payments in Lieu of Taxes | | | | | 36,226 | - | 36,226 |
| Cable Franchise Fees | | | | | 118,670 | - | 118,670 |
| Investment Earnings | | | | | 3,816 | 2,708 | 6,524 |
| Sale of Fixed Assets | | | | | 1,002,100 | - | 1,002,100 |
| Miscellaneous | | | | | 210,318 | - | 210,318 |
| Proceeds from Loan | | | | | 500,000 | - | 500,000 |
| **Total General Revenues** | | | | | **$ 6,098,833** | **$ 2,708** | **$ 6,101,541** |
| **Change in Net Position** | | | | | **$ 833,110** | **$ 121,761** | **$ 954,871** |
| Net Position — January 1, 2021 | | | | | 1,340,326 | 8,146,961 | 9,487,287 |
| **Net Position — December 31, 2021** | | | | | **$ 2,173,436** | **$ 8,268,722** | **$ 10,442,158** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**BALANCE SHEET**
**GOVERNMENTAL FUNDS**
**DECEMBER 31, 2021**

**EXHIBIT C**

| | GENERAL FUND | CAPITAL PROJECTS FUND | NON-MAJOR GOVERNMENTAL FUNDS | TOTAL GOVERNMENTAL FUNDS |
|---|---|---|---|---|
| **ASSETS:** | | | | |
| Cash and Cash Equivalents | $ 1,680,842 | $ 70,718 | $ 95,646 | $ 1,847,206 |
| Taxes Receivable, net | 191,926 | - | - | 191,926 |
| Due From Other Funds | 241,216 | - | - | 241,216 |
| Due From Other Governments | 153,977 | - | - | 153,977 |
| Other Receivables | 44,819 | - | - | 44,819 |
| Prepaid Expenses | 93,046 | - | - | 93,046 |
| **TOTAL ASSETS** | **$ 2,405,826** | **$ 70,718** | **$ 95,646** | **$ 2,572,190** |
| **LIABILITIES AND FUND BALANCES** | | | | |
| **LIABILITIES:** | | | | |
| Accounts Payable | $ 138,224 | $ 45,982 | $ - | $ 184,206 |
| Payroll Liabilities | 51,546 | - | - | 51,546 |
| Due to Other Governments | 47,411 | - | - | 47,411 |
| Unearned Revenue | 250 | - | - | 250 |
| Customer Deposits | 115,341 | - | - | 115,341 |
| **TOTAL LIABILITIES** | **$ 352,772** | **$ 45,982** | **$ -** | **$ 398,754** |
| **FUND BALANCES:** | | | | |
| Non-spendable (Note 1) | $ 93,046 | $ - | $ - | $ 93,046 |
| Restricted (Note 1) | 374,690 | 24,736 | 95,646 | 495,072 |
| Unassigned | 1,585,318 | - | - | 1,585,318 |
| **TOTAL FUND BALANCES** | **$ 2,053,054** | **$ 24,736** | **$ 95,646** | **$ 2,173,436** |
| **TOTAL LIABILITIES AND FUND BALANCES** | **$ 2,405,826** | **$ 70,718** | **$ 95,646** | **$ 2,572,190** |



The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES**
**GOVERNMENTAL FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | GENERAL FUND | CAPITAL PROJECTS FUND | NON-MAJOR GOVERNMENTAL FUNDS | TOTAL GOVERNMENTAL FUNDS |
|---|---|---|---|---|
| **REVENUES** | | | | |
| Taxes | $ 4,227,703 | $ - | $ - | $ 4,227,703 |
| Licenses and Permits | 343,432 | - | - | 343,432 |
| Fines and Forfeitures | 115,123 | - | 7,030 | 122,153 |
| Interest and Rents | 27,868 | 495 | 213 | 28,576 |
| Intergovernmental | 970,529 | - | 250,716 | 1,221,245 |
| Charges for Services | 2,830,299 | - | - | 2,830,299 |
| Miscellaneous | 225,767 | - | 7,805 | 233,572 |
| **Total Revenue** | **$ 8,740,721** | **$ 495** | **$ 265,764** | **$ 9,006,980** |
| **EXPENDITURES** | | | | |
| General Government | $ 472,771 | $ 157,714 | $ 28 | $ 630,513 |
| Public Safety | 2,794,522 | 205,578 | 22,908 | 3,023,008 |
| Health and Human Services | 45,860 | - | - | 45,860 |
| Rental Registration | 43,772 | - | - | 43,772 |
| Public Works | 2,168,641 | 197,371 | - | 2,366,012 |
| Culture and Recreation | 12,401 | 1,865 | - | 14,266 |
| Debt Service | 584,903 | 1,500 | 604,816 | 1,191,219 |
| Insurance | 1,113,437 | - | - | 1,113,437 |
| Miscellaneous Expenses (Pension/Employer Taxes) | 1,249,260 | - | - | 1,249,260 |
| **Total Expenditures** | **$ 8,485,567** | **$ 564,028** | **$ 627,752** | **$ 9,677,347** |
| **Excess ( Deficiency) of Revenue over Expenditures** | **$ 255,154** | **$ (563,533)** | **$ (361,988)** | **$ (670,367)** |
| **OTHER FINANCING SOURCES (USES)** | | | | |
| Sale of Assets | $ 1,002,100 | $ - | $ - | $ 1,002,100 |
| Refund of Prior Year Expenses | 1,377 | - | - | 1,377 |
| Proceeds - Tax Anticipation Loan | 500,000 | - | - | 500,000 |
| Operating Transfers In | 256,224 | 5,300 | 604,816 | 866,340 |
| Operating Transfers Out | (610,116) | - | (256,224) | (866,340) |
| **Total Other Financing Sources (Uses)** | **$ 1,149,585** | **$ 5,300** | **$ 348,592** | **$ 1,503,477** |
| **NET CHANGE IN FUND BALANCES** | **$ 1,404,739** | **$ (558,233)** | **$ (13,396)** | **$ 833,110** |
| FUND BALANCE - JANUARY 1, 2021 | 648,315 | 582,969 | 109,042 | 1,340,326 |
| **FUND BALANCE - DECEMBER 31, 2021** | **$ 2,053,054** | **$ 24,736** | **$ 95,646** | **$ 2,173,436** |

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES, BUDGET AND ACTUAL
GOVERNMENTAL FUNDS - GENERAL FUND
FOR THE YEAR ENDED DECEMBER 31, 2021

| | Budgeted Amounts | | Actual | Variance with Final Budget Positive (Negative) |
|---|---|---|---|---|
| | Original | Final | (Budgetary Basis) | |
| **REVENUES** | | | | |
| Taxes | $ 4,282,000 | $ 4,282,000 | $ 4,227,703 | $ (54,297) |
| Licenses and Permits | 338,900 | 338,900 | 343,432 | 4,532 |
| Fines and Forfeitures | 113,900 | 113,900 | 115,123 | 1,223 |
| Interest and Rents | 40,160 | 40,160 | 27,868 | (12,292) |
| Intergovernmental | 485,174 | 485,174 | 970,529 | 485,355 |
| Charges for Services | 2,776,852 | 2,776,852 | 2,830,299 | 53,447 |
| Miscellaneous | 180,300 | 180,300 | 225,767 | 45,467 |
| **Total Revenues** | **$ 8,217,286** | **$ 8,217,286** | **$ 8,740,721** | **$ 523,435** |
| **EXPENDITURES** | | | | |
| Legislative | $ 18,750 | $ 18,750 | $ 22,233 | $ (3,483) |
| Executive | 243,493 | 243,493 | 238,135 | 5,358 |
| Financial Administration | 85,850 | 85,850 | 91,741 | (5,891) |
| Tax Collection | 35,000 | 35,000 | 36,704 | (1,704) |
| Legal | 31,000 | 31,000 | 42,991 | (11,991) |
| Data Processing | 16,300 | 16,300 | 16,106 | 194 |
| Municipal Building | 25,500 | 25,500 | 24,861 | 639 |
| Public Safety - Police | 1,663,768 | 1,663,768 | 1,919,452 | (255,684) |
| Public Safety - Fire | 822,284 | 822,284 | 874,471 | (52,187) |
| Emergency Management | 1,000 | 1,000 | 599 | 401 |
| Health and Human Services | 40,015 | 40,015 | 45,860 | (5,845) |
| Rental Registration | 44,628 | 44,628 | 43,772 | 856 |
| Public Works - Sanitation | 605,500 | 605,500 | 676,588 | (71,088) |
| Public Works - Highways | 1,073,110 | 1,073,110 | 1,119,106 | (45,996) |
| Public Works - Wastewater System | 378,991 | 378,991 | 372,947 | 6,044 |
| Culture and Recreation | 18,000 | 18,000 | 12,401 | 5,599 |
| Debt Service | 586,525 | 586,525 | 584,903 | 1,622 |
| Insurance | 1,030,797 | 1,030,797 | 1,113,437 | (82,640) |
| Miscellaneous Expenses (Pension/Employer Taxes) | 1,281,711 | 1,281,711 | 1,249,260 | 32,451 |
| **Total Expenditures** | **$ 8,002,222** | **$ 8,002,222** | **$ 8,485,567** | **$ (483,345)** |
| **Excess ( Deficiency) of Revenues over Expenditures** | **$ 215,064** | **$ 215,064** | **$ 255,154** | **$ 40,090** |
| **OTHER FINANCING SOURCES (USES)** | | | | |
| Sale of Assets | $ - | $ - | $ 1,002,100 | $ 1,002,100 |
| Refund of Prior Year Expenses | - | - | 1,377 | 1,377 |
| Proceeds - Tax Anticipation Loan | 500,000 | 500,000 | 500,000 | - |
| Operating Transfers In | 325,646 | 325,646 | 256,224 | (69,422) |
| Operating Transfers Out | (604,816) | (604,816) | (610,116) | (5,300) |
| **Total Other Financing Sources (Uses)** | **$ 220,830** | **$ 220,830** | **$ 1,149,585** | **$ 928,755** |
| **NET CHANGE IN FUND BALANCES** | **$ 435,894** | **$ 435,894** | **$ 1,404,739** | **$ 968,845** |
| FUND BALANCE - JANUARY 1, 2021 | - | - | 648,315 | 648,315 |
| **FUND BALANCE - DECEMBER 31, 2021** | **$ 435,894** | **$ 435,894** | **$ 2,053,054** | **$ 1,617,160** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF NET POSITION
## PROPRIETARY FUNDS
## DECEMBER 31, 2021

| ASSETS | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 1,711,625 | $ 383,852 | $ 2,095,477 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 208,116 | 208,116 |
| Other | 383,278 | - | 383,278 |
| **Total Current Assets** | **$ 2,094,903** | **$ 591,968** | **$ 2,686,871** |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 86,638 | 11,885 | 98,523 |
| Vehicles | 150,933 | 148,570 | 299,503 |
| Machinery & Equipment | - | 415,645 | 415,645 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (6,743,617) | (717,369) | (7,460,986) |
| **Total Noncurrent Assets** | **$ 5,204,831** | **$ 645,803** | **$ 5,850,634** |
| **TOTAL ASSETS** | **$ 7,299,734** | **$ 1,237,771** | **$ 8,537,505** |
| **LIABILITIES AND NET POSITION** | | | |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 27,549 | $ 18 | $ 27,567 |
| Due to other funds | 76,840 | 164,376 | 241,216 |
| **Total Current Liabilities** | **$ 104,389** | **$ 164,394** | **$ 268,783** |
| **TOTAL LIABILITIES** | **$ 104,389** | **$ 164,394** | **$ 268,783** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,204,831 | $ 645,803 | $ 5,850,634 |
| Unrestricted | 1,990,514 | 427,574 | 2,418,088 |
| **TOTAL NET POSITION** | **$ 7,195,345** | **$ 1,073,377** | **$ 8,268,722** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,299,734** | **$ 1,237,771** | **$ 8,537,505** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION
## PROPRIETARY FUNDS
## FOR THE YEAR ENDED DECEMBER 31, 2021

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,519,336 | $ 1,557,666 | $ 3,077,002 |
| Tap-In Fees | 3,250 | - | 3,250 |
| Permit Fees | 1,000 | - | 1,000 |
| Miscellaneous | 1,637 | - | 1,637 |
| **TOTAL OPERATING REVENUES** | **$ 1,525,223** | **$ 1,557,666** | **$ 3,082,889** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 682,900 | $ 682,900 |
| Wages and Benefits | 641,124 | 200,000 | 841,124 |
| Administrative | 30,000 | 300,000 | 330,000 |
| Office | 4,727 | - | 4,727 |
| Repair and maintenance | 168,243 | 58,660 | 226,903 |
| Billing expense | - | 20,271 | 20,271 |
| Depreciation | 203,461 | 45,297 | 248,758 |
| Engineering | 6,339 | 226 | 6,565 |
| Utilities | 138,336 | - | 138,336 |
| Chemicals/Chlorine | 32,950 | - | 32,950 |
| Sludge/grit removal | 63,213 | - | 63,213 |
| Janitorial Supplies | 3,075 | - | 3,075 |
| Gas and Oil | 1,564 | - | 1,564 |
| Equipment | 10,122 | - | 10,122 |
| Operating Supplies | - | 572 | 572 |
| Uniforms | 2,400 | - | 2,400 |
| Permits and testing | 15,074 | - | 15,074 |
| Certification & Training | 1,123 | - | 1,123 |
| Small Tools | 3,468 | - | 3,468 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | 234 | 184 | 418 |
| Line Rental Expense | 100,000 | - | 100,000 |
| Sewer-Line Reimbursement | - | 200,000 | 200,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,455,726** | **$ 1,508,110** | **$ 2,963,836** |
| **OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES)** | **$ 69,497** | **$ 49,556** | **$ 119,053** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 2,198 | $ 510 | $ 2,708 |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ 2,198** | **$ 510** | **$ 2,708** |
| **CHANGE IN NET POSITION** | **$ 71,695** | **$ 50,066** | **$ 121,761** |
| NET POSITION - January 1, 2021 | 7,123,650 | 1,023,311 | 8,146,961 |
| **NET POSITION - December 31, 2021** | **$ 7,195,345** | **$ 1,073,377** | **$ 8,268,722** |

The accompanying notes are an integral part of these financial statements

# CITY OF BEAVER FALLS
## STATEMENT OF CASH FLOWS
## PROPRIETARY FUNDS
## FOR THE YEAR ENDED DECEMBER 31, 2021

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,229,617 | $ 1,566,002 | $ 2,795,619 |
| Miscellaneous Revenue | 1,637 | - | 1,637 |
| Cash Paid to Vendors for Goods and Services | (1,239,453) | (1,295,859) | (2,535,312) |
| **Net cash provided (used) by operating activities** | **$ (8,199)** | **$ 270,143** | **$ 261,944** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ (8,283) | $ (65,000) | $ (73,283) |
| **Net cash provided (used) by capital and related financing activities** | **$ (8,283)** | **$ (65,000)** | **$ (73,283)** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 2,198 | $ 510 | $ 2,708 |
| **Net cash provided by investing activities** | **$ 2,198** | **$ 510** | **$ 2,708** |
| **Net increase (decrease) in cash and cash equivalents** | **$ (14,284)** | **$ 205,653** | **$ 191,369** |
| **CASH AND CASH EQUIVALENTS - January 1, 2021** | 1,725,909 | 178,199 | 1,904,108 |
| **CASH AND CASH EQUIVALENTS - December 31, 2021** | **$ 1,711,625** | **$ 383,852** | **$ 2,095,477** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 69,497 | $ 49,556 | $ 119,053 |
| **Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:** | | | |
| Depreciation | 203,461 | 45,297 | 248,758 |
| **Changes in assets and liabilities:** | | | |
| (Increase) decrease in sewer/refuse receivables | - | 8,336 | 8,336 |
| (Increase) decrease in other accounts receivable | (293,969) | - | (293,969) |
| (Increase) decrease in due from other funds | - | 2,934 | 2,934 |
| Increase (decrease) in accounts payable | 4,797 | (356) | 4,441 |
| Increase (decrease) in due to other funds | 8,015 | 164,376 | 172,391 |
| **Net cash provided (used) by operating activities** | **$ (8,199)** | **$ 270,143** | **$ 261,944** |

The accompanying notes are an integral part of these financial statements

EXHIBIT I

# CITY OF BEAVER FALLS
## STATEMENT OF FIDUCIARY NET POSITION
## FIDUCIARY FUNDS
## DECEMBER 31, 2021

| | POLICE PENSION FUND | FIREFIGHTERS PENSION FUND | CITY EMPLOYEES PENSION FUND | TOTAL |
|---|---|---|---|---|
| **ASSETS** | | | | |
| Cash and Cash Equivalents | $ 250,729 | $ 236,299 | $ 189,905 | $ 676,933 |
| Investments, at Fair Value: | | | | |
| U.S. Treasury Securities | 263,822 | 92,503 | - | 356,325 |
| U.S. Agency Securities | 44,729 | - | | 44,729 |
| Municipal Bonds | 596,059 | 179,234 | - | 775,293 |
| Corporate Bonds | 533,987 | 46,406 | - | 580,393 |
| Money Market Funds | 473,850 | 106,695 | 27,250 | 607,795 |
| Mutual Funds | 10,221,285 | 4,795,397 | 8,682,920 | 23,699,602 |
| Exchange Traded Products | 1,054,555 | 426,439 | 745,835 | 2,226,829 |
| Accrued Interest | 11,097 | 2,281 | - | 13,378 |
| Other Accounts Receivable | 400 | - | - | 400 |
| **TOTAL ASSETS** | **$ 13,450,513** | **$ 5,885,254** | **$ 9,645,910** | **$ 28,981,677** |
| **LIABILITIES** | | | | |
| Accounts Payable | $ 823 | $ 825 | $ 825 | $ 2,473 |
| **TOTAL LIABILITIES** | **$ 823** | **$ 825** | **$ 825** | **$ 2,473** |
| **NET POSITION** | | | | |
| Held in Trust for Pension Benefits | $ 13,449,690 | $ 5,884,429 | $ 9,645,085 | $ 28,979,204 |
| **TOTAL NET POSITION** | **$ 13,449,690** | **$ 5,884,429** | **$ 9,645,085** | **$ 28,979,204** |

The accompanying notes are an integral part of these financial statements

EXHIBIT J

# CITY OF BEAVER FALLS
## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
## FIDUCIARY FUNDS
## FOR THE YEAR ENDED DECEMBER 31, 2021

| | POLICE PENSION FUND | FIREFIGHTERS PENSION FUND | CITY EMPLOYEES PENSION FUND | TOTAL |
|---|---|---|---|---|
| **ADDITIONS** | | | | |
| Contributions | | | | |
| Employer | $ 665,745 | $ 248,883 | $ 197,290 | $ 1,111,918 |
| Plan Members | 79,888 | 28,748 | 60,021 | 168,657 |
| **Total Contributions** | **$ 745,633** | **$ 277,631** | **$ 257,311** | **$ 1,280,575** |
| Investment Earnings | | | | |
| Net Increase <Decrease> in Fair Value of Investments | $ 749,490 | $ 339,291 | $ 592,108 | $ 1,680,889 |
| Interest and Dividends | 616,559 | 264,758 | 445,118 | 1,326,435 |
| Total Investment Earnings | $ 1,366,049 | $ 604,049 | $ 1,037,226 | $ 3,007,324 |
| Less Investment Expense | - | - | - | - |
| **Net Investment Earnings** | **$ 1,366,049** | **$ 604,049** | **$ 1,037,226** | **$ 3,007,324** |
| **Total Additions** | **$ 2,111,682** | **$ 881,680** | **$ 1,294,537** | **$ 4,287,899** |
| **DEDUCTIONS** | | | | |
| Benefits | $ 714,695 | $ 315,268 | $ 377,034 | $ 1,406,997 |
| Member Refunds (Lump Sum) | 4,499 | - | 9,502 | 14,001 |
| Administrative Expenses | 60,168 | 28,993 | 45,452 | 134,613 |
| Miscellaneous | - | - | 580 | 580 |
| **Total Deductions** | **$ 779,362** | **$ 344,261** | **$ 432,568** | **$ 1,556,191** |
| **CHANGE IN NET POSITION** | **$ 1,332,320** | **$ 537,419** | **$ 861,969** | **$ 2,731,708** |
| NET POSITION - JANUARY 1, 2021 | 12,117,370 | 5,347,010 | 8,783,116 | 26,247,496 |
| **NET POSITION - DECEMBER 31, 2021** | **$ 13,449,690** | **$ 5,884,429** | **$ 9,645,085** | **$ 28,979,204** |

The accompanying notes are an integral part of these financial statements

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### REPORTING ENTITY

The City of Beaver Falls was incorporated on December 3, 1928, under the provisions governing the creation of municipal corporations in the Commonwealth of Pennsylvania. The administration of the City consists of four (4) Councilmen and a City Mayor. Members of City Council are elected by the voting public. City Council appoints a City Manager to administer the day-to-day operations of the City. The major functions of the City include public safety, maintenance of City infrastructure (roads), sanitation and sewage control, maintenance of parks and other recreational facilities for use by City residents and general administrative functions necessary to facilitate City resident needs and responsibilities.

A reporting entity is comprised of the primary government, component units and other organizations that are included to ensure the financial statements are not misleading. The primary government of the City of Beaver Falls consists of all funds, departments, boards, and agencies that are not legally separate from the City. Generally accepted accounting standards defines component units are legally separate entities that are included in the City's reporting entity because of the significance of their operating or financial relationships with the City. The City of Beaver Falls has no component units.

### FINANCIAL STATEMENT PRESENTATION

**GOVERNMENT-WIDE FINANCIAL STATEMENTS** – The statement of net position (Exhibit A) and the statement of activities (Exhibit B) report information about the City as a whole. These financial statements combine all of the financial activity of the primary government excluding fiduciary funds. As a general rule, the effect of inter-fund activity has been removed from these statements. Governmental activities, which normally are supported by taxes, intergovernmental revenues, and other nonexchange transactions, are recorded separately from business-type activities, which rely to a significant extent on fees and charges for services.

The government-wide statement of activities presents a comparison between direct expenses and program revenues for each function of the City's governmental activities. Direct expenses are those that are specifically associated with a service, program, or department and are therefore clearly identifiable to a particular function. Program revenues include charges paid by the recipient of the goods or services offered by the program, and grants, subsidies, and contributions that are restricted to meeting the operational or capital requirements of a particular program.

**FUND FINANCIAL STATEMENTS** – Fund financial statements report detailed information about the City. Under generally accepted accounting standards, the focus of governmental fund financial statements is on major funds rather than reporting funds by type. Major funds represent the City's most important funds and are determined based on a percentage of assets, liabilities, revenues, and expenditures/expenses. For the City of Beaver Falls the General Fund always considered a major fund. Each major governmental fund is presented in a separate column. Non-major governmental funds, if any, are segregated and combined in a single column. Fiduciary funds are reported separately.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### BASIS OF ACCOUNTING AND MEASUREMENT FOCUS

The basis of accounting determines when transactions are recorded in the financial records and reported in the financial statements. The governmental activities on the government-wide financial statements are presented in conformity with the modified accrual basis of accounting, which is a basis of accounting other than generally accepted accounting standards. The governmental fund financial statements of the City of Beaver Falls are presented on the modified accrual basis of accounting, in accordance with accounting standards generally accepted in the United States of America (GAAP) established by the Government Accounting Standards Board (GASB). Business-type activities on the government-wide financial statements, the proprietary fund financial statements, and the Fiduciary Fund financial statements use the accrual basis of accounting in conformity with GAAP.

Revenue resulting from exchange transactions, in which the City receives value without directly giving equal values in return, includes property taxes, grants and contributions. On the modified accrual basis, revenue from current year property taxes is recognized when received, and within sixty days subsequent to year-end if they are both measurable and available to fund current year general operations. Revenues from grants and contributions are recognized in the calendar year in which all eligibility requirements have been satisfied. On the modified accrual basis, revenue from non-exchange transactions must also be 'available' before it can be recognized.

The management of the City of Beaver Falls has determined that the revenues most susceptible to accrual at December 31, 2021 are **1)** current real estate taxes estimated to be collected within 60 days, **2)** delinquent real estate taxes earned by the City in December of 2021, **3)** deed transfer taxes and vehicle violations earned by the City in December of 2021, **4)** certain taxpayer assessed Act 511 taxes, **5)** solid waste and sewage fees billed to City residents, **6)** cable franchise fees earned during the year, and **7)** other miscellaneous revenues estimable and available to the City for 2021 but not as yet collected at December 31, 2021. On the governmental fund financial statements, receivables that will not be collected within the 'available' period have been reported as 'deferred inflows of resources'.

On the modified accrual basis of accounting, expenses are recognized at the time they are incurred. The measurement focus of governmental fund accounting is on decreases in net financial resources (expenditures) rather than expenses. Expenditures, with certain exceptions, are recognized in the accounting period in which the related fund liability is incurred, if measurable. The primary expenditures deemed susceptible to accrual at December 31, 2021, are those for which the City's intention was to expense these items as budgeted for in the 2021 official budget, and for which the City has incurred an obligation during 2021 but has not paid as of December 31, 2021.

### FUND ACCOUNTING

Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain City functions or activities. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts. Funds are classified into three categories: governmental, proprietary, and fiduciary. Fund categories are defined as follows:

**Governmental Funds** – Governmental funds focus on the sources, uses and balances of current financial resources. Expendable assets are assigned to the various governmental funds according to the purposes for which they may or must be used. Current liabilities are assigned to the fund from which they will be paid. The difference between governmental fund assets and liabilities is reported as fund balance. The following are the City's major and non-major governmental funds:

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### FUND ACCOUNTING (Continued)

**MAJOR GOVERNMENTAL FUNDS:**

**GENERAL FUND** - Established under 'The Third-Class City Code' of the Commonwealth of Pennsylvania and is used for the general operations of the City. Income in this fund is derived mainly from assessed revenues such as real estate taxes, local taxes established under Act 511, charges for sanitation service and other miscellaneous revenues not designated for other restricted fund purposes. These revenues are used for general ongoing government services such as public safety, public works, general administration of the City and other miscellaneous operating expenses.

**CAPITAL PROJECTS FUND** - Established from the proceeds of a portion of the City's General Obligation Bonds – Series of 2017 to fund capital projects of the City.

**NON-MAJOR GOVERNMENTAL FUNDS:**

**HIGHWAY AID FUND** - Established and restricted under Act 655 of the Commonwealth of Pennsylvania. Funding is received from the Commonwealth and is restricted in use for the maintenance, repair and construction of roads, streets, and bridges for which the City is responsible.

**LOCAL DRUG INVESTIGATIVE FUND** - Established to account for monies received primarily from the Local Drug Enforcement Agency for forfeited drug funds to be used for training and other allowable expenses.

**K-9 FUND** - Established to account for monies received through donations to be used for K-9 expenses.

**CRIMEWATCH FUND** - Established to account for monies received through donations to be used for Crimewatch expenses.

**DEBT SERVICE FUND** - Established from the proceeds of the City's General Obligation Bonds – Series of 2017. The main purpose of the fund is to pay the principal and interest due on the City's general obligation bonds and notes. Funding is received through transfers from the General Fund.

**Proprietary Funds** - used to account for activities similar to those found in the private sector, where the determination of net income is necessary and useful to sound financial administration. Goods or services from such activities can be provided either to outside parties (enterprise funds) or to other departments or agencies within the City (internal service funds). The City maintains two (2) proprietary funds: **1)** City Sewer Users Fund and **2)** Joint Sewer Users Fund. Based on the criteria for determining major funds as set forth in GASB Statement No. 34, each of the City's proprietary funds are considered major funds.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### FUND ACCOUNTING (Continued)

**Fiduciary Funds** – Fiduciary fund reporting focuses on net position and changes in net position. The fiduciary fund category is split into four classifications: pension trust funds, investment trust funds, private-purpose trust funds and custodial funds. Trust funds are used to account for assets held by the City under a trust agreement for individuals, private organizations, or other governments and are therefore not available to support the City's own programs. Custodial funds report fiduciary activities that are not held in a Trust or equivalent arrangement that meets specific criteria. The City has three pension trust funds (police pension, firefighter's pension, and non-uniform service employee's pension). The City does not maintain any other type of fiduciary fund.

### ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires the City's management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

### BUDGETS

In December of 2020, the City of Beaver Falls adopted its 2021 annual budget for its General Fund totaling $8,607,038 in accordance with the provisions of the Third-Class City Code. The budget is prepared utilizing the modified accrual method of accounting in accordance with generally accepted accounting principles. Budgetary transfers among various expenditure line items are performed as approved by the City Council. The original and adjusted budgetary amounts are reflected in these financial statements (Exhibit E). Actual expenditures of the General Fund exceeded budgeted expenditures for 2021. All annual appropriations of the general fund lapse at year-end.

The City uses the following procedures in establishing this budgetary data:

a. In accordance with the Third-Class City Code, each year at the last stated meeting in November, the chief fiscal officer shall, on behalf of Council, present to Council for introduction a proposed budget ordinance. The proposed budget ordinance shall show the estimated receipts, expenditures, and liabilities for the ensuing year, with the balance of unexpended appropriations and all other information of value as a basis for fixing the levy and tax rate for the next calendar year. Council shall upon introducing the proposed budget ordinance, fix a date or adoption, which shall be not later than December 31 of that year.

b. When the proposed budget ordinance is submitted to Council and has been introduced, the City Clerk shall immediately make the prosed budget ordinance available for public inspection at the City Clerk's office and shall publish a notice to that effect once in a newspaper of general circulation that states the date fixed by Council for enactment of the proposed budget ordinance. The notice shall be published at least 20 days prior to the time fixed by Council for enactment of the proposed budget ordinance. The proposed budget ordinance shall be available for public inspection at the City Clerk's office for at least 10 days after the newspaper notice is published.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### BUDGETS (Continued)

c. Council shall, after making the changes and modifications as appear proper, enact the budget and any appropriation measures required to put it into effect upon the date fixed for enactment. Any budget revisions whereby total expenditures would be increased by more than 10%, or more than 25% in any individual lie-item over the proposed budget, the proposed budget shall not be enacted unless made available for public inspection for a period of at least 10 days after notice to that effect is published.

### CASH AND CASH EQUIVALENTS

For the purposes of these basic financial statements, cash and cash equivalents include amounts in demand deposit accounts and all highly liquid short-term investments with original maturity terms of less than three months.

### INVESTMENTS

Provisions of the Third-Class City Code authorize the following investments:

I. Obligations of (a) the United States of American or any of its agencies or instrumentalities backed by the full faith and credit of the United States of America, (b) the Commonwealth of Pennsylvania or any of its agencies or instrumentalities backed by the full faith and credit of the Commonwealth of Pennsylvania, or (c) of any political subdivision of the Commonwealth of Pennsylvania or any of its agencies or instrumentalities backed by the full faith and credit of the political subdivision.

II. Deposits in savings accounts, time deposits and share accounts of institutions insured by the Federal Deposit Insurance Corporation (FDIC) to the extent that such accounts are so insured and, for any amounts above the insured maximum, provided that approved collateral, as provided by law, is pledged by the depository.

III. U.S. government obligations, short-term commercial paper issued by a public corporation, and banker's acceptances.

IV. Shares of an investment company registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933.

Fiduciary fund type investments include investments consisting of fixed income securities, U.S. Treasury securities, mutual funds and exchange-traded products held by Hefren-Tillotson, Inc. for the benefit of the City's pension plans (Trust Funds). Investments are stated at fair value. The City's portfolio is in compliance with these statutes at December 31, 2021.

### RECEIVABLES

Sanitation, sewage, and other receivables are reflected at net realizable value as of December 31, 2021.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### SHORT-TERM INTERFUND RECEIVABLES/PAYABLES

During the course of operations, numerous transactions occur between individual funds for goods provided or services rendered. These receivables and payables are classified as 'due from/to other funds' on the governmental funds balance sheet. For the purposes of the government-wide statement of Net position, governmental inter-fund receivables and payables have been eliminated. Amounts due between governmental activities and business-type activities are offset as 'Internal Balances' on the Statement of Net position.

### CAPITAL ASSETS AND DEPRECIATION

All capital assets of the City's business-type activities are recorded at cost (or estimated historical cost). Donated fixed assets are recorded at fair value at the time of receipt. The City does not maintain a specific dollar threshold for fixed asset capitalization. The cost of infrastructure is included in the government-wide statement of net position for business-type activities and the proprietary fund financial statements. Routine repair and maintenance costs that do not add to the value of the asset or extend its useful life are charged as an expense.

All reported capital assets for business-type activities, except land, are depreciated using the straight-line method over the following useful lives:

| CATEGORY | BUSINESS-TYPE ACTIVITIES |
|---|---|
| Buildings and Improvements | 10-50 years |
| Office Equipment | 5-7 years |
| Vehicles | 5-15 Years |
| Infrastructure | 50 Years |

The accounting and reporting treatment applied to the capital assets associated with a fund are determined by its measurement focus. All governmental funds are accounted for on a spending or 'financial flow' measurement focus. This means that only the current assets and current liabilities are generally included on their balance sheets. Their reported fund balance (net current assets) is considered a measure of 'available resources'. Governmental operating statements present increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Accordingly, they are said to present a summary of sources and uses of 'available spendable resources' during a period. Under the modified accrual method of accounting, capital assets purchased by governmental funds are recorded as expenditures in the fund financial statements (Exhibit D). The City does not capitalize and depreciate the cost of its governmental activities fixed asset purchases in accordance with generally accepted accounting principles.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### ACCRUED LIABILITIES AND LONG-TERM OBLIGATIONS

All payables, accrued liabilities and long-term obligations are reported in the government-wide financial statements for business-type activities only. In general, payables and accrued liabilities that will be paid from governmental funds are reported on the governmental fund financial statements regardless of whether they will be liquidated with current resources. However, the non-current portion that will be paid from governmental funds are reported as a liability in the fund financial statements only to the extent that they will be paid with current, expendable, available financial resources. In general, liabilities that mature or come due for payment within 60 days of the end of the fiscal year-end, are considered to be paid with current available financial resources. Notes and other long-term obligations that will be paid from governmental funds are not recognized as a liability in the fund financial statements when due. The City's General Fund and Debt Service Fund are typically used to liquidate long-term liability obligations.

### LONG-TERM DEBT FINANCING COSTS

Bond and note issue costs are recorded as expenditures in the governmental or proprietary fund financial statements in the year paid. During the 2021 calendar year, the City incurred no bond/note issuance costs.

### COMPENSATED ABSENCES

In accordance with the terms of its various collective bargaining unit agreements, the City is responsible to pay eligible employees at the rate of $10 per day for each accumulated unused sick day upon separation of service from the City. For governmental fund financial statements under the modified accrual method of accounting, compensated absences are recorded as expenditures when paid rather than accrued when earned.

### NET POSITION

Net position is classified into three categories according to external donor or legal restrictions or availability of assets to satisfy City obligations. Net position is classified as follows:

- **Net Investment in Capital Assets** – This component of net position consists of capital assets net of accumulated depreciation, and reduced by the outstanding balances of debt that is attributable to the acquisition, construction and improvement of the capital assets, plus deferred outflows of resources less deferred inflows of resources related to those assets.
- **Restricted Net Position** –This component of net position consists of restricted assets reduced by liabilities and deferred inflows related to those assets. Restricted net position consists of the following:
    - General Fund - Act 205 Earned Income Taxes for pension obligations - $364,690
    - General Fund - Library Park Donation - $10,000
    - Highway Aid Fund restricted under Act 655 for highway/road projects - $48,166
    - Capital Project Fund restricted for City capital improvements - $24,736
    - Drug Investigative Fund restricted for police public safety costs - $33,471
    - K-9 Fund restricted for police public safety costs - $13,023
    - Crimewatch Fund restricted for police safety costs - $984.
    - Debt Service Fund restricted for debt service payments - $2

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### NET POSITION (Continued)

- **Unrestricted** – Consists of net position that does not meet the definition of 'restricted' or 'net investment in capital assets'.

When an expense is incurred that can be paid using either restricted or unrestricted resources (net position), the City's policy is to first apply the expense toward restricted resources and then toward unrestricted resources

### FUND EQUITY

In the Balance Sheet – Governmental Funds (Exhibit C), fund balances are reported in specific categories to make the nature and extent of the constraints placed on any entity's fund balance more transparent in accordance with GASB No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*. The following classifications describe the relative strength of the spending constraints placed on the purposes for which resources can be used:

- **Non-spendable fund balance** – amounts that are not in spendable form (such as prepaid) or are required to be maintained intact – The City's non-spendable fund balance is comprised of prepaid expenses paid in calendar year 2021 for the benefit of future periods totaling $93,046.

- **Restricted fund balance** – amounts constrained to specific purposes by their providers (such as grantors, bondholders, and high levels of government), through constitutional provisions, or by enabling legislation. Restricted fund balance of $495,072 is detailed above under restricted net position.

- **Committed fund balance** – amount constrained to specific purposes by the City itself, using its highest level of decision-making authority; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest-level action to remove or change the constraint.

- **Assigned fund balance** – amounts the City intends to use for a specific purpose; intent can be expressed by the governing body or by an official or body to which the governing body delegates the authority.

- **Unassigned fund balance** – amount that are available for any purpose.

### OPERATING REVENUES AND EXPENSES

Proprietary fund operating revenues are those revenues that are generated directly from the primary activity of the City's Joint Sewer User's Fund and City Sewer User's Fund. For the City, these revenues are sewer user charges, tap-in fees, and miscellaneous revenues directly related to the operations of these two funds. Operating expenses are the necessary costs incurred to operate the City's two proprietary funds. Non-operating revenues of the City consist of interest income.

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### ADOPTION OF GASB PRONOUNCEMENTS

The requirements of the following GASB Statements were adopted for the City's 2021 financial statements. Except where noted, the adoption of these pronouncements did not have a significant impact on the City's financial statements.

**GASB Statement No. 89**, *'Accounting for Interest Cost Incurred before the end of a Construction Period'*. The primary objectives of this Statement are (a) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and, (b) to simplify accounting for certain interest costs.

**GASB Statement No. 92**, *'Omnibus 2020'*. The primary objectives of this statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of GASB Statement Nos. 73, 74, 84, and 87. In addition the Statement addresses various topics and includes specific provisions concerning the following:

- Measurement of liabilities (and assets, if any) related to asset retirement obligations (ARO') in a government acquisition
- Reporting by entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature
- Terminology used to refer to derivative instruments

**GASB Statement No. 93**, *'Replacement of Interbank Offered Rates'*. The primary objectives of this Statement are to address the accounting and financial reporting implications that result from the replacement of an interbank offering rate (IBOR).

### PENDING GASB PRONOUNCEMENTS

**GASB Statement No. 87**, *'Leases'*. The primary objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases; enhancing the comparability of financial statements between governments; and also enhancing the relevance, reliability (representational faithfulness), and consistency of information about the leasing activities of governments. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

**GASB Statement No. 91**, *'Conduit Debt Obligations'*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

### PENDING GASB PRONOUNCEMENTS (Continued)

**GASB Statement No. 94**, *'Public-Private and Public-Public Partnerships and Availability Payment Arrangements'*. The primary objectives of this Statement are to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs), and provide guidance for accounting and financial reporting for availability payment arrangements (APAs). The provisions of this Statement are effective for the City's December 31, 2023 financial statements.

**GASB Statement No. 96**, *'Subscription-Based Information Technology Arrangements (SBITA)'*. The primary objectives of this Statement are as follows:

- Defines a SBITA
- Establishes that a SBITA results in a right-to-use subscription asset – an intangible asset – and a corresponding subscription liability
- Provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA
- Requires note disclosures regarding a SBITA

The provisions of this Statement are effective for the City's December 31, 2023 financial statements.

**GASB Statement No. 97**, *'Certain Component Unit Criteria and Accounting and Financial Report for Internal Revenue Code Section 457 Deferred Compensation Plans'*. The primary objectives of this Statement are to 1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; 2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and 3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. The provisions of this Statement are effective for the City's December 31, 2022 financial statements.

**GASB Statement No. 98**, *'The Annual Comprehensive Financial Report'*. The statement establishes the term *annual comprehensive financial report* and its acronym *ACFS*. The new term and acronym replace instances of *comprehensive annual financial report* and its acronym in generally accepted accounting principles for state and local governments. The provisions of this Statement are effective for the City's December 15, 2022 financial statements.

The effects of implementing these Statements on the City's financial statements have not yet been determined.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS

### CASH DEPOSITS

At December 31, 2021, the City of Beaver Falls had the following carrying values on its cash and cash equivalent accounts held with its depositories:

| | Bank Balance | (Memo Only) Book Balance |
|---|---|---|
| General Fund | $ 1,827,338 | $ 1,680,842 |
| Capital Projects Fund | 141,448 | 70,718 |
| Non-Major Governmental Funds | 95,646 | 95,646 |
| Proprietary Funds | 2,281,053 | 2,095,477 |
| Fiduciary Funds | 992,331 | 676,933 |
| TOTAL | **$ 5,337,816** | **$ 4,619,616** |

The difference between the bank balance and the book balance represents year-end reconciling items such as deposits in transit and outstanding checks. The Federal Deposit Insurance Corporation (FDIC) coverage threshold for government account $250,000 per official custodian. This coverage includes checking and savings accounts, money market deposit accounts, and certificates of deposit.

### Custodial Credit Risk:

Custodial credit risk is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City does not have a separate policy for custodial credit risk in addition to the requirements of the Third-Class City Code. As of December 31, 2021, $4,837,814 of the City's bank balance total is exposed to custodial credit risk as this amount represents uninsured deposits collateralized with securities held by the pledging financial institution or by its trust department or agent, but not in the City's name. In accordance with Act Number 72-1971 Session of the Commonwealth of Pennsylvania, the aforementioned deposits, in excess of $250,000, are collateralized by securities pledged to a pooled public funds account with the Federal Reserve System.

### INVESTMENTS:

The fair value and maturity term of the City's fiduciary fund investments as of December 31, 2021, is as follows:

| | Fair Value | No Stated Maturity | 1-5 Years | 6-10 Years | 11-15 Years | 16-30 Years |
|---|---|---|---|---|---|---|
| U.S. Agencies | $ 44,729 | $ - | $ 1,665 | $ - | $ 11,687 | $ 31,377 |
| U.S. Treasury | 356,325 | - | 279,553 | - | - | 76,772 |
| Municipal Bonds | 775,293 | - | 21,459 | 525,754 | 228,080 | - |
| Corporate Bonds | 580,393 | - | 359,643 | 160,199 | - | 60,551 |
| Mutual Funds | 23,699,602 | 23,699,602 | - | - | - | - |
| Exchange Traded | 2,226,829 | 2,226,829 | - | - | - | - |
| Money Funds | 607,795 | 607,795 | - | - | - | - |
| | **$ 28,290,966** | **$ 26,534,226** | **$ 662,320** | **$ 685,953** | **$ 239,767** | **$ 168,700** |

Investments classified as U.S. Agencies are securities of agencies of the U.S. Government that have an implied but not explicit guarantee.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS (Continued)

### INVESTMENTS (Continued)

#### Custodial Credit Risk:

For an investment, custodial risk is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral security that are in the possession of an outside party. The City's investments in mutual funds and money funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form. The City does not have a specific policy that would limit its investment choices to those with certain credit ratings.

#### Credit Risk:

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The City has no formal investment policy, in addition to the requirements of the Third-Class City Code that and the Intergovernmental Cooperation Act, that limits its investment choices based on credit ratings by nationally recognized rating organizations. As of December 31, 2021, investments in U.S. Agencies, U.S. Treasury, Municipal Bonds, and Corporate Bonds of the City's pension plans are rated individually by nationally recognized statistical rating agencies (Moody's and S&P) as follows:

| Bond Quality | Market Value |
|---|---|
| Aaa | $ 92,503 |
| AAA | 80,027 |
| AA+ | 88,187 |
| AA | 464,665 |
| AA- | 130,932 |
| A+ | 42,247 |
| A- | 215,919 |
| Aa1 | 74,087 |
| A2 | 91,511 |
| BBB+ | 65,573 |
| BBB | 54,108 |
| Not Rated | 356,981 |
| | **$ 1,756,740** |

#### Interest Rate Risk:

The City does not have a formal investment policy that limits investments maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

#### Concentration of Credit Risk:

The City places no limit on the amount it may invest in any one issuer.

## NOTE 2 - CASH DEPOSITS AND INVESTMENTS (Continued)

### INVESTMENTS (Continued)

### Fair Value Measurements:

The City of Beaver Fall's investments are reported at fair value within the fair value hierarchy established by generally accepted accounting principles. Generally accepted accounting standards establishes a three-level fair value hierarchy that prioritizes the inputs to measure fair value. The hierarchy provides the highest priority to unadjusted quoted prices for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable (level 3 measurements). The three levels of the fair value hierarchy are described below:

- **Level 1** – Observable inputs that reflect quoted prices for identical assets or liabilities in active markets such as stock quotes
- **Level 2** – Includes inputs other than level 1 inputs that are directly or indirectly observable in the marketplace such as yield curves or other market data
- **Level 3** – Unobservable inputs which reflect the reporting entity's assessment of the assumptions that market participants would use in pricing the asset or liability including assumptions about risk such as bid/ask spreads and liquidity discounts.

The following schedule presents the Investments of the City by level within the fair value hierarchy:

| | Value at 12/31/21 | Fair Value Measurements | | |
|---|---|---|---|---|
| | | Level 1 | Level 2 | Level 3 |
| U.S. Treasury | $ 356,325 | $ 356,325 | $ - | $ - |
| U.S. Agencies | 44,729 | 44,729 | - | - |
| Municipal Bonds | 775,293 | 775,293 | - | - |
| Corporate Bonds | 580,393 | 580,393 | - | - |
| Mutal Funds | 23,699,602 | 23,699,602 | - | - |
| Exchange Traded Products | 2,226,829 | 2,226,829 | - | - |
| | **$ 27,683,171** | **$ 27,683,171** | **$ -** | $ - |

## NOTE 3 - PROPERTY TAXES

The City of Beaver Falls levies property taxes March 1st of each calendar year. The calendar dates for payment of these taxes are as follows:

**PAYMENT PERIOD**

| | |
|---|---|
| February 1 – March 31, 2021 | (Discount period) |
| April 1 – May 31, 2021 | (Face period) |
| June 1 – March 31, 2022 | (Penalty period) |

## NOTE 3 - PROPERTY TAXES (Continued)

Taxpayers are entitled to a 2% discount if taxes are paid prior to May 1st. Collections after June 30st are assessed a 10% penalty. Taxes unpaid as of April of the year following levy are liened through Beaver County. As of December 31, 2021, the City had $332,557 in unpaid 2021 property taxes which represents 16% of the total assessed property taxes for the current year.

The tax millage assessment for the 2021 calendar year is 34 mills on the assessed value of land and buildings, which represents $34.00 of revenue for every $1,000 of assessed value. The total millage includes 24.5928 dedicated for general revenue purposes, 9.1747 dedicated for debt service and .2325 mills dedicated for the maintenance and operation of recreation places. No provision has been made for amounts estimated to be uncollectable.

Taxes receivables, as reflected in Exhibit A and C, consist of the following at December 31, 2021:

| | |
|---|---|
| Delinquent Real Estate | 96,210 |
| Act 511 Taxes | 95,716 |
| | **$ 191,926** |

## NOTE 4 – INTERFUND TRANSACTIONS

Interfund receivable and payable obligations, as reflected in Exhibit C and Exhibit F, are comprised of the following at December 31, 2021:

| | DUE FROM OTHER FUNDS | DUE TO OTHER FUNDS |
|---|---|---|
| General Fund | $ 241,216 | $ - |
| Joint Sewer Users | - | 76,840 |
| City Sewer Users | - | 164,376 |
| | **$ 241,216** | **$ 241,216** |

During the 2021 calendar year, the following transfers were made between funds:

- General Fund transferred $604,816 to the Debt Service Fund for the Series of B 2017 General Obligation Bond and Series A of 2017 General Obligation Note principal and interest payments and $5,300 to the Capital Projects Fund for reimbursement of firearm purchases.
- Highway Aid Fund transferred $256,224 to the General Fund for street lighting

## NOTE 5 - DUE FROM OTHER GOVERNMENTAL UNITS

The 'due from other governmental units' total of $153,977, as reflected in Exhibits A and C for governmental activities and governmental funds, represents amounts earned by and due the City of Beaver Falls for 2021 from other governmental agencies as follows:

| | | |
|---|---|---|
| Fines - Magistrate | $ | 5,550 |
| Reimbursements from School District | | 24,182 |
| Beaver County Housing Authority | | 26,809 |
| Grant | | 41,044 |
| Reimbursements for Police & Fire Services | | 56,392 |
| | **$** | **153,977** |

## NOTE 6 – OTHER RECEIVABLES

Other receivables, as reflected in Exhibit A and C, consist of the following at December 31, 2021:

| | GOVERNMENTAL ACTIVITIES | BUSINESS-TYPE ACTIVITIES |
|---|---|---|
| Cable Franchise Fees | $ 29,683 | $ - |
| Sewage | - | 208,116 |
| Miscellaneous | 15,136 | - |
| | **$ 44,819** | **$ 208,116** |

## NOTE 7 – BUSINESS-TYPE FIXED ASSETS

A summary of the business-type fixed asset activity for the 2021 calendar year was as follows:

| | Balance 1/1/2021 | Additions | Deductions | Balance 12/31/2021 |
|---|---|---|---|---|
| Building and Improvements | $ 10,010,405 | $ - | $ - | $ 10,010,405 |
| Office Equipment | 90,240 | 8,283 | - | 98,523 |
| Vehicles | 299,503 | - | - | 299,503 |
| Machinery & Equipment | 410,644 | 65,000 | 59,999 | 415,645 |
| Infrastructure | 2,487,544 | - | - | 2,487,544 |
| | $ 13,298,336 | $ 73,283 | $ 59,999 | $ 13,311,620 |
| **Less: Accumulated depreciation** | | | | |
| Building and Improvements | $ (5,694,975) | $ (158,381) | $ - | $ (5,853,356) |
| Office Equipment | (44,614) | (3,806) | - | (48,420) |
| Vehicles | (257,033) | (8,330) | - | (265,363) |
| Machinery & Equipment | (306,027) | (29,684) | (59,999) | (275,712) |
| Infrastructure | (969,578) | (48,557) | - | (1,018,135) |
| | $ (7,272,227) | $ (248,758) | $ (59,999) | $ (7,460,986) |
| **Business-Type Activities Capital Assets, Net** | **$ 6,026,109** | **$ (175,475)** | **$ -** | **$ 5,850,634** |

## NOTE 8 – LONG TERM DEBT OBLIGATIONS

### BONDS PAYABLE – GENERAL OBLIGATION BONDS SERIES B OF 2017

In November of 2017, the City of Beaver Falls issued General Obligation Bonds, Series B of 2017 in the amount of $2,380,000. Proceeds from the sale of the bonds will be used to provide funds for and towards the costs of planning, designing, acquiring, constructing, furnishing, and equipping additions and improvements to the City's capital improvement plan and pay the costs of issuing and insuring the bonds. The bonds were issued in denominations of $5,000 with interest payable on May 15 and November 15 each year through maturity. Interest rates range between 1.55% and 3.375%, with the bonds scheduled to mature on November 15, 2034. The bonds provide for early redemption options for the city as more fully described in the detailed Official Statement.

### DEFAULT PROVISIONS

The Bonds are general obligations of the City, payable from its tax and other general revenues, which taxing power presently includes ad valorem taxes which may be levied on all taxable real property within the City presently without limitation as to rate or amount. The City has covenanted that it will provide in its budget for each year, and will appropriate from its general revenues in each such year, the amount of debt service on the Bonds for such year, and will duly and punctually pay or cause to be paid from its Sinking Fund , as hereinafter defined, or any other of its revenues or funds, the principal of every maturity of the Bonds and the interest thereon at the dates and place and in the manner stated on the Bonds, and for such budgeting, appropriation and payment the City irrevocably has pledged its full faith, credit and taxing power.

**NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)**

**BONDS PAYABLE – GENERAL OBLIGATION BONDS SERIES B OF 2017 (Continued)**

**DEFAULT PROVISIONS (Continued)**

In the event of default of the payment of principle or interest with respect to the Bonds when all or some becomes due, any owner of the Bonds shall have a claim under the applicable Bond Insurance Policy (the "Policy") for such payments. However, in the event of any acceleration of the date of such principal by reason of mandatory or optional redemption or acceleration resulting from default or otherwise, other than any advancement of maturity pursuant to a mandatory sinking fund payment, the payments are to be made in such amounts and at such times as such payments would have been due had there not been any such acceleration. The Policy does not insure payment of redemption premium, if any. The payment of principal and interest in connection with mandatory or optional prepayment of the Bonds by the City which is recovered by the City from the bond owner as a voidable preference under applicable bankruptcy law is covered by the insurance policy, however, such payments will be made by the bond insurer at such time and in such amounts as would have been due absence such prepayment by the City unless the bond insurer chooses to pay such amounts at an earlier date. Under most circumstances, default of payment of principal and interest does not obligate acceleration of the obligations of the bond insurer without appropriate consent. The bond insurer may direct and must consent to any remedies that that Paying Agent exercises and the bond insurer's consent may be required in connection with amendments to the Ordinance. In the event the bond insurer is unable to make payment of principal and interest as such payments become due under the Policy, the Bonds are payable solely from the monies received by the Paying Agent pursuant to the Ordinance. In the event the bond insurer becomes obligated to make payments with respect to the Bonds, no assurance is given that such event will not adversely affect the market price of the Bonds or the marketability (liquidity) for the Bonds.

The bonds carry a commitment from Build America Mutual Assurance Corporation (BAM) under which a Municipal Bond Insurance Policy will be issued at the time of delivery of the bonds, which policy assure the payment of the principal and interest to the registered owners of the Bonds.

A summary of the City of Beaver Fall's General Obligation Bonds outstanding at December 31, 2021, is as follows:

| Year End Dec 31 | Principal | Interest | Total |
|---|---|---|---|
| 2022 | $ 10,000 | $ 75,446 | $ 85,446 |
| 2023 | 10,000 | 75,226 | 85,226 |
| 2024 | 10,000 | 74,926 | 84,926 |
| 2025 | 10,000 | 74,626 | 84,626 |
| 2026 | 10,000 | 74,326 | 84,326 |
| 2027-2031 | 570,000 | 367,130 | 937,130 |
| 2032-2034 | 1,700,000 | 114,396 | 1,814,396 |
| | **$ 2,320,000** | **$ 856,076** | **$ 3,176,076** |

## NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)

### NOTES PAYABLE – GENERAL OBLIGATION NOTES SERIES A OF 2017

In November of 2017, the City of Beaver Falls issued General Obligation Notes, Series A of 2017 in the amount of $5,880,000. Proceeds from the sale of the notes were used to currently refund the City's outstanding General Obligation Bonds, Series of 2012, and pay the costs of issuing and insuring the bonds. The notes were issued in denominations of $5,000 with interest payable on May 15 and November 15 each year through maturity. Interest rates range between 1.55% and 3.0%, with the notes scheduled to mature on November 15, 2030. The notes provide for early redemption options for the city as more fully described in the detailed Official Statement. Default provisions as described herein Note 8 (Bonds Payable) apply to the City's General Obligation Notes Series A of 2017.

A summary of the City of Beaver Fall's Series A of 2017 General Obligation Notes outstanding at December 31, 2021, is as follows:

| Year End Dec 31 | Principal | Interest | Total |
|---|---|---|---|
| 2022 | $ 410,000 | $ 111,170 | $ 521,170 |
| 2023 | 420,000 | 102,150 | 522,150 |
| 2024 | 430,000 | 92,175 | 522,175 |
| 2025 | 440,000 | 81,425 | 521,425 |
| 2026 | 450,000 | 70,425 | 520,425 |
| 2027-2030 | 1,935,000 | 147,150 | 2,082,150 |
| | **$ 4,085,000** | **$ 604,495** | **$ 4,689,495** |

### NOTES -PAYABLE– FIRST NATIONAL BANK (DIRECT BORROWING)

In December of 2019, the City of Beaver Falls borrowed $600,000 from First National Bank for the following purposes 1) refinancing existing indebtedness and providing additional funds for economic revitalization, and 2) financing the closing costs and attorneys' fees in connection with the loan. The terms of the loan call for 120 monthly principal and interest payments of $6,237.52 at an interest rate of 4.5%. The note is scheduled to mature in December of 2029. The outstanding balance on the loan as of December 31, 2021, is $489,828.

### DEFAULT PROVISIONS

The City represents, warrants, and covenants to the Bank that the full faith, credit, and taxing power of the City has been irrevocably pledged to the Bank to secure the payment of this Note. In the event of default, under the Loan Agreement occurs and is continuing upon demand the Bank or any future Registered Owner of this Note, the outstanding principal sum, together with any unpaid accrued interest, will be due and payable in full.

## NOTE 8 – LONG TERM DEBT OBLIGATIONS (Continued)

### NOTES PAYABLE – FIRST NATIONAL BANK (DIRECT BORROWING) (Continued)

A summary of the City of Beaver Fall's 2019 General Obligation Note outstanding with First National Bank at December 31, 2021, is as follows:

| Year End Dec 31 | Principal | Interest | Total |
|---|---|---|---|
| 2022 | $ 53,712 | $ 21,138 | $ 74,850 |
| 2023 | 56,180 | 18,670 | 74,850 |
| 2024 | 58,761 | 16,089 | 74,850 |
| 2025 | 61,460 | 13,390 | 74,850 |
| 2026 | 64,284 | 10,566 | 74,850 |
| 2027-2029 | 199,755 | 13,452 | 213,207 |
| | **$ 494,152** | **$ 93,305** | **$ 587,457** |

### TAX ANTICIPATION NOTE – SERIES 2021

In January of 2021, the City of Beaver Falls issued a Tax Anticipation Note – Series of 2021 in the amount of $500,000 to WesBanco Bank at an interest rate of 2.25%. The City repaid the note as of December 31, 2021.

## NOTE 9 – CHANGES IN LONG-TERM DEBT

The following represents the changes in the City's long-term debt during 2021:

| | Balance 1/1/2021 | Additions | Reductions | Balance 12/31/2021 | Due Within One Year |
|---|---|---|---|---|---|
| General Obligation Bonds | $ 2,330,000 | $ - | $ 10,000 | $ 2,320,000 | $ 10,000 |
| General Obligation Notes | 4,485,000 | - | 400,000 | 4,085,000 | 410,000 |
| Direct Borowings: | | | | | |
| Note Obligations | 547,174 | - | 53,022 | 494,152 | 53,712 |
| | **$ 7,362,174** | **$ -** | **$ 463,022** | **$ 6,899,152** | **$ 473,712** |

## NOTE 10 - CITY PENSION PLANS

The following is a summary of the City's police, fire, and non-uniform pension plans

**POLICE PENSION PLAN** - The City of Beaver Falls' Police Pension Plan is a single-employer defined benefit pension plan established May 12, 1941, as amended April 26, 2016, to provide retirement and death benefits to qualified police department employees under the provisions governing pension plans in the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of this plan are determined under the Entry Age Normal Actuarial Cost Method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Hefren Tillotson, Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls police department who have attained the age of 21.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 25 years of aggregate service as a City employee and have attained the age of 50.

* **BENEFITS** – Benefit is equal to 50% of the greater of monthly pay at retirement or average monthly pay, plus a service increment, if any.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING** – Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 4% of monthly earnings plus $1.00 to provide for service increments. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

**FIREMEN'S PENSION PLAN** - The City of Beaver Falls' Fireman's pension Plan is a single-employer defined benefit pension plan established February 23, 1948, as amended October 25, 2015, to provide retirement and death benefits to qualified fire department employees under the provisions governing firemen's pension plans in the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of the plan are determined under the Entry Age Normal Actuarial Cost method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Merrill Lynch and Hefren Tillotson Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls fire department who have attained the age of 21.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 25 years of aggregate service as a City employee and have attained the age of 50.

* for employees hired on or after 12/17/90, lump sum payments for unused vacation and sick days are not included.

**NOTE 10 - CITY PENSION PLANS (Continued)**

**FIREMEN'S PENSION PLAN (Continued)**

**BENEFITS** – Benefit is equal to 50% of average pay at retirement, plus a service increment, if any. For employees hired on or after 8/5/93, lump sum payments for sick pay and vacation pay are not included.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING** – Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 4% of monthly earnings plus $1.00 to provide for service increments. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

**GENERAL EMPLOYEES PENSION PLAN** - The City of Beaver Falls' Employee's pension Plan is a single-employer defined benefit pension plan established January 1, 1960, as amended October 22, 1996, to provide retirement and death benefits to qualified non-uniformed service employees under the provisions of Act 205 of the Commonwealth of Pennsylvania and local City ordinances. The actuarial costs of the plan are determined under the Entry Age Normal Actuarial Cost method as required by Act 205 of the Commonwealth. The plan is governed by the Council of the City of Beaver Falls which is responsible for the management of Plan assets. The Council has delegated the authority to manage certain plan assets to Hefren-Tillotson, Inc. A summary of the plan's provisions are as follows:

**PARTICIPANTS** – All permanent members of the City of Beaver Falls other than police or firemen.

**ELIGIBILITY** – All participants are eligible for retirement benefits provided that they have completed 20 years of aggregate service as a City employee and have attained the age of 60.

**BENEFITS** – Benefit is equal to 50% of monthly average compensation.

**TERMINATION** – The plan provides terminated employees with a return of their contribution without interest.

**VESTING** – Employees are 100% vested after completion of 12 years of service.

**FUNDING** – Employee contributions are equal to 5% of monthly salary. City contributions are determined by the Actuary. Annual contributions are received from the Commonwealth as provided by Act 205, the General Municipal Pension System State Aid Program and Act 47 of 1988.

* For employees hired on or after 8/30/92, lump sum payments for unused sick and vacation pay are not included.

## NOTE 10 - CITY PENSION PLANS (Continued)

Plan membership as of January 1, 2021, was comprised of:

| | Police | Firemen | Employees |
|---|---|---|---|
| Active employees (non-vested) | 16 | 9 | 22 |
| Retirees and beneficiaries currently receiving benefits | 28 | 17 | 19 |
| Terminated employees entitled to benefits but not yet receiving them | - | - | - |
| Total | 44 | 26 | 41 |

## NOTE 11 – RISK AND UNCERTAINITIES

### INSURANCE

The City of Beaver Falls is exposed to various risks of loss related to tort; theft of, damage to, and destruction of assets, errors and omissions; injuries to employees; and natural disasters. These risks are covered by commercial insurance purchased from independent third parties. Settled claims for these risks have not exceeded commercial insurance coverage for the past three years.

### LEGAL MATTERS

The City of Beaver Falls, in the normal course of operations, is party to various legal matters normally associated with municipalities such as real estate tax assessment appeals, personnel wage and benefits, and other miscellaneous legal matters. As of December 31, 2021 he City is unaware of any pending claims or litigations that would be material to the financial position of the City of Beaver Falls.

### FEDERAL AND STATE FUNDING

The City of Beaver Falls' state and federally funded programs, including its pension funds, are subject to program compliance audits by various governmental agencies. The audit scopes of these program compliance audits are different than the scope of financial audits performed by an outside, independent certified public accounting firm. The City is potentially liable for any expenditure disallowed by the results of these program compliance audits. Management is not aware of any material items of noncompliance which would result in the disallowance of program expenditures.

### COVID

Early in 2020, a new strain of the coronavirus (COVID-19) spread in many countries including the United States. The impact of the virus continues to vary from region to region, and any significant additional spreading of the virus could adversely affect the City of Beaver Falls's business. The outbreak of the COVID-19 virus will potentially have a further negative impact in 2022 on the global and local economy and, in the future, might impact the City of Beaver Falls's financial results in 2022 and beyond. Given the dynamic nature of this outbreak, however, the extent to which the COVID-19 virus impacts the City of Beaver Falls's results will depend on future developments, which continue to remain somewhat uncertain and cannot be predicted at this time.

## NOTE 12 – SUBSEQUENT EVENTS

The City of Beaver Falls entered into an Asset Purchase Agreement with the Aqua Pennsylvania Wastewater Inc., in October 2021. The final purchase price has been agreed upon in the amount of $41,250,000 and the closing is anticipated to take place at some point during the early part of calendar year 2023 upon the approval of the Pennsylvania Utility Commission and Department of Environmental Protection.

The City of Beaver Falls as adopted to operate under the Home Rule Charter Law effective January 1, 2022. All elected officials in office at that time will serve until the end of their respective terms. All city administration officers or employees holding any office or position prior to January 2022 will continue such office or position unless that office or position is eliminated under the Charter or Administrative Code.

Management has determined that there are no other subsequent events after December 31, 2021, through the October 15, 2022 date of the "Independent Auditor's Report' date, which is the date the financial statements were available to be issued, that requires disclosure in the financial statements.

# SUPPLEMENTARY INFORMATION

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL REVENUES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **TAXES:** | | | |
| Real estate - current | $ 1,700,000 | $ 1,686,117 | $ 1,644,726 |
| Real estate - prior | 25,000 | 36,612 | 32,631 |
| Real estate - delinquent | 260,000 | 346,342 | 261,809 |
| Deed transfer | 25,000 | 96,155 | 53,813 |
| Per capita and residence | 30,000 | 19,194 | 19,157 |
| Per capita- prior | 1,000 | 912 | 1,240 |
| Per capita - delinquent | 7,000 | 8,439 | 7,576 |
| Earned income - city | 600,000 | 639,252 | 595,502 |
| Earned income - Act 205 | 1,200,000 | 1,021,933 | 937,973 |
| Earned income - prior | 24,000 | 14,012 | 16,069 |
| Mercantile tax | 85,000 | 85,107 | 90,100 |
| EMS | 120,000 | 114,592 | 120,397 |
| Business privilege tax | 205,000 | 159,036 | 178,760 |
| **TOTAL TAXES** | **$ 4,282,000** | **$ 4,227,703** | **$ 3,959,753** |
| **LICENSES AND PERMITS:** | | | |
| Transient Licenses | $ - | $ 100 | $ - |
| Amusement licenses | 5,000 | 16,300 | 11,400 |
| Cable franchise fee | 120,000 | 118,670 | 120,384 |
| Building permits | 40,000 | 13,248 | 79,339 |
| Demolition permits | 600 | 1,450 | 510 |
| Plumbing licenses | 2,300 | 1,175 | 2,260 |
| Zoning Permits | 2,500 | 3,200 | 2,500 |
| Zoning variances | 4,500 | 2,375 | 6,235 |
| Vacant Property Fees | 2,000 | 1,640 | 765 |
| Rental registration | 100,000 | 120,705 | 98,568 |
| Code Enforcement misc. receipts | 33,000 | 50,219 | 33,592 |
| Street opening permits | 29,000 | 14,350 | 31,150 |
| **TOTAL LICENSES AND PERMITS** | **$ 338,900** | **$ 343,432** | **$ 386,703** |
| **FINES AND FORFEITURES:** | | | |
| Magistrate and Clerk of Courts | $ 75,000 | $ 74,083 | $ 85,101 |
| Code Restitution | 900 | 890 | 1,048 |
| Rental Restitution | 850 | 697 | 854 |
| State police fines | 4,000 | 3,464 | 3,958 |
| Warrant server fees | 450 | 110 | 440 |
| Incarceration fees | 10,000 | 11,915 | 11,855 |
| Police reports | 2,700 | 2,833 | 3,192 |
| Parking Authority collections | 20,000 | 21,081 | 18,890 |
| Miscellaneous | - | 50 | 50 |
| **TOTAL FINES AND FORFEITURES** | **$ 113,900** | **$ 115,123** | **$ 125,388** |
| **INTEREST AND RENTS:** | | | |
| Investment interest | $ 15,500 | $ 3,108 | $ 10,720 |
| DEP rent | 21,660 | 21,660 | 21,660 |
| Other Rents | 3,000 | 3,100 | 3,000 |
| **TOTAL INTEREST AND RENTS** | **$ 40,160** | **$ 27,868** | **$ 35,380** |
| **INTERGOVERNMENTAL:** | | | |
| PA recycling grants | $ 1,350 | $ 2,268 | $ 1,346 |
| PA State pension aid | 370,000 | 331,012 | 369,287 |
| PA State A205 Fire Relief | 25,000 | 21,021 | 24,622 |
| PA Cola refund | 5,600 | 5,238 | 5,550 |
| PENNDOT agreement - snow removal | 31,000 | 47,423 | 45,912 |
| DCED Grant | - | 67,958 | 63,165 |
| Other PA Grants | - | 13,481 | 13,016 |
| Covid | - | 436,052 | 223,656 |
| PURTA Tax Refund | 2,700 | 2,601 | 2,699 |
| Alcoholic beverage tax | 3,150 | - | 3,150 |
| Act13 Gas Well Fees | 15,000 | 9,851 | 14,843 |
| PILOT - County Building | 30,795 | 30,795 | 30,795 |
| PILOT - Reimbursement to school county | (20,671) | (20,671) | (20,671) |
| PILOT - Morado, Brodhead, Harmony | 22,425 | 23,990 | 23,645 |
| PILOT - Reimbursement to school district | (4,890) | (4,606) | (4,348) |
| PILOT - Current Real Estate | 3,715 | 4,116 | 3,715 |
| **TOTAL INTERGOVERNMENTAL** | **$ 485,174** | **$ 970,529** | **$ 800,382** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL REVENUES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **CHARGES FOR SERVICES:** | | | |
| Miscellaneous revenue | $ 25,000 | $ 39,336 | $ 22,942 |
| School Reimbursement | 65,000 | 80,047 | 67,111 |
| Housing Authority reimbursements | 46,000 | 48,244 | 47,581 |
| Eastvale | 12,668 | 12,668 | 12,299 |
| West Mayfield Patrol | 65,239 | 65,239 | 63,339 |
| Big Beaver Boro Patrol | - | 130,000 | - |
| Police Reimbursements | - | 21,839 | 47,134 |
| AG Task Force Reimbursements | 50,000 | 22,083 | - |
| DUI Task Force Reimbursements | - | 5,614 | - |
| Fire Dept receipts | - | 60 | 80 |
| Fire Service Ins. Reimbursement | 5,000 | 6,883 | 5,825 |
| Fire Hydrant Fees | 68,421 | 78,934 | 73,680 |
| Eastvale Fire Protection | 6,524 | 6,524 | 6,334 |
| Parking Authority | 25,000 | 31,303 | 21,700 |
| Water Pollution Control - Joint Sewer Users | 900,000 | 701,395 | 787,144 |
| Water Pollution Control - Line Rental | 50,000 | 100,000 | 40,000 |
| Solid Waste Admin Fee | 150,000 | 150,000 | 100,000 |
| Solid Waste | 758,000 | 780,130 | 682,478 |
| City SU Admin Exp Reimb | 150,000 | 150,000 | 140,000 |
| City SU Sewer Line Reimb | 200,000 | 200,000 | 200,000 |
| City SU Wage Reimbursement | 200,000 | 200,000 | 200,000 |
| **TOTAL CHARGES FOR SERVICES** | **$ 2,776,852** | **$ 2,830,299** | **$ 2,517,647** |
| **MISCELLANEOUS:** | | | |
| Insurance claims | $ 1,000 | $ - | $ 4,116 |
| Civil Service Testing | 500 | 600 | 1,200 |
| Worker's Comp Refunds | - | 43,590 | 3,297 |
| Workman's Compensation dividend | 115,000 | 101,859 | 115,736 |
| Donations | 3,000 | 18,918 | 7,785 |
| County lease agreement | 60,800 | 60,800 | 60,800 |
| **TOTAL MISCELLANEOUS** | **$ 180,300** | **$ 225,767** | **$ 192,934** |
| **OTHER FINANCING SOURCES:** | | | |
| Sale of property - fixed assets | $ - | $ 1,002,100 | $ - |
| Liquid Fuels | 240,000 | 256,224 | 234,393 |
| Bond Fund | 85,646 | - | 85,846 |
| Tax Anticipation Loan | 500,000 | 500,000 | 600,000 |
| Refund prior year expenses | - | 1,377 | 3,403 |
| **TOTAL OTHER FINANCING SOURCES** | **$ 825,646** | **$ 1,759,701** | **$ 923,642** |
| **TOTAL REVENUES AND OTHER FINANCING SOURCES** | **$ 9,042,932** | **$ 10,500,422** | **$ 8,941,829** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **GENERAL GOVERNMENT:** | | | |
| **LEGISLATIVE:** | | | |
| Salary - director | $ 15,000 | $ 15,000 | $ 15,000 |
| Salary - controller | 2,500 | 2,500 | 2,500 |
| Council & Mayor Expenses | 250 | 3,616 | 250 |
| COG Payment | 1,000 | 1,117 | 984 |
| **TOTAL LEGISLATIVE** | **$ 18,750** | **$ 22,233** | **$ 18,734** |
| **EXECUTIVE:** | | | |
| Admin Coord/City Clerk Salary | $ 63,957 | $ 63,335 | $ 64,440 |
| City Manager's Salary | 53,901 | 57,330 | 55,522 |
| Admin Secretary Salary | - | 3,767 | 265 |
| Admin Comm Development Coord | 20,000 | 15,269 | 24,476 |
| Admin Contracted Sick Days | 700 | 700 | 700 |
| Admin Longevity | 2,450 | 2,450 | 2,150 |
| Administration supplies | 4,000 | 6,341 | 4,604 |
| Copy machine supplies | 13,200 | 14,426 | 13,102 |
| Audit | 7,600 | 7,843 | 7,683 |
| Telephone | 9,400 | 9,085 | 9,115 |
| City clerk postage | 9,200 | 9,034 | 11,818 |
| Printing and legal ads | 8,000 | 6,743 | 7,628 |
| Taxes on City Owned Property | 7,235 | 78 | 7,235 |
| Miscellaneous administrative expense | 200 | 1,173 | 159 |
| Admin Maint Service | - | 798 | - |
| Accountant - Part-time | 20,000 | 24,210 | 22,976 |
| Accountant - Full-time | 22,500 | 12,299 | - |
| Planning commission | 50 | - | - |
| Civil service commission expense | 750 | 2,839 | 1,507 |
| Public Relations | 200 | 415 | 161 |
| Comm Dev Public Relations | - | - | 40,184 |
| City Manager's Expenses | 150 | - | - |
| **TOTAL EXECUTIVE** | **$ 243,493** | **$ 238,135** | **$ 273,725** |
| **FINANCIAL ADMINISTRATION:** | | | |
| Salary - treasurer | $ - | $ 45,000 | $ 43,577 |
| Salary - treasurer sick wages | - | - | 1,500 |
| Salary - treasurer - vacation wages | - | 2,634 | 4,370 |
| Salary - bookkeeper | 81,400 | 34,720 | 20,149 |
| Salary - treasurer's clerk | - | 1,668 | 1,746 |
| Salary - treasury overtime | - | 390 | - |
| Treasury - FMLA Wages | - | - | 780 |
| Treasurer's ofc contracted sick | 1,400 | 700 | 700 |
| Treasurer's ofc longevity | 1,050 | 1,050 | 1,000 |
| Treasurer's ofc supplies | 2,000 | 2,217 | 1,929 |
| Treasurer's ofc computer exp | - | 3,362 | 675 |
| **TOTAL FINANCIAL ADMINISTRATION** | **$ 85,850** | **$ 91,741** | **$ 76,426** |
| **TAX COLLECTION:** | | | |
| Salary - tax collector | $ - | $ - | $ 1,154 |
| Real estate tax cards | 3,700 | 4,974 | 3,691 |
| Earned income tax commission | 10,000 | 11,442 | 10,309 |
| EMS income tax commission | 3,000 | 2,332 | 2,799 |
| Earned income tax commission act 205 | 16,200 | 15,778 | 15,480 |
| Tax Commission - Act 511 Taxes | 50 | - | 54 |
| Bonds - Treasurers office | 2,050 | 2,178 | 1,091 |
| **TOTAL TAX COLLECTION** | **$ 35,000** | **$ 36,704** | **$ 34,578** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **GENERAL GOVERNMENT (Continued):** | | | |
| **LEGAL:** | | | |
| Salary - solicitor | $ 18,000 | $ 18,000 | $ 18,000 |
| Legal fees | 12,000 | 19,155 | 11,300 |
| Appraisal | - | 855 | 830 |
| Engineering Services | 1,000 | 4,981 | 1,109 |
| **TOTAL LEGAL** | **$ 31,000** | **$ 42,991** | **$ 31,239** |
| **DATA PROCESSING:** | | | |
| Data processing - computer maintenance | $ 10,000 | $ 10,623 | $ 9,624 |
| Data processing - computer upgrade | 6,300 | 5,483 | 5,570 |
| **TOTAL DATA PROCESSING** | **$ 16,300** | **$ 16,106** | **$ 15,194** |
| **MUNICIPAL BUILDING:** | | | |
| City Building - electric | $ 18,000 | $ 16,075 | $ 16,570 |
| City Building - gas | 5,100 | 6,729 | 5,820 |
| City Building - water | 2,400 | 2,057 | 2,711 |
| **TOTAL MUNICIPAL BUILDING** | **$ 25,500** | **$ 24,861** | **$ 25,101** |
| **TOTAL GENERAL GOVERNMENT** | **$ 455,893** | **$ 472,771** | **$ 474,997** |
| **PUBLIC SAFETY:** | | | |
| **POLICE:** | | | |
| Salary - chief | $ 83,119 | $ 72,887 | $ 71,950 |
| Police Sick Wages | - | 61,258 | 45,088 |
| Police Vacation Wages | - | 85,455 | 96,837 |
| Salary - captain | 282,483 | 218,095 | 194,993 |
| Salary - sargeant | 196,850 | 62,343 | 121,103 |
| Salary - non-ranked policemen | 568,000 | 526,041 | 456,880 |
| Police Vehicle Repair Wages | - | 719 | 145 |
| Police Acting OIC wages | 6,578 | 6,679 | 7,121 |
| Police Health Insurance Comp | 9,500 | 2,656 | 9,481 |
| Salary - jailers | 37,103 | 28,767 | 31,228 |
| Jailers | 3,500 | 3,896 | 3,520 |
| Police Jailers Sick Pay | - | 3,181 | 1,108 |
| Meter Patrols | 19,000 | 23,337 | 19,673 |
| Parking Maintenance | 5,000 | 8,606 | 7,170 |
| Police Jailer Vacation Hourly | - | 3,887 | 4,979 |
| Pkg & Jailer Longevity | 2,050 | 2,050 | 1,950 |
| Overtime - Major Cases | 20,000 | 21,343 | 21,460 |
| Overtime - Jailer (police) | 15,000 | 15,522 | 17,485 |
| Overtime - Special Events | 3,000 | 12,042 | 5,964 |
| Overtime - 1.5 Reimbursable | - | 162 | - |
| Contracted sick days | 1,500 | 1,000 | 1,500 |
| Longevity - police | 10,200 | 9,100 | 10,650 |
| Overtime | 117,000 | 311,814 | 163,753 |
| Shift differential | 7,500 | 9,385 | 7,615 |
| Holiday pay | 55,125 | 63,461 | 57,344 |
| Court time | 100,000 | 143,405 | 136,841 |
| Education pay | 1,800 | 1,350 | 1,800 |
| Housing authority policing | 37,000 | 34,111 | 38,990 |
| Police schools | 13,000 | 18,961 | 13,246 |
| Uniforms | 9,650 | 11,215 | 10,714 |
| Police Tuition Reimbursement | 350 | - | 350 |
| Police Training Expenses | 1,000 | 3,262 | 950 |
| Police Heart & Lung Benefit | - | 51,050 | 5,778 |
| Employment costs - policemen | - | 14,756 | 3,299 |
| Office supplies | 3,000 | 5,535 | 3,961 |
| Weight equipment | 300 | - | - |
| Ammunition | 8,000 | 8,953 | 11,273 |
| Criminal investigation | 2,400 | 546 | 2,381 |
| K-9 supplies | 1,000 | 898 | 1,032 |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **PUBLIC SAFETY (Continued):** | | | |
| **POLICE (Continued):** | | | |
| K-9 veterinarian expenses | 250 | 205 | - |
| Breathalyzer supplies | 160 | 71 | 200 |
| K-9 Equipment & Training | 250 | - | - |
| Criminal Drug Testing | - | 5,890 | - |
| Police Miscellaneous Expense | 500 | 4,700 | 2,056 |
| Fuel | 12,000 | 18,214 | 10,146 |
| Vehicle maintenance | 10,000 | 15,233 | 11,579 |
| Computer maintenance expense | 14,000 | 21,141 | 13,792 |
| Phone - police station | 2,200 | 3,322 | 2,104 |
| Radio repairs | - | 88 | - |
| Printing | 700 | 210 | 707 |
| Ticket printing | 2,000 | 1,797 | 1,941 |
| Range - electric | 1,000 | 655 | 1,140 |
| Public Relations | 300 | - | - |
| Meter Equipment & Repair | 250 | - | - |
| Uniforms | 150 | 198 | - |
| Miscellaneous Expense | - | - | 148 |
| **TOTAL POLICE** | **$ 1,663,768** | **$ 1,919,452** | **$ 1,633,425** |
| | | | |
| **FIRE DEPARTMENT:** | | | |
| Salary - chief | $ 83,120 | $ 73,207 | $ 70,109 |
| Fire Asst Chief Wages | 62,170 | - | - |
| Sick Hourly Wages | - | 63,513 | 52,210 |
| Vacation Hourly Wages | - | 51,911 | 50,805 |
| Salary - captain | 120,236 | 99,272 | 108,820 |
| OIC pay | 3,000 | 6,032 | 5,146 |
| Salary - firefighters | 254,158 | 218,665 | 194,998 |
| Part-Time Firefighters | 20,000 | - | 16,296 |
| Fire Vehicle Repair Wages | - | 66 | - |
| Health Insurance Comp | 19,800 | 18,832 | 19,801 |
| Off-Duty Training Wages | 8,000 | 10,078 | 9,371 |
| Contracted sick days | 2,500 | 3,000 | 2,500 |
| Longevity | 4,650 | 4,050 | 4,300 |
| Overtime - double rate | 50,000 | 90,296 | 73,848 |
| Holiday pay | 28,000 | 34,130 | 35,903 |
| Off-duty fire calls | 45,500 | 42,597 | 47,114 |
| Fire school | 3,500 | 1,994 | 2,902 |
| Education pay | 450 | 800 | 450 |
| Uniforms | 6,000 | 4,934 | 4,733 |
| Physicals | 4,400 | 349 | 2,544 |
| Contracted training | 4,500 | 2,500 | 1,546 |
| Heart & Lung Benefits | - | 3,170 | 1,540 |
| Office supplies | 1,500 | 1,054 | 1,121 |
| Cleaning supplies | 1,000 | 1,694 | 1,315 |
| Fuel and lubrication | 7,500 | 8,850 | 6,598 |
| Truck repairs | 12,000 | 41,736 | 17,295 |
| Tire Replacement | - | - | 45 |
| Miscellaneous equipment | - | - | 1,231 |
| Protective clothing | - | - | 2,161 |
| Hose replacement | - | 2,930 | 1,226 |
| Mask repair parts | 3,500 | 2,923 | 3,854 |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **PUBLIC SAFETY:** | | | |
| **FIRE DEPARTMENT (Continued):** | | | |
| Replacement Fire Gear | - | 472 | 5,625 |
| Compressor maintenance | 1,600 | 1,604 | 2,209 |
| SCUBA Equipment | 1,000 | 1,130 | 970 |
| Volunteer fire time | 17,500 | 13,200 | 18,720 |
| Telephone | 2,500 | 3,077 | 2,446 |
| Radio repairs | 2,000 | 3,656 | 1,616 |
| BFMA hydrant rental | 21,700 | 22,716 | 21,429 |
| #3 Station - electric | 1,150 | 1,047 | 1,113 |
| #3 Station - gas/Pleasantview | 4,000 | 1,664 | 3,504 |
| #3 Station - Water | 350 | 285 | 341 |
| Fire Equipment Maint Service | - | 86 | - |
| Fire Act205 Relief to VFD | 25,000 | 21,021 | 24,622 |
| Fire Grant Expenses | - | 13,480 | 37,427 |
| Fire Major Equip Repair/Replace | - | 2,450 | - |
| **TOTAL FIRE DEPARTMENT** | **$ 822,284** | **$ 874,471** | **$ 859,803** |
| **EMERGENCY MANAGEMENT:** | | | |
| Emergency Mgmt Fee | $ 1,000 | $ 599 | $ - |
| **TOTAL EMERGENCY MANAGEMENT** | **$ 1,000** | **$ 599** | **$ -** |
| **TOTAL PUBLIC SAFETY** | **$ 2,487,052** | **$ 2,794,522** | **$ 2,493,228** |
| **HEALTH AND WELFARE:** | | | |
| Health and enforcement salary | $ - | $ - | $ 3,506 |
| Sick Pay | - | 714 | 1,781 |
| Vacation Hourly | - | 357 | 5,570 |
| Code Clerical Wages | 19,890 | 26,264 | 10,081 |
| Code FMLA Wages | - | - | 1,439 |
| Code Longevity | 350 | 350 | 1,250 |
| Printing and supplies | 500 | 1,442 | 451 |
| BOCA Code books | 250 | 145 | - |
| Code enforcement | 375 | 275 | 455 |
| Training - Code Enforcement | 500 | - | - |
| Inspection Certification | 400 | 474 | 390 |
| Zoning Hearing Expense | 11,000 | 6,106 | 11,674 |
| Private Property Maint | - | 126 | - |
| Code BasicGov Program | 5,800 | 5,865 | 5,586 |
| Gas and repairs | - | - | 135 |
| Telephone | 750 | 647 | 728 |
| Zoning Ordinance/Comp Plan | - | 3,095 | - |
| Code Uniforms | 200 | - | 190 |
| **TOTAL HEALTH AND WELFARE** | **$ 40,015** | **$ 45,860** | **$ 43,237** |
| **RENTAL REGISTRATION:** | | | |
| Rental Reg FMLA Wages | $ - | $ - | $ 3,713 |
| Rental Reg Coordinator | - | - | 7,628 |
| Rental Reg Clerk | 37,128 | 27,754 | 27,002 |
| Rental Admin Vacation | - | 2,438 | 2,476 |
| Rental Admin Sick Pay | - | 6,936 | 584 |
| Rental Printing & Supplies | 500 | 24 | 127 |
| Rental ICC Publication | 600 | - | - |
| Misc Expense | 600 | 755 | 445 |
| Rental BasicGov Software | 5,800 | 5,865 | 5,586 |
| **TOTAL RENTAL REGISTRATION** | **$ 44,628** | **$ 43,772** | **$ 47,561** |
| **PUBLIC WORKS:** | | | |
| **SANITATION:** | | | |
| Landfill fees | $ 105,000 | $ 122,448 | $ 113,355 |
| Outside contracting fees | 487,500 | 542,780 | 512,633 |
| Recycling Fees | 13,000 | - | 13,717 |
| Replacement Cart Cost | - | 11,360 | 1,360 |
| **TOTAL SANITATION** | **$ 605,500** | **$ 676,588** | **$ 641,065** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **PUBLIC WORKS (Continued):** | | | |
| **STREET DEPARTMENT:** | | | |
| Salary - superintendent | $ 79,235 | $ 72,866 | $ 75,124 |
| Sick Wages | - | 9,410 | 15,906 |
| Vacation Wages | - | 40,222 | 39,576 |
| Maintenance/ Utility Wages | 46,066 | 43,532 | 43,361 |
| Salary - skilled laborer and vactor operator | 92,133 | 70,607 | 82,705 |
| Salary - mechanics/operators | 51,086 | 41,654 | 44,866 |
| Salary - sweeper operator | 45,365 | 39,800 | 41,892 |
| Salary - skilled laborer helper | 44,699 | 30,602 | 33,537 |
| Salary - vactor helper | 44,699 | 35,587 | 36,850 |
| Salary - labor pool | 87,277 | 48,338 | 76,402 |
| Street FMLA Wages | - | - | 1,686 |
| St Health Insurance Comp | 29,700 | 24,330 | 29,702 |
| Contracted sick days | 4,900 | 4,900 | 5,600 |
| Longevity | 8,150 | 8,500 | 7,900 |
| Overtime | 35,000 | 41,211 | 39,056 |
| Shift differential | 2,000 | 1,192 | 1,857 |
| Higher wages | 5,000 | 29,174 | 7,785 |
| Sewer OT | 2,000 | 933 | 2,338 |
| Uniforms | 4,000 | 3,933 | 5,087 |
| Drug and alcohol testing | 1,000 | 675 | 854 |
| Office supplies | 1,000 | 838 | 1,080 |
| Property maintenance | 20,000 | 18,239 | 27,333 |
| Weed Cutting | 2,800 | - | 2,611 |
| City Building Repairs | 18,000 | 26,740 | 33,761 |
| Telephone | 9,000 | 7,121 | 7,073 |
| Utilities - electric | 4,000 | 3,982 | 4,459 |
| Utilities - gas | 8,800 | 11,710 | 8,550 |
| Utilities - water | 500 | 557 | 531 |
| Street lights | 235,000 | 219,227 | 213,606 |
| Traffic signals electricity | 3,400 | 4,306 | - |
| 7th Avenue lights | 2,500 | 3,969 | 2,985 |
| Traffic signal repairs | - | 930 | 3,621 |
| Salary - snow control | 5,000 | 4,555 | 9,829 |
| Snow control expenses - supplies | 120,000 | 123,152 | 88,731 |
| Snow Supply Reimbursements | (3,000) | (6,480) | (3,240) |
| Street signs | 4,000 | 3,508 | 4,229 |
| Storm sewer maintenance | 1,800 | 1,421 | 1,512 |
| Street Maintenance Fuel | 20,000 | 54,790 | 21,433 |
| Street vehicles maintenance | 15,000 | 25,735 | 16,679 |
| Street sweeper maintenance | 7,000 | 8,515 | 8,831 |
| Tools and new equipment | 2,500 | - | 1,995 |
| Safety equipment | 1,000 | 833 | 887 |
| Vehicle Purchase | - | 48,011 | - |
| Road patching material | 11,000 | 8,629 | 10,998 |
| Road painting | 1,500 | 1,352 | 1,779 |
| **TOTAL STREET DEPARTMENT** | **$ 1,073,110** | **$ 1,119,106** | **$ 1,061,357** |
| | | | |
| **WATER SYSTEM:** | | | |
| Sick Wages | $ - | $ 14,374 | $ 10,647 |
| Vacation Wages | - | 23,340 | 37,813 |
| Manager Salary | 81,574 | 71,537 | 78,848 |
| Operator 1 | 51,085 | 44,994 | 48,712 |
| Operator 2 | 51,085 | 1,593 | - |
| Mechanic 1 | - | 37,331 | 46,593 |
| Mechanic 2 | 46,010 | 22,651 | 23,739 |
| Mechanic Laborer | 45,365 | 41,545 | 41,730 |
| Mechanic/OP Trainee | 45,365 | 63,255 | 78,162 |
| Higher wages | 3,000 | 4,155 | 3,204 |
| Secretary - WPCP | 21,357 | 18,690 | 19,013 |
| Contracted sick days | 4,200 | 4,200 | 3,500 |
| Longevity | 4,200 | 4,350 | 6,350 |
| Overtime | 16,000 | 11,628 | 18,295 |
| Shift differential | 750 | 672 | 717 |
| Holidays | 9,000 | 8,632 | 10,127 |
| **TOTAL WATER SYSTEM** | **$ 378,991** | **$ 372,947** | **$ 427,450** |
| | | | |
| **TOTAL PUBLIC WORKS** | **$ 2,057,601** | **$ 2,168,641** | **$ 2,129,873** |

**CITY OF BEAVER FALLS**
**DETAILED SCHEDULE OF BUDGETED AND ACTUAL EXPENDITURES**
**GENERAL FUND**
**FOR THE YEAR ENDED DECEMBER 31, 2021**

| | BUDGET | ACTUAL | (MEMORANDUM ONLY) 2020 |
|---|---|---|---|
| **CULTURE AND RECREATION:** | | | |
| **PARKS & PLAYGROUNDS:** | | | |
| Parks Repairs & Maintenance | $ 5,000 | $ 1,350 | $ 4,407 |
| Recreation payment | 7,000 | 6,703 | 2,371 |
| Special events | - | 184 | - |
| Parks and playgrounds - utilities | 6,000 | 4,164 | 5,817 |
| **TOTAL PARKS & PLAYGROUNDS** | **$ 18,000** | **$ 12,401** | **$ 12,595** |
| **TOTAL CULTURE AND RECREATION** | **$ 18,000** | **$ 12,401** | **$ 12,595** |
| **DEBT SERVICE:** | | | |
| Credit Card Fees | $ 300 | $ 406 | $ 125 |
| Bank Fees | 2,000 | 1,110 | 1,747 |
| TAN - Principal | 500,000 | 500,000 | 600,000 |
| TAN - Interest | 8,275 | 7,437 | 15,193 |
| FNB Loan Payment | 74,850 | 74,850 | 81,088 |
| Bond & Debt Svc Admin Fees | 1,100 | 1,100 | 1,100 |
| **TOTAL DEBT SERVICE** | **$ 586,525** | **$ 584,903** | **$ 699,253** |
| **INSURANCE:** | | | |
| Workers Comp Ins | $ 149,458 | $ 188,116 | $ 164,983 |
| General Ins | 130,000 | 124,745 | 128,876 |
| Employee Hospital/Life Ins | 820,000 | 878,462 | 828,387 |
| Employee Ins Cont. | (67,600) | (70,428) | (62,580) |
| Health Ins Reimbursements | (1,061) | (7,458) | (7,401) |
| **TOTAL INSURANCE** | **$ 1,030,797** | **$ 1,113,437** | **$ 1,052,265** |
| **MISCELLANEOUS EXPENSES:** | | | |
| Non-Uniform Pension Contribution | $ 137,708 | $ 137,708 | $ 169,530 |
| State Pension Transfer | 370,000 | 331,012 | 369,287 |
| Manager's Pension Contribution | 2,805 | 2,805 | 2,914 |
| Uniform Pension Contribution | 467,138 | 467,138 | 737,097 |
| Fireman's Pension Contribution | 176,060 | 176,060 | 389,550 |
| Social Security - other | 81,000 | 82,153 | 85,334 |
| Medicare | 47,000 | 52,384 | 50,510 |
| Unemployment Comp | - | - | 4,098 |
| **TOTAL MISCELLANEOUS EXPENSES** | **$ 1,281,711** | **$ 1,249,260** | **$ 1,808,320** |
| **OTHER FINANCING USES:** | | | |
| Refund Prior Year Revenues | $ - | $ - | $ 2,998 |
| Transfer to Bond Fund | - | 5,300 | - |
| Transfer to Debt Service | 604,816 | 604,816 | 607,560 |
| **TOTAL OTHER FINANCING USES** | **$ 604,816** | **$ 610,116** | **$ 610,558** |
| **TOTAL EXPENDITURES AND OTHER FINANCING USES** | **$ 8,607,038** | **$ 9,095,683** | **$ 9,371,886** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**COMBINING BALANCE SHEET**
**NON-MAJOR GOVERNMENTAL FUNDS**
**DECEMBER 31, 2021**

**SCHEDULE 3**

| | HIGHWAY AID FUND | LOCAL DRUG INVESTIGATIVE FUND | K-9 FUND | CRIMEWATCH FUND | DEBT SERVICE FUND | TOTAL NON-MAJOR GOVERNMENTAL FUNDS |
|---|---|---|---|---|---|---|
| **ASSETS:** | | | | | | |
| Cash and Cash Equivalents | $ 48,166 | $ 33,471 | $ 13,023 | $ 984 | $ 2 | $ 95,646 |
| **TOTAL ASSETS** | $ 48,166 | $ 33,471 | $ 13,023 | $ 984 | $ 2 | $ 95,646 |
| **LIABILITIES AND FUND BALANCES** | | | | | | |
| **LIABILITIES:** | | | | | | |
| Due to Other Funds | $ - | $ - | $ - | $ - | $ - | $ - |
| **TOTAL LIABILITIES** | $ - | $ - | $ - | $ - | $ - | $ - |
| **FUND BALANCES:** | | | | | | |
| Restricted | $ 48,166 | $ 33,471 | $ 13,023 | $ 984 | $ 2 | $ 95,646 |
| **TOTAL FUND BALANCES** | $ 48,166 | $ 33,471 | $ 13,023 | $ 984 | $ 2 | $ 95,646 |
| **TOTAL LIABILITIES AND FUND BALANCES** | $ 48,166 | $ 33,471 | $ 13,023 | $ 984 | $ 2 | $ 95,646 |



The accompanying notes are an integral part of these financial statements

SCHEDULE 4

# CITY OF BEAVER FALLS
## COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
## NON-MAJOR GOVERNMENTAL FUNDS
## FOR THE YEAR ENDED DECEMBER 31, 2021

| | HIGHWAY AID FUND | LOCAL DRUG INVESTIGATIVE FUND | K-9 FUND | CRIMEWATCH FUND | DEBT SERVICE FUND | TOTAL NON-MAJOR GOVERNMENTAL FUNDS |
|---|---|---|---|---|---|---|
| **REVENUES** | | | | | | |
| Interest and Rents | $ 206 | $ 5 | $ - | $ - | $ 2 | $ 213 |
| Fines & Forfeitures | - | 7,030 | - | - | - | 7,030 |
| Intergovernmental | 250,716 | - | - | - | - | 250,716 |
| Donations | - | - | 6,915 | 890 | - | 7,805 |
| **Total Revenue** | **$ 250,922** | **$ 7,035** | **$ 6,915** | **$ 890** | **$ 2** | **$ 265,764** |
| **EXPENDITURES** | | | | | | |
| General Government | $ - | $ - | $ - | $ 28 | $ - | $ 28 |
| Public Safety | - | 22,658 | 250 | - | - | 22,908 |
| Debt Service | - | - | - | - | 604,816 | 604,816 |
| **Total Expenditures** | **$ -** | **$ 22,658** | **$ 250** | **$ 28** | **$ 604,816** | **$ 627,752** |
| **Excess ( Deficiency) of Revenue over Expenditures** | **$ 250,922** | **$ (15,623)** | **$ 6,665** | **$ 862** | **$ (604,814)** | **$ (361,988)** |
| **OTHER FINANCING SOURCES (USES)** | | | | | | |
| Operating Transfers In | $ - | $ - | $ - | $ - | $ 604,816 | $ 604,816 |
| Operating Transfers Out | (256,224) | - | - | - | - | (256,224) |
| **Total Other Financing Sources (Uses)** | **$ (256,224)** | **$ -** | **$ -** | **$ -** | **$ 604,816** | **$ 348,592** |
| **NET CHANGE IN FUND BALANCES** | **$ (5,302)** | **$ (15,623)** | **$ 6,665** | **$ 862** | **$ 2** | **$ (13,396)** |
| FUND BALANCE - JANUARY 1, 2021 | 53,468 | 49,094 | 6,358 | 122 | - | 109,042 |
| **FUND BALANCE - DECEMBER 31, 2021** | **$ 48,166** | **$ 33,471** | **$ 13,023** | **$ 984** | **$ 2** | **$ 95,646** |



The accompanying notes are an integral part of these financial statements

# EXHIBIT J3

| 2022 JSU Budget | | | | | |
|---|---|---|---|---|---|
| 448-122 | Administration | $30,000.00 | | | |
| 448-130 | Manager | $84,843.00 | | | |
| 448-131 | Chief Operator | $53,123.00 | | | |
| 448-136 | Mech/OP Trainee (1) | $47,175.00 | | | |
| 448-133 | Chief Mechanic | $53,123.00 | | | |
| 448-134 | Mechanic #2 | $47,840.00 | | | |
| 448-135 | Mechanic Help | $47,175.00 | | | |
| 448-138 | Higher Wages | $5,000.00 | | | |
| 448-141 | Secretary | $22,000.00 | | | |
| 448-151 | Hospital & Life | $160,000.00 | | | |
| 448-163 | Pension | $120,000.00 | | | |
| 448-169 | Social Security | $35,000.00 | | | |
| 448-181 | Contract Sick | $4,900.00 | | | |
| 448-182 | Longevity | $4,550.00 | | | |
| 448-183 | Overtime | $20,000.00 | | | |
| 448-184 | Shift Differential | $1,000.00 | | | |
| 448-185 | Holiday | $15,000.00 | | | |
| 448-351 | Insurance | $35,000.00 | | | |
| 448-354 | Worker's Comp. | $28,000.00 | | | |
| 448-201 | Chemicals | $24,000.00 | | **Total operating expenses:** | |
| 448-202 | Chlorine | $20,000.00 | | **$1,520,246.00** | |
| 448-204 | Sludge Removal | $100,000.00 | | | |
| 448-205 | Grit Removal | $3,000.00 | | | |
| 448-206 | Gasoline & Oil | $5,000.00 | | | |
| 448-207 | School & Seminars | $5,000.00 | | **Estimated billable gallons:** | |
| 448-208 | Natural Gas | $20,000.00 | | **344,727,000** | |
| 448-209 | Electric | $125,000.00 | | | |
| 448-210 | Water | $10,000.00 | | | |
| 448-211 | Telephone | $20,000.00 | | | |
| 448-212 | Uniforms | $3,600.00 | | | |
| 448-213 | Safety Equipment | $7,500.00 | | | |
| 448-214 | Office Supplies | $7,000.00 | | | |
| 448-215 | Petty Cash | $1,000.00 | | | |
| 448-216 | Engineering Services | $12,000.00 | | **Estimated Income: $1,520,246.00** | |
| 448-219 | Repairs, Parts, & Maint. | $140,000.00 | | | |
| 448-220 | Equip. Purchases (Major) | $50,000.00 | | | |
| 448-221 | Permits/Test/Lab | $25,000.00 | | | |
| 448-222 | Bank Charges | $500.00 | | | |
| 448-223 | Janitorial Supplies | $5,000.00 | | | |
| 448-260 | Small Tool Purchases | $3,000.00 | | | |
| 448-341 | Advertising | $1,000.00 | | | |
| 448-421 | Dues & Subscriptions | $200.00 | | | |
| 448-720 | Const. & Improv. | $10,000.00 | | | |
| 493-100 | Operating Reserve | $8,717.00 | | | |
| 448-125 | Line Rental | $100,000.00 | | | |
| **TOTAL** | | $1,520,246.00 | | | |

# EXHIBIT J4

# 2023 JSU Budget

| | | | | | |
|---|---|---|---|---|---|
| 448-122 | Administration | $30,000.00 | | | |
| 448-130 | Manager | $88,234.00 | | | |
| 448-131 | Chief Operator | $55,245.00 | | | |
| 448-136 | Operator Trainee | $49,067.00 | | | |
| 448-133 | Chief Mechanic | $55,245.00 | | | |
| 448-134 | Mechanic #2 | $49,754.00 | | | |
| 448-135 | Mechanic Help | $49,067.00 | | | |
| 448-138 | Higher Wages | $5,200.00 | | | |
| 448-141 | Secretary | $22,641.00 | | | |
| 448-151 | Hospital & Life | $160,000.00 | | | |
| 448-163 | Pension | $130,000.00 | | | |
| 448-169 | Social Security | $40,000.00 | | | |
| 448-181 | Contract Sick | $4,200.00 | | | |
| 448-182 | Longevity | $5,000.00 | | | |
| 448-183 | Overtime | $20,000.00 | | | |
| 448-184 | Shift Differential | $1,000.00 | | | |
| 448-185 | Holiday | $15,000.00 | | | |
| 448-351 | Insurance | $35,000.00 | | | |
| 448-354 | Worker's Comp. | $28,000.00 | | | |
| 448-201 | Chemicals | $30,000.00 | | **Total operating expenses:** | |
| 448-202 | Chlorine | $30,000.00 | | **$1,604,304.00** | |
| 448-204 | Sludge Removal | $105,000.00 | | | |
| 448-205 | Grit Removal | $3,000.00 | | | |
| 448-206 | Gasoline & Oil | $5,000.00 | | | |
| 448-207 | School & Seminars | $3,000.00 | | **Estimated billable gallons:** | |
| 448-208 | Natural Gas | $25,000.00 | | **353,371,000** | |
| 448-209 | Electric | $125,000.00 | | | |
| 448-210 | Water | $12,000.00 | | | |
| 448-211 | Telephone | $25,000.00 | | | |
| 448-212 | Uniforms | $3,600.00 | | | |
| 448-213 | Safety Equipment | $7,500.00 | | | |
| 448-214 | Office Supplies | $5,000.00 | | **Estimated Income** | |
| 448-215 | Petty Cash | $500.00 | | **$1,604,304.00** | |
| 448-216 | Engineering Services | $12,000.00 | | | |
| 448-219 | Repairs, Parts, & Maint. | $140,000.00 | | | |
| 448-220 | Equip. Purchases (Major) | $80,000.00 | | | |
| 448-221 | Permits/Test/Lab | $25,000.00 | | | |
| 448-222 | Bank Charges | $500.00 | | | |
| 448-223 | Janitorial Supplies | $3,000.00 | | | |
| 448-260 | Small Tool Purchases | $3,000.00 | | | |
| 448-341 | Advertising | $1,000.00 | | | |
| 448-421 | Dues & Subscriptions | $200.00 | | | |
| 448-720 | Const. & Improv. | $10,000.00 | | | |
| 493-100 | Operating Reserve | $7,351.00 | | | |
| 448-125 | Line Rental | $100,000.00 | | | |
| **TOTAL** | | $1,604,304.00 | | | |

# EXHIBIT K

DCED-CLGS-30 (9-09)

Received by DCED: 10/13/2022
Approved by DCED: Yes

Department of Community & Economic Development
Governor's Center for Local Government Services
Commonwealth Keystone Building
400 North Street, 4th Floor
Harrisburg, PA 17120-0225
Ph: 888-223-6837 | fax: 717-783-1402

# 2021 MUNICIPAL ANNUAL AUDIT AND FINANCIAL REPORT

## 040152 BEAVER FALLS CITY, BEAVER COUNTY

# BALANCE SHEET

DCED-CLGS-30 (09-09)

**BEAVER FALLS CITY, BEAVER County**

## BALANCE SHEET

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fid. Fund | Account Groups | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | General Fixed Assets | General Long Term Debt | Memorandum Only |
| **Assets and Other Debits** | | | | | | | | | | | |
| 100-120 | Cash and Investments | 1,680,842 | 95,645 | 70,718 | 2 | 2,095,477 | | 28,967,900 | | | 32,910,584 |
| 140-144 | Tax Receivable | 191,926 | | | | | | | | | 191,926 |
| 121-129, 145-149 | Accounts Receivable (excluding taxes) | 198,796 | | | | 591,393 | | 400 | | | 790,589 |
| 130.00 | Due From Other Funds | 241,216 | | | | | | | | | 241,216 |
| 131-139, 150-159 | Other Current Assets | 93,046 | | | | | | 13,378 | | | 106,424 |
| 160-169 | Fixed Assets | | | | | 5,850,634 | | | | | 5,850,634 |
| 180-189 | Other Debits | | | | | | | | | 6,899,153 | 6,899,153 |
| **Total Assets and Other Debits** | | 2,405,826 | 95,645 | 70,718 | 2 | 8,537,504 | | 28,981,678 | | 6,899,153 | 46,990,526 |
| **Liabilities and Other Credits** | | | | | | | | | | | |
| 210-229 | Payroll Taxes and Other Payroll Withholdings | 51,546 | | | | | | | | | 51,546 |
| 200-209, 231-239 | All Other Current Liabilities | 301,224 | | 45,982 | | 27,567 | | 2,473 | | | 377,246 |
| 230.00 | Due To Other Funds | | | | | 241,216 | | | | | 241,216 |

**BEAVER FALLS CITY, BEAVER County**

# BALANCE SHEET

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fid. Fund | Account Groups | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | General Fixed Assets | General Long Term Debt | Memorandum Only |
| **Liabilities and Other Credits** | | | | | | | | | | | |
| 260-269 | Long-Term-Liabilities | | | | | | | | | 6,425,441 | 6,425,441 |
| 240-259 | Current Portion of Long-Term Debt and Other Credits | | | | | | | | | 473,712 | 473,712 |
| **Total Liabilities and Other Credits** | | 352,770 | | 45,982 | | 268,783 | | 2,473 | | 6,899,153 | 7,569,161 |
| **Fund and Account Group Equity** | | | | | | | | | | | |
| 281-284 | Contributed Capital | | | | | | | | | | |
| 290.00 | Investment in General Fixed Assets | | | | | | | | | | |
| 270-289 | Fund Balance / Retained Earnings on 12/31 | 2,053,056 | 95,645 | 24,736 | 2 | 8,268,721 | | 28,979,205 | | | 39,421,365 |
| 291-299 | Other Equity | | | | | | | | | | |
| **Total Fund and Account Group Equity** | | 2,053,056 | 95,645 | 24,736 | 2 | 8,268,721 | | 28,979,205 | | | 39,421,365 |
| **TOTAL LIABILITIES AND FUND AND ACCOUNT GROUP EQUITY** | | | | | | | | | | | 46,990,526 |

**BEAVER FALLS CITY, BEAVER County**

# STATEMENT OF REVENUES AND EXPENDITURES

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **REVENUES** | | | | | | | | | |
| **Taxes** | | | | | | | | | |
| 301.00 | Real Estate Taxes | 1,489,731 | 20,691 | | 558,649 | | | | 2,069,071 |
| 305.00 | Occupation Taxes (levied under municipal code) | | | | | | | | |
| 308.00 | Residence Taxes (levied by cities of the 3rd Class) | 14,273 | | | | | | | 14,273 |
| 309.00 | Regional Asset District Sales Tax (Allegheny County municipalities only) | | | | | | | | |
| 310.00 | Per Capita Taxes | 14,273 | | | | | | | 14,273 |
| 310.10 | Real Estate Transfer Taxes | 96,155 | | | | | | | 96,155 |
| 310.20 | Earned Income Taxes / Wage Taxes | 1,675,197 | | | | | | | 1,675,197 |
| 310.30 | Business Gross Receipts Taxes | 159,035 | | | | | | | 159,035 |
| 310.40 | Occupation Taxes (levied under Act 511) | | | | | | | | |
| 310.50 | Local Services Tax ** | 114,592 | | | | | | | 114,592 |
| 310.60 | Amusement / Admission Taxes | | | | | | | | |
| 310.70 | Mechanical Device Taxes | 101,407 | | | | | | | 101,407 |
| 310.90 | Other: _____ | | | | | | | | |
| | Other: _____ | | | | | | | | |
| **Total Taxes** | | 3,664,663 | 20,691 | | 558,649 | | | | 4,244,003 |
| **Licenses and Permits** | | | | | | | | | |
| 320-322 | All Other Licenses and Permits | 208,462 | | | | | | | 208,462 |
| 321.80 | Cable Television Franchise Fees | 118,670 | | | | | | | 118,670 |
| **Total Licenses and Permits** | | 327,132 | | | | | | | 327,132 |
| **Fines and Forfeits** | | | | | | | | | |
| 330-332 | Fines and Forfeits | 115,123 | 7,030 | | | | | | 122,153 |
| **Total Fines and Forfeits** | | 115,123 | 7,030 | | | | | | 122,153 |

BEAVER FALLS CITY, BEAVER County

# STATEMENT OF REVENUES AND EXPENDITURES

December 31, 2021

## REVENUES

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **Interest, Rents and Royalties** | | | | | | | | | |
| 341.00 | Interest Earnings | 3,108 | 211 | 495 | 2 | 2,708 | | 3,007,323 | 3,013,847 |
| 342.00 | Rents and Royalties | 24,760 | | | | | | | 24,760 |
| **Total Interest, Rents and Royalties** | | 27,868 | 211 | 495 | 2 | 2,708 | | 3,007,323 | 3,038,607 |
| **Federal** | | | | | | | | | |
| 351.03 | Highways and Streets | | | | | | | | |
| 351.09 | Community Development | | | | | | | | |
| 351.00 | All Other Federal Capital and Operating Grants | | | | | | | | |
| 352.01 | National Forest | | | | | | | | |
| 352.00 | All Other Federal Shared Revenue and Entitlements | 436,052 | | | | | | | 436,052 |
| 353.00 | Federal Payments in Lieu of Taxes | | | | | | | | |
| **Total Federal** | | 436,052 | | | | | | | 436,052 |
| **State** | | | | | | | | | |
| 354.03 | Highways and Streets | 47,422 | | | | | | | 47,422 |
| 354.09 | Community Development | | | | | | | | |
| 354.15 | Recycling / Act 101 | 2,268 | | | | | | | 2,268 |
| 354.00 | All Other State Capital and Operating Grants | 81,439 | | | | | | | 81,439 |
| 355.01 | Public Utility Realty Tax (PURTA) | 2,601 | | | | | | | 2,601 |
| 355.02-355.03 | Motor Vehicle Fuel Tax (Liquid Fuels Tax) and State Road Turnback | | 250,716 | | | | | | 250,716 |
| 355.04 | Alcoholic Beverage Licenses | | | | | | | | |
| 355.05 | General Municipal Pension System State Aid | 336,250 | | | | | | | 336,250 |
| 355.07 | Foreign Fire Insurance Tax Distribution | 21,021 | | | | | | | 21,021 |
| 355.08 | Local Share Assessment/Gaming Proceeds | | | | | | | | |
| 355.09 | Marcellus Shale Impact Fee Distribution | 9,851 | | | | | | | 9,851 |

**BEAVER FALLS CITY, BEAVER County**

# STATEMENT OF REVENUES AND EXPENDITURES

**December 31, 2021**

## REVENUES

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| | **State** | | | | | | | | |
| 355.00 | All Other State Shared Revenues and Entitlements | | | | | | | | |
| 356.00 | State Payments in Lieu of Taxes | | | | | | | | |
| | **Total State** | 500,852 | 250,716 | | | | | | 751,568 |
| | **Local Government Units** | | | | | | | | |
| 357.03 | Highways and Streets | | | | | | | | |
| 357.00 | All Other Local Governmental Units Capital and Operating Grants | | | | | | | | |
| 358.00 | Local Government Unit Shared Payments for Contracted Intergovernmental Services | | | | | | | | |
| 359.00 | Local Governmental Units and Authorities Payments in Lieu of Taxes | 33,625 | | | | | | | 33,625 |
| | **Total Local Government Units** | 33,625 | | | | | | | 33,625 |
| | **Charges for Service** | | | | | | | | |
| 361.00 | General Government | 180,183 | | | | | | | 180,183 |
| 362.00 | Public Safety | 398,688 | | | | | | | 398,688 |
| 363.20 | Parking | 31,303 | | | | | | | 31,303 |
| 363.00 | All Other Charges for Highway & Street Services | | | | | | | | |
| 364.10 | Wastewater / Sewage (including connection / tapping fees, sewer usage charges, reserve capacity fee, etc.) | 550,000 | | | | 2,399,988 | | | 2,949,988 |
| 364.30 | Solid Waste Collection and Disposal Charge (trash) | 930,130 | | | | | | | 930,130 |
| 364.60 | Host Municipality Benefit Fee for Solid Waste Facility | | | | | | | | |
| 364.00 | All Other Charges for Sanitation Services | | | | | | | | |
| 365.00 | Health | | | | | | | | |
| 366.00 | Human Services | | | | | | | | |
| 367.00 | Culture and Recreation | | | | | | | | |
| 368.00 | Airports | | | | | | | | |

BEAVER FALLS CITY, BEAVER County

# STATEMENT OF REVENUES AND EXPENDITURES

December 31, 2021

## REVENUES

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **Charges for Service** | | | | | | | | | |
| 369.00 | Bars | | | | | | | | |
| 370.00 | Cemeteries | | | | | | | | |
| 372.00 | Electric System | | | | | | | | |
| 373.00 | Gas System | | | | | | | | |
| 374.00 | Housing System | | | | | | | | |
| 375.00 | Markets | | | | | | | | |
| 377.00 | Transit Systems | | | | | | | | |
| 378.00 | Water System | 801,395 | | | | | | | 801,395 |
| 379.00 | All Other Charges for Service | | | | | | | | |
| **Total Charges for Service** | | 2,891,699 | | | | 2,399,988 | | | 5,291,687 |
| **Unclassified Operating Revenues** | | | | | | | | | |
| 383.00 | Special Assessments | | | | | | | | |
| 386.00 | Escheats (sale of personal property) | | | | | | | | |
| 387.00 | Contributions and Donations from Private Sectors | 18,919 | 7,805 | | | | | | 26,724 |
| 388.00 | Fiduciary Fund Pension Contributions | | | | | | | 1,280,576 | 1,280,576 |
| 389.00 | All Other Unclassified Operating Revenues | | | | | | | | |
| **Total Unclassified Operating Revenues** | | 18,919 | 7,805 | | | | | 1,280,576 | 1,307,300 |
| **Other Financing Sources** | | | | | | | | | |
| 391.00 | Proceeds of General Fixed Asset Disposition | 1,002,100 | | | | | | | 1,002,100 |
| 392.00 | Interfund Operating Transfers | 835,564 | | 5,300 | 604,816 | | | | 1,445,680 |
| 393.00 | Proceeds of General Long-Term Debt | | | | | | | | |
| 394.00 | Proceeds of Short Term-Debt | 500,000 | | | | | | | 500,000 |

**BEAVER FALLS CITY, BEAVER County**

## STATEMENT OF REVENUES AND EXPENDITURES

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **REVENUES** | | | | | | | | | |
| **Other Financing Sources** | | | | | | | | | |
| 395.00 | Refunds of Prior Year Expenditures | 146,826 | | | | | | | 146,826 |
| **Total Other Financing Sources** | | 2,484,490 | | 5,300 | 604,816 | | | | 3,094,606 |
| **TOTAL REVENUES** | | 10,500,423 | 286,453 | 5,795 | 1,163,467 | 2,402,696 | | 4,287,899 | 18,646,733 |
| **EXPENDITURES** | | | | | | | | | |
| **General Government** | | | | | | | | | |
| 400.00 | Legislative (Governing) Body | 22,234 | | | | | | | 22,234 |
| 401.00 | Executive (Manager or Mayor) | 63,335 | | | | | | | 63,335 |
| 402.00 | Auditing Services / Financial Administration | 91,741 | | | | | | | 91,741 |
| 403.00 | Tax Collection | 36,704 | | | | | | | 36,704 |
| 404.00 | Solicitor / Legal Services | 37,155 | | | | | | | 37,155 |
| 405.00 | Secretary / Clerk | 61,096 | | | | | | | 61,096 |
| 406.00 | Other General Government Administration | 116,073 | | 73,831 | | | | | 189,904 |
| 407.00 | IT-Networking Services-Data Processing | 16,106 | | | | | | | 16,106 |
| 408.00 | Engineering Services | 4,981 | | | | | | | 4,981 |
| 409.00 | General Government Buildings and Plant | 24,861 | | 83,883 | | | | | 108,744 |
| **Total General Government** | | 474,286 | | 157,714 | | | | | 632,000 |
| **Public Safety** | | | | | | | | | |
| 410.00 | Police | 1,919,452 | 22,935 | 93,573 | | | | | 2,035,960 |
| 411.00 | Fire | 874,471 | | 78,178 | | | | | 952,649 |
| 412.00 | Ambulance / Rescue | | | | | | | | |
| 413.00 | UCC and Code Enforcement | | | 33,827 | | | | | 33,827 |

BEAVER FALLS CITY, BEAVER County

# STATEMENT OF REVENUES AND EXPENDITURES

December 31, 2021

## EXPENDITURES

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **Public Safety** | | | | | | | | | |
| 414.00 | Planning and Zoning | | | | | | | | |
| 415.00 | Emergency Management and Communications | 599 | | | | | | | 599 |
| 416.00 | Militia and Armories | | | | | | | | |
| 417.00 | Examination of Licensed Occupations | | | | | | | | |
| 418.00 | Public Scales (weights and measures) | | | | | | | | |
| 419.00 | Other Public Safety | | | | | | | | |
| **Total Public Safety** | | 2,794,522 | 22,935 | 205,578 | | | | | 3,023,035 |
| **Health and Human Services** | | | | | | | | | |
| 420.00-425.00 | Health and Human Services | 89,632 | | | | | | | 89,632 |
| **Total Health and Human Services** | | 89,632 | | | | | | | 89,632 |
| **Public Works - Sanitation** | | | | | | | | | |
| 426.00 | Recycling Collection and Disposal | | | | | | | | |
| 427.00 | Solid Waste Collection and Disposal (garbage) | 676,588 | | | | | | | 676,588 |
| 428.00 | Weed Control | | | | | | | | |
| 429.00 | Wastewater / Sewage Treatment and Collection | | | | | 825,209 | | | 825,209 |
| **Total Public Works - Sanitation** | | 676,588 | | | | 825,209 | | | 1,501,797 |
| **Public Works - Highways and Streets** | | | | | | | | | |
| 430.00 | General Services - Administration | 753,703 | | 105,854 | | | | | 859,557 |
| 431.00 | Cleaning of Streets and Gutters | | | | | | | | |
| 432.00 | Winter Maintenance – Snow Removal | 121,227 | | | | | | | 121,227 |
| 433.00 | Traffic Control Devices | 4,438 | | | | | | | 4,438 |
| 434.00 | Street Lighting | 227,502 | | | | | | | 227,502 |

BEAVER FALLS CITY, BEAVER County

# STATEMENT OF REVENUES AND EXPENDITURES

December 31, 2021

## EXPENDITURES

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **Public Works - Highways and Streets** | | | | | | | | | |
| 435.00 | Sidewalks and Crosswalks | | | | | | | | |
| 436.00 | Storm Sewers and Drains | 1,421 | | 569 | | | | | 1,990 |
| 437.00 | Repairs of Tools and Machinery | 834 | | | | | | | 834 |
| 438.00 | Maintenance and Repairs of Roads and Bridges | 9,981 | | 89,748 | | | | | 99,729 |
| 439.00 | Highway Construction and Rebuilding Projects | | | | | | | | |
| **Total Public Works - Highways and Streets** | | 1,119,106 | | 196,171 | | | | | 1,315,277 |
| **Other Public Works Enterprises** | | | | | | | | | |
| 440.00 | Airports | | | | | | | | |
| 441.00 | Cemeteries | | | | | | | | |
| 442.00 | Electric System | | | | | | | | |
| 443.00 | Gas System | | | | | | | | |
| 444.00 | Markets | | | | | | | | |
| 445.00 | Parking | | | | | | | | |
| 446.00 | Storm Water and Flood Control | | | | | | | | |
| 447.00 | Transit System | | | | | | | | |
| 448.00 | Water System | 372,947 | | 1,200 | | 1,455,727 | | | 1,829,874 |
| 449.00 | Water Transport and Terminals | | | | | | | | |
| **Total Other Public Works Enterprises** | | 372,947 | | 1,200 | | 1,455,727 | | | 1,829,874 |
| **Culture and Recreation** | | | | | | | | | |
| 451.00 | Culture-Recreation Administration | | | 1,865 | | | | | 1,865 |
| 452.00 | Participant Recreation | | | | | | | | |
| 453.00 | Spectator Recreation | | | | | | | | |
| 454.00 | Parks | 12,401 | | | | | | | 12,401 |

**BEAVER FALLS CITY, BEAVER County**

## STATEMENT OF REVENUES AND EXPENDITURES

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **EXPENDITURES** | | | | | | | | | |
| **Culture and Recreation** | | | | | | | | | |
| 455.00 | Shade Trees | | | | | | | | |
| 456.00 | Libraries | | | | | | | | |
| 457.00 | Civil and Military Celebrations | | | | | | | | |
| 458.00 | Senior Citizens' Centers | | | | | | | | |
| 459.00 | All Other Culture and Recreation | | | | | | | | |
| **Total Culture and Recreation** | | 12,401 | | 1,865 | | | | | 14,266 |
| **Community Development** | | | | | | | | | |
| 461.00 | Conservation of Natural Resources | | | | | | | | |
| 462.00 | Community Development and Housing | | | | | | | | |
| 463.00 | Economic Development | | | | | | | | |
| 464.00 | Economic Opportunity | | | | | | | | |
| 465-469 | All Other Community Development | | | | | | | | |
| **Total Community Development** | | | | | | | | | |
| **Debt Service** | | | | | | | | | |
| 471.00 | Debt Principal (short-term and long-term) | 553,022 | | | 410,000 | | | | 963,022 |
| 472.00 | Debt Interest (short-term and long-term) | 29,266 | | | 194,816 | | | | 224,082 |
| 475.00 | Fiscal Agent Fees | 1,100 | | 1,500 | | | | | 2,600 |
| **Total Debt Service** | | 583,388 | | 1,500 | 604,816 | | | | 1,189,704 |
| **Employer Paid Benefits and Withholding Items** | | | | | | | | | |
| 481.00 | Employer Paid Withholding Taxes and Unemployment Compensation | 134,536 | | | | | | | 134,536 |
| 482.00 | Judgments and Losses | | | | | | | | |
| 483.00 | Pension / Retirement Fund Contributions | 1,114,724 | | | | | | | 1,114,724 |

**BEAVER FALLS CITY, BEAVER County**

## STATEMENT OF REVENUES AND EXPENDITURES

**December 31, 2021**

| | | Governmental Funds | | | | Proprietary Funds | | Fiduciary Fund | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | General Fund | Special Revenue (Including State Liquid Fuels) | Capital Projects | Debt Service | Enterprise | Internal Service | Trust and Agency | Memorandum Only |
| **EXPENDITURES** | | | | | | | | | |
| **Employer Paid Benefits and Withholding Items** | | | | | | | | | |
| 484.00 | Worker Compensation Insurance | 188,116 | | | | | | | 188,116 |
| 487.00 | Other Group Insurance Benefits | 800,576 | | | | | | | 800,576 |
| **Total Employer Paid Benefits and Withholding Items** | | 2,237,952 | | | | | | | 2,237,952 |
| **Insurance** | | | | | | | | | |
| 486.00 | Insurance, Casualty, and Surety | 124,745 | | | | | | | 124,745 |
| **Total Insurance** | | 124,745 | | | | | | | 124,745 |
| **Unclassified Operating Expenditures** | | | | | | | | | |
| 488.00 | Fiduciary Fund Benefits and Refunds Paid | | | | | | | 1,420,997 | 1,420,997 |
| 489.00 | All Other Unclassified Expenditures | | | | | | | 135,194 | 135,194 |
| **Total Unclassified Operating Expenditures** | | | | | | | | 1,556,191 | 1,556,191 |
| **Other Financing Uses** | | | | | | | | | |
| 491.00 | Refund of Prior Year Revenues | | | | | | | | |
| 492.00 | Interfund Operating Transfers | 610,116 | 276,915 | | 558,649 | | | | 1,445,680 |
| 493.00 | All Other Financing Uses | | | | | | | | |
| **Total Other Financing Uses** | | 610,116 | 276,915 | | 558,649 | | | | 1,445,680 |
| **TOTAL EXPENDITURES** | | 9,095,683 | 299,850 | 564,028 | 1,163,465 | 2,280,936 | | 1,556,191 | 14,960,153 |
| **EXCESS/DEFICIT OF REVENUES OVER EXPENDITURES** | | 1,404,740 | -13,397 | -558,233 | 2 | 121,760 | | 2,731,708 | 3,686,580 |

**BEAVER FALLS CITY**

**December 31, 2021**

## DEBT STATEMENT

**OUTSTANDING BONDS AND NOTES**
**Listed below are all currently outstanding bond and note issues according to our files, excluding bond issues redeemed or refunded and defeased. Please show the principal payments and make any other necessary corrections and additions.**

| Purpose | Bond (B) Capital Lease (C) Lease Rental (L) Note (N) | Issue Year (yyyy) | Maturity Year (yyyy) | Original Amount of Issue | Outstanding Beginning of Year (1) | Principal Incurred This Year | Principal Paid This Year | Current Year Accretion on Compound Interest Bonds | Outstanding at Year End (1) | Plus (less) Unamortized Premium (Discount) | Total Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **General Obligation Bonds and Notes** | | | | | | | | | | | |
| | | | | | | | | | | | |
| General Obligation Bond | Bond | 2017 | 2034 | 2,380,000 | 2,330,000 | | 10,000 | | 2,320,000 | | 2,320,000 |
| General Obligation Note | Note | 2017 | 2030 | 5,880,000 | 4,485,000 | | 400,000 | | 4,085,000 | | 4,085,000 |
| **Revenue Bonds and Notes** | | | | | | | | | | | |
| | | | | | | | | | | | |
| TAN | Note | 2021 | 2021 | 500,000 | 0 | 500,000 | 500,000 | | 0 | | 0 |
| **Lease Rental Debt** | | | | | | | | | | | |
| | | | | | | | | | | | |
| FNB Loan | Note | 2019 | 2029 | 600,000 | 547,175 | | 53,022 | | 494,153 | | 494,153 |
| **Other** | | | | | | | | | | | |
| | | | | | | | | | | | |

(1) - excludes unamortized premium/discount

| | |
|---|---|
| **Total bonds and notes outstanding** | 6,899,153 |
| **Capitalized lease obligations** | 0 |
| **Net debt** | 6,899,153 |

**BEAVER FALLS CITY, BEAVER County**

## STATEMENT OF CAPITAL EXPENDITURES

**December 31, 2021**

| Category | Capital Purchases | Capital Construction | Total |
|---|---|---|---|
| Community Development | | | |
| Electric | | | |
| Fire | 66,242 | | 66,242 |
| Gas System | | | |
| General Government | 33,827 | | 33,827 |
| Health | | | |
| Housing | | | |
| Libraries | | | |
| Mass Transit | | | |
| Parks | | | |
| Police | 90,570 | | 90,570 |
| Recreation | | | |
| Sewer | | | |
| Solid Waste | 73,283 | | 73,283 |
| Streets / Highways | 113,891 | | 113,891 |
| Water | | | |
| Other: _____ | | | |
| **TOTAL CAPITAL EXPENDITURES** | 377,813 | | 377,813 |

## EMPLOYEE COMPENSATION

| | |
|---|---|
| Total salaries, wages, commissions, etc. paid this year (including all employees and elected officials) | 3,612,717 |

**Independent Public Accountant/Certified Public Accountant Submission Page**
**Opinion page was provided in lieu of signature page.**

## SIGNATURE AND VERIFICATION

Signed: Mark C. Turnley Appointed Auditor/CPA

DCED-CLGS-30 (9-09)

**December 31, 2021**

## NOTES / COMMENTS

# EXHIBIT L

# Commonwealth of Pennsylvania

## Department of Environmental Protection

*In accordance with the*
*State Board for Certification of Water and Wastewater Systems Operators*
*and the Regulations of the*
*Department of Environmental Protection*

**JOSEPH M DURISH JR**

*Is Hereby Authorized to Operate*
**WASTEWATER SYSTEM**

**Class: A,E, Wastewater**
**Subclass: 2,4**

**Client ID: 296046**

**JOSEPH M DURISH JR**
[redacted]

Issue Date Jan 1, 2023
Expiration Date Dec 31, 2025

Mary Roland
Board Chairperson

**Certificate No. S18320**

# EXHIBIT M1

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST REGIONAL OFFICE

March 10, 2010

The City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Re: Sewage
Part II Permit No. 0472402
Amendment No. 4
City of Beaver Falls
Beaver County

Dear Permittee:

We are approving your proposal to enlarge the secondary pump station wet well as outlined in your consulting engineer's February 23, 2010 letter and supporting documentation.

This letter serves as Amendment No. 4 to Sewage Permit No. 0472402 originally issued by the Department on November 3, 1972 and subsequently amended on November 5, 1991, July 30, 1992, and March 16, 1996.

The approval of the previously permitted overflow line from the pumping station is contingent upon its use only in case of power or equipment failure. Should the use of the line become frequent or should objectionable conditions result therefrom, the permittee shall submit plans for and install equipment to prevent such discharge or overflow. In case of sewage overflow, the overflowing sewage shall receive a minimum of primary treatment and chlorination. Conveyance and treatment of existing sewage flows shall be maintained during construction.

Should you have any questions or comments, please feel free to contact David Ponchione of my staff at the address or telephone number on this letter.

Sincerely,

Samuel C. Harper
Program Manager
Water Management

cc: Mark T. Kennedy – Widmer Engineering

400 Waterfront Drive, Pittsburgh, PA 15222-4745
412.442.4000 FAX 412.442.5885
Printed on Recycled Paper
www.dep.state.pa.us

February 23, 2010

Mr. Donald Leone, P.E.
Water Management
PA Department of Environmental Protection
400 Waterfront Avenue
Pittsburgh, PA 15222-4745

WIDMER ENGINEERING INC.

**RE: Beaver Falls Water Pollution Control Plant**
**Letter Modification to Water Quality, Management Permit**
**WQM No. 0472402-A3, NPDES Permit No. PA0026883**

Dear Mr. Leone:

This letter is written on behalf of the City of Beaver Falls to request a letter modification to the City's wastewater treatment plant water quality management permit (Part II permit). I am proposing that the secondary pump station wet well surface area be enlarged in order to optimize pump response to rapid flow increases that occur during rainfall events. Enlarging the wet well surface area will slow the vertical rise of the influent water surface during peak flow periods and allow the automatic pump controls to adjust pump speeds more gently and maintain a stable water surface elevation below the wet well overflow pipe invert.

This plant modification does not change any treatment process or flow rating but merely increases the size of the existing wet well. Based on my conversation with Mr. Kevin Halloran, a letter amendment to the Part II Permit was the best means for proceeding with this project.

I have enclosed the project plans and design calculations for your review. The plans, specifications and contract documents for this work have been prepared and the City is ready to proceed as soon as your approval is obtained. Please feel free to call me with questions.

Sincerely,

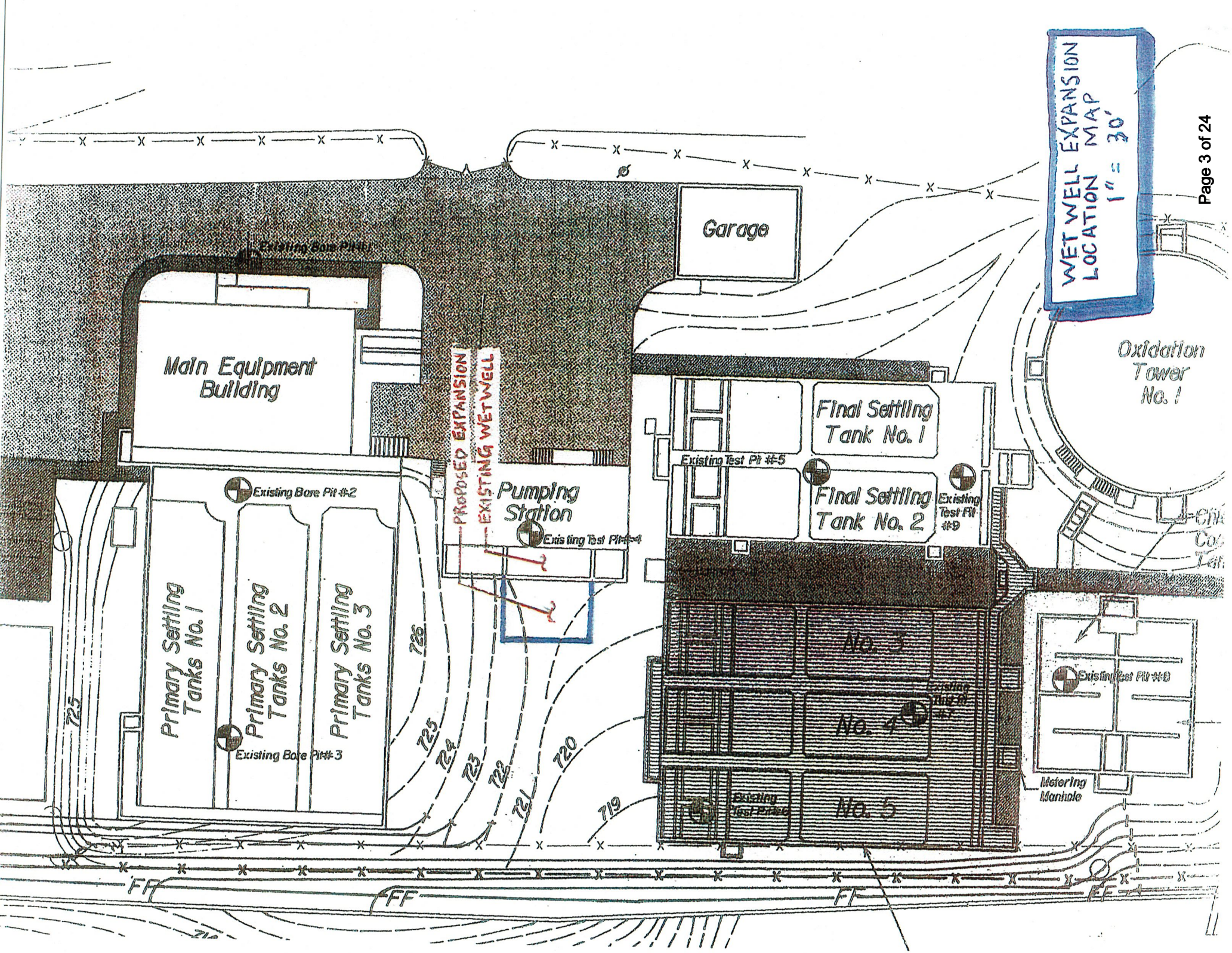
**WIDMER ENGINEERING INC.**

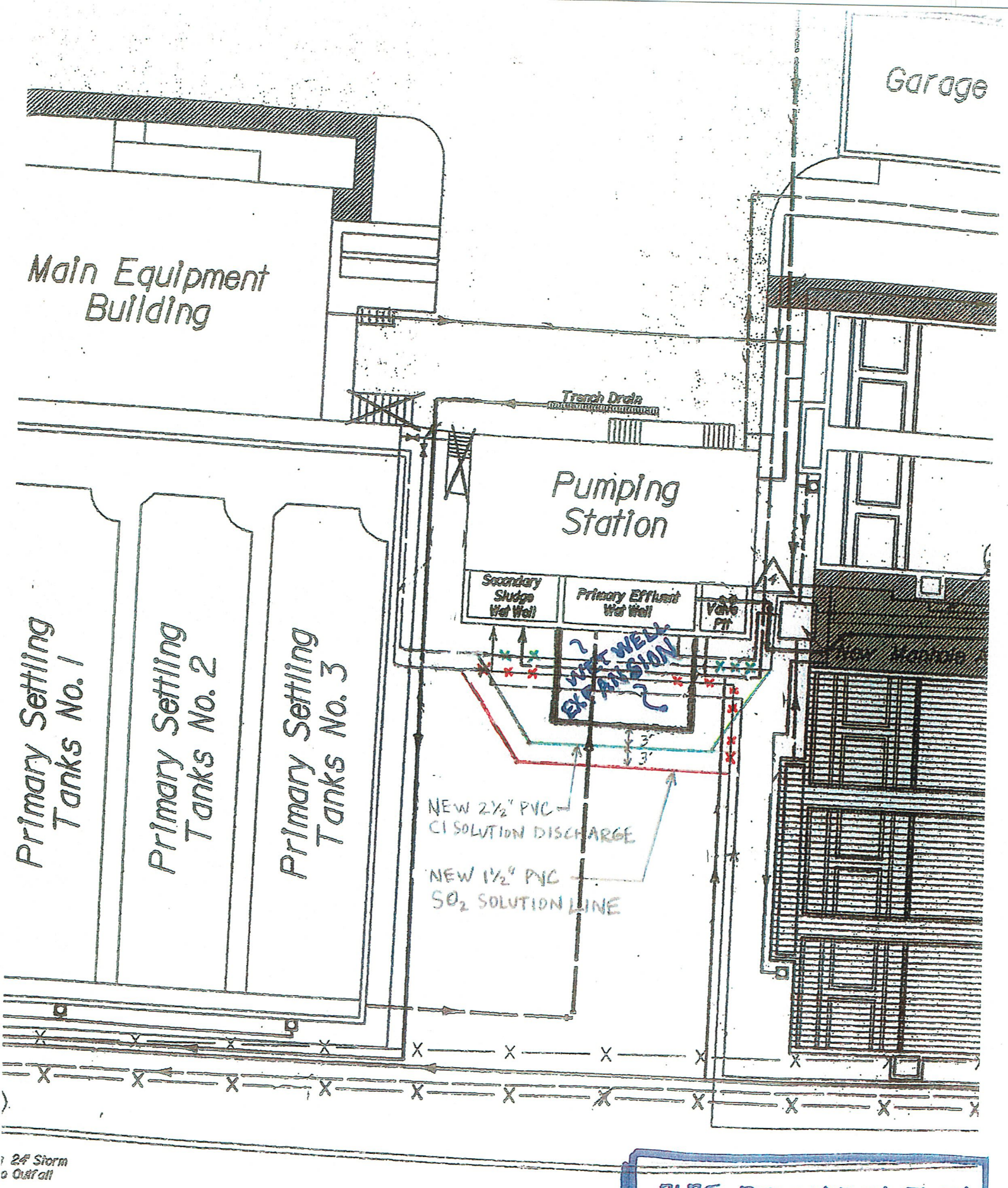
Mark T. Kennedy, P.E.
Project Manager

Enclosures: 1. Project Plans
2. Engineers Design Report/Calculations

cc w/encl : Kevin Holloran, DEP
Steve Johnson, City of Beaver Fall
Jim Breznai, City of Beaver Falls Water Pollution Control Plant

10032-0004

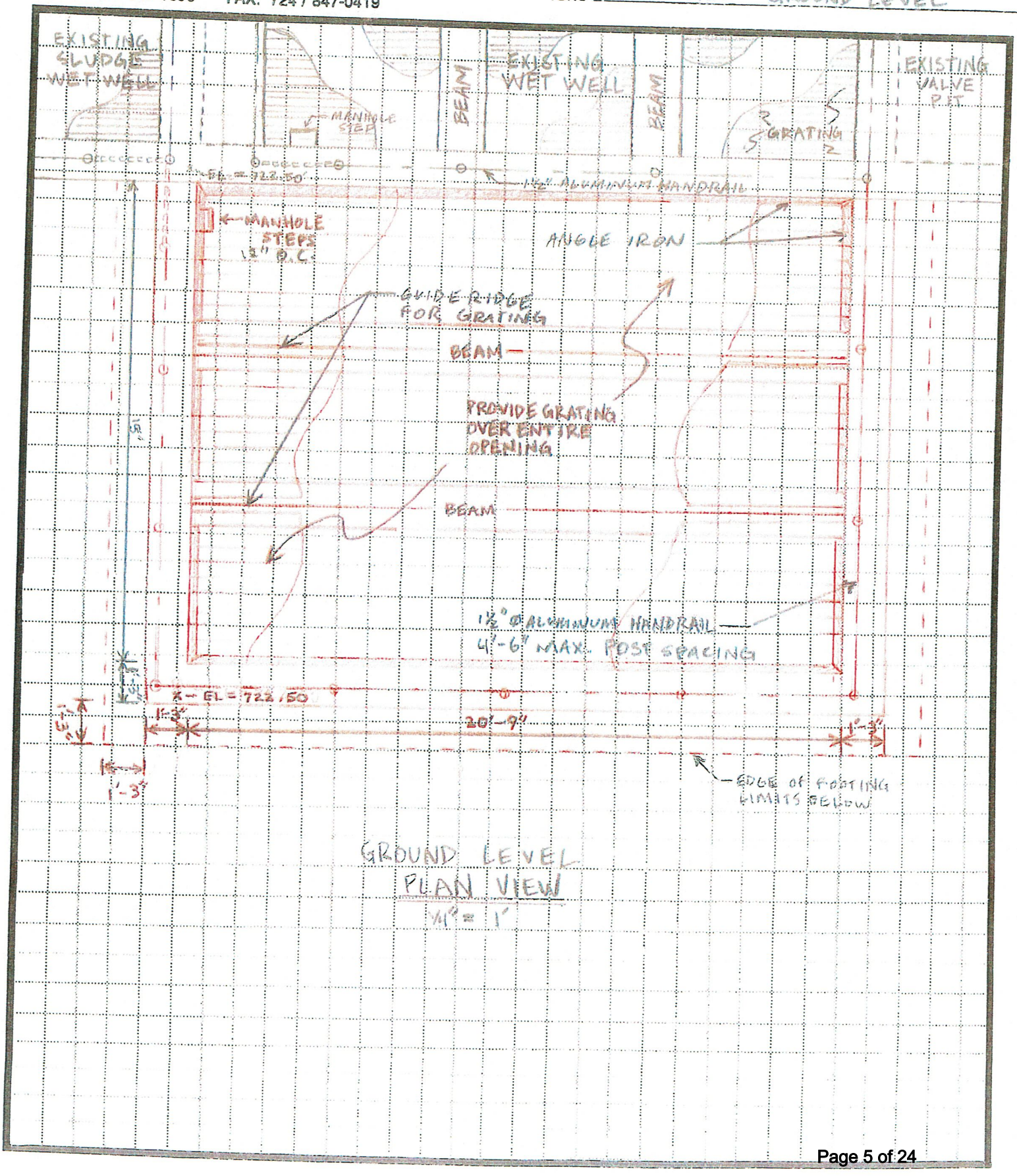

WET WELL EXPANSION
LOCATION MAP
1" = 30'
Garage
Main Equipment Building
Existing Bore Pit #1
Existing Bore Pit #2
Existing Bore Pit #3
Primary Settling Tanks No. 1
Primary Settling Tanks No. 2
Primary Settling Tanks No. 3
PROPOSED EXPANSION
EXISTING WETWELL
Pumping Station
Existing Test Pit #4
Existing Test Pit #5
Final Settling Tank No. 1
Final Settling Tank No. 2
Existing Test Pit #9
Oxidation Tower No. 1
No. 3
No. 4
No. 5
Existing Test Pit #8
Metering Manhole
725
726
724
723
722
721
720
719
FF
FF
FF




PIPE RELOCATION PLAN
1" = 20'

WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1698 FAX: 724 / 847-0419

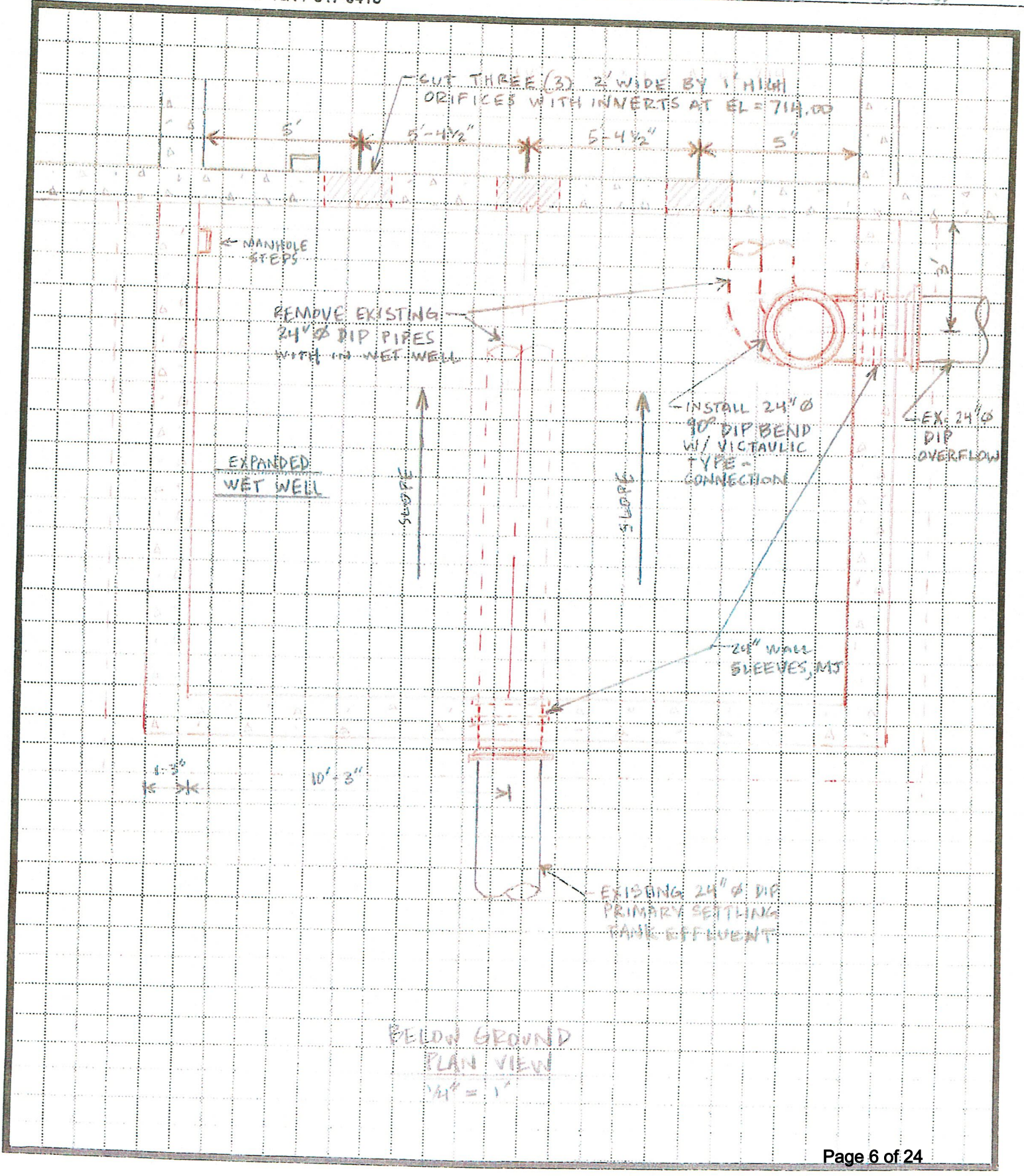
JOB 10032 - WET WELL EXPANSION
SHEET NO. 1 OF 4
CALCULATED BY MJD DATE 2/2/10
CHECKED BY MTK DATE 2/16/10
TOPIC PLAN VIEW - GROUND LEVEL




GROUND LEVEL
PLAN VIEW
¼" = 1'

WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1696 FAX: 724 / 847-0419

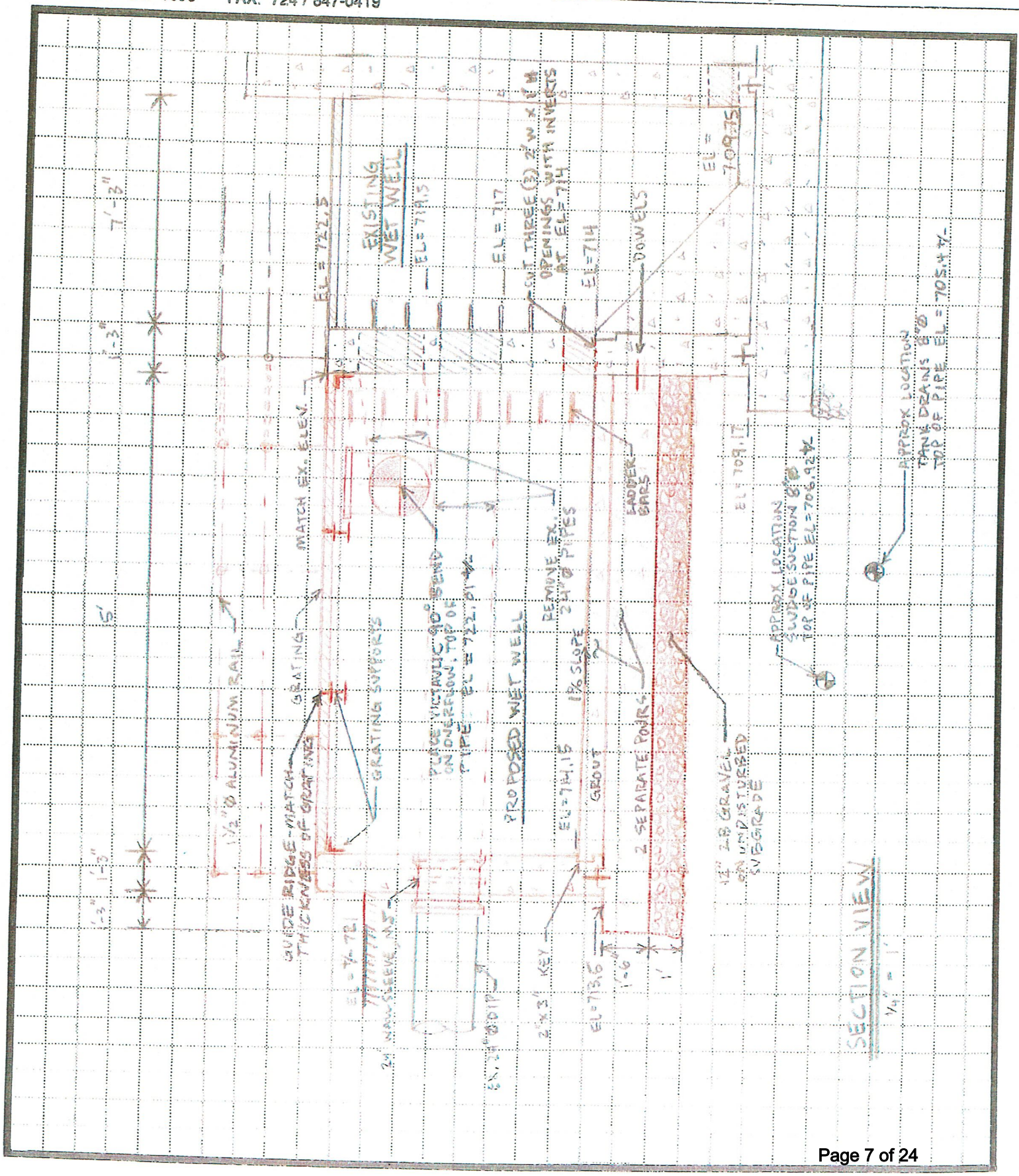
JOB 10032 - WET WELL EXPANSION
SHEET NO. 2 OF 4
CALCULATED BY MJD DATE 2/2/10
CHECKED BY MTK DATE 2/16/10
TOPIC PLAN VIEW - BELOW GROUND




BELOW GROUND
PLAN VIEW
¼" = 1'

WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1696 FAX: 724 / 847-0419

JOB 10032 - WET WELL EXPANSION
SHEET NO. 3 OF 4
CALCULATED BY MJD DATE 2/2/10
CHECKED BY MTK DATE 2/16/10
TOPIC SECTION VIEW



WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1696 FAX: 724 / 847-0419

JOB BF WPCP Secondary Wet well
SHEET NO. 1 OF 3
CALCULATED BY MTK DATE 2-23-10
CHECKED BY MJD DATE 2/23/10
TOPIC Wet Well Expansion Calcs

Top area of existing secondary wet well:

$7'-3'' \times (10'-3'' + 7'-6'' + 3') = 150.44\ ft^2$

Time for pumps to react to rising water surface rates:

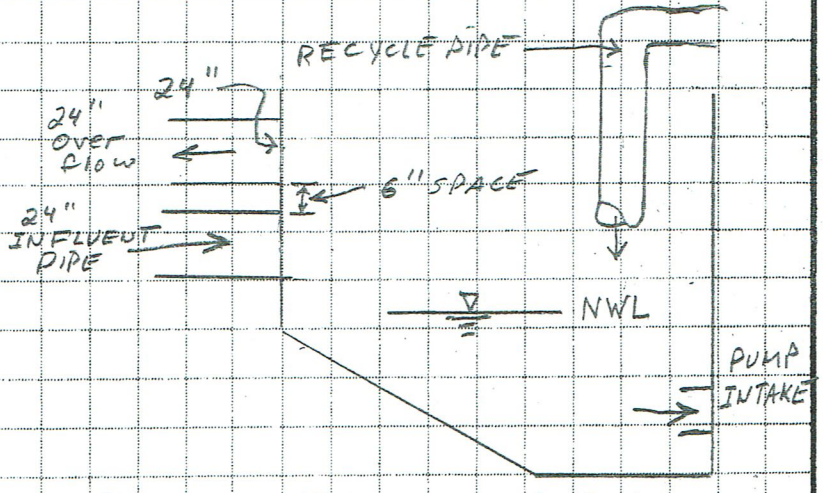
| FLOW (MGD) | Time for 1 vertical foot rise (SECONDS) |
|---|---|
| 1 | 97.24 |
| 2 | 48.62 |
| 4 | 24.31 |
| 8 | 12.15 |
| 10 | 9.72 |

Ex: $1.547 \frac{cft}{sec} = 1\ MGD$

$\frac{150.44\ ft^2}{1.547\ ft^3/s} = 97.24\ s$

There is only 6" between the crown of the influent pipe and the invert of the overflow pipe

BF WPCP Normally operates at 6.5 MGD including recycle. Flows can jump to 8, 10, or 12 MGD during significant rainfall.




WET WELL PROFILE

Compare New Brighton secondary wet well (operates w/o bypass and uses similar pumps/controls).

Wet well area: $26'-6 \times 11' = 291.5\ sf$

1 foot vertical rise @ 6 MGD (max) $= \frac{291.5}{(6)(1.547)} = 31.4\ sec$

∴ ½ Twice the area, Twice the rise time.

∴ BF WPCP wet well is too small.

WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1696 FAX: 724 / 847-0419

JOB BF WPCP SECONDARY WET WELL
SHEET NO. 2 OF 3
CALCULATED BY MTK DATE 2-23-10
CHECKED BY MJD DATE 2/23/10
TOPIC WET WELL EXPANSION CALCS

## SIZE EXPANDED BF WPCP WET WELL

TRY 31 seconds @ 8 MGD. (31 seconds is adequate FOR THE NEW BRIGHTON WWTP)

$$\frac{(31\text{ s})}{(1\text{ ft})}(8)\left(1.547\ \frac{\text{cf}}{\text{MGD}\cdot\text{sec}}\right) = 383.65\text{ sf of Area needed.}$$

$-150.44$ sf (Existing WET WELL AREA)

ADDL' AREA NEEDED = 233.21 SF

KEEP SAME WET WELL WIDTH DUE TO SPACE CONSTRAINTS, EXTEND LENGTH INTO THE YARD

$$\frac{233.21\text{ sf}}{20.75'} = 11.24'\text{ into the yard.}$$

TRY 15' for higher flows (10, 12 MGD)

AREA = $20.75 \times (15' + 7'\text{-}3'') = 461.68$ sf

AT 8 MGD : $\frac{461.68}{8\ (1.547)} = 37.3$ sec / VERTICAL FOOT RISE

AT 10 MGD $\Rightarrow$ 29.8 sec / VF RISE

$\therefore$ 15 ADDED FEET OF LENGTH SHOULD ALLOW BF PUMPS TO ADJUST FLOW RATES AUTOMATICALLY AND PREVENT MINOR BYPASSING EPISODES.

WIDMER ENGINEERING INC.
CONSULTING ENGINEERS
806 Lincoln Place • Beaver Falls, PA 15010
Phone: 724 / 847-1696 FAX: 724 / 847-0419

JOB 10032 BF WET WELL EXPANSION
SHEET NO. 3 OF 3
CALCULATED BY MJD DATE 2/23/10
CHECKED BY MTK DATE 2-23-10
TOPIC REFERENCES

| ATTACHMENT NO. | DRAWING SET | SHEET NO. | NOTES |
|---|---|---|---|
| 1 | BF WWTP UPGRADE 1995 | 18 OF 55 | 20'-9" x 7'-3" MEASUREMENTS NOTED & 6" BETWEEN CROWN OF INFLUENT & INVERT OF OVER-FLOW PIPE NOTED |
| 2 | BF WWTP SECONDARY TREATMENT ADDITIONS 1972 | 6 OF 37 | NWL ELEV IS BELOW CROWN OF INFLUENT PIPE |
| 3 | " " " " " " | 15 OF 37 | " " |
| 4 | NB WWTP SECONDARY TREATMENT ADDITIONS 1972 | 15 OF 39 | 26'-6" x 11'-9" MEASUREMENTS NOTED |

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER QUALITY MANAGEMENT

WATER QUALITY MANAGEMENT PERMIT NO. 0472402-A3

**A. PERMITTEE**

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

**B. LOCATION**

Municipality: City of Beaver Falls

County: Beaver

**C. TYPE OF FACILITY OR ESTABLISHMENT**

Sewage Treatment Plant Expansion
Interceptor Sewer Expansion

**D. NAME OF PLANT, AREA SERVED, ETC.**

Beaver Falls STP

**E. THIS PERMIT APPROVES**

1. Plans for construction of:
   [X] Treatment Facilities [ ] Outfall or Headwall [ ] Impoundment
   [X] Sewers and Appurtenances [ ] Stream Crossing [ ] Pump Station
   [ ] Injection Well [ ]
2. [ ] The discharge of _____
   to _____
3. [ ] An Erosion and Sedimentation Control Plan. Project Area is _____ acres.
4. [ ] Preparedness, Prevention, Contingency (PPC) Plan.

**F. THIS APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS**

1. All construction, operations, procedures, and discharge shall be in accordance with the application dated March, 1995, its supporting documentation, and amendments dated through February 15, 1996. Such application, its supporting documentation and amendments are hereby made part of this permit.
2. Conditions 1,2,3,4,5,6,7,9,10,11,12,13,14,16,19,20,21,22 of the Standard Conditions Relating to Sewerage - Part II Permits dated September 2, 1983, and all of the Standard Conditions Relating to Erosion Control for use in Water Quality Management Permits (August, 1991) which conditions are attached and made part of this permit.
3. Special Conditions designated A, B, C, D, E, F which are attached and made part of this permit.

**G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS**

1. If there is a conflict between the application or its supporting documentation and amendments and the standard or special conditions, the standard or special conditions shall apply.
2. Failure to comply with the rules and regulations of the Department or with the terms or conditions of of this permit shall void the authority given to the permittee by the issuance of the permit.
3. This permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987 as amended, 35 P.S. §691.1 et seq., and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §693.1 et seq. Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

**H. PERMIT ISSUED**

DATE MAR 18 1996

BY _____
Tim V. Dreier, P.E.
Water Management Program Manager

## SPECIAL CONDITIONS FOR PART II PERMIT 0472402-A3

A. The authority granted by this permit is subject to all effluent requirements, monitoring requirements, and other conditions as set forth in Part I NPDES Permit PA0026883.

B. Conveyance and treatment of existing sewage flows shall be maintained during construction. No bypassing or discharge of inadequately treated sewage is authorized by this permit.

C. In accordance with the information submitted in support of this permit, sludge is to be disposed at Joseph Brunner Landfill (Permit 101439). Any change from this procedure must receive prior approval in writing from the Department.

D. The Beaver County Conservation District shall be notified prior to the start of earth moving associated with the construction of the herein approved project.

E. The permittee shall comply with Chapter 102 of the Department's Rules and Regulations regarding erosion control. Chapter 102 requires, in part, that the erosion control plan be available at work sites at all times, that all upslope surface water be diverted away from the project areas, that runoff from project areas pass through facilities for removal of sediment, that all disturbed areas be stabilized as soon as possible after final grade or final earthmoving, that interim stabilization measures be implemented promptly where it is not possible to permanently stabilize a disturbed area immediately after final earthmoving or where the activity ceases for more than 20 days, that erosion and sedimentation control facilities be maintained until stabilization is completed, and that all unnecessary and unusable control measures and facilities be removed upon completion of stabilization.

F. The requirements of Act 1989-32, the Storage Tank and Spill Prevention Act, must be met for installation of the fuel tank to be used with the emergency generator.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
SOUTHWEST REGION - FIELD OPERATIONS
WATER QUALITY MANAGEMENT
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745
(412) 442-4000 (answers 24 hrs.)

CERTIFIED MAIL #P 249 041 370

JUL 30 1992

City of Beaver Falls
Perry C. Wayne, Jr.
City Clerk/Coordinator
715 15th Street
Beaver Falls, PA 15010

RE: Part II Permit No. 0472402-A2
Sewer Line Relocations/Repairs
Patterson Avenue and Ingrich Road
Ingrich Road and 31st Street
City of Beaver Falls
Beaver County

Dear Mr. Wayne:

Your Part II amended permit is enclosed. Please study it carefully, and if you have any questions, please contact me.

Sincerely,

Deborah Caramellino
Sanitary Engineer

DC:njh: cert

Enclosures:

cc: Beatrice Schulte
Operations

An Equal Opportunity/Affirmative Action Employer

Recycled Paper

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WATER QUALITY MANAGEMENT

WATER QUALITY MANAGEMENT PERMIT NO. 0472402-A2

**A. PERMITTEE**

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

**B. LOCATION**

Municipality City of Beaver Falls

County Beaver

**C. TYPE OF FACILITY OR ESTABLISHMENT**

Sewer Line Construction

**D. NAME OF PLANT, AREA SERVED, ETC.**

Patterson Avenue and Ingrich Road
Ingrich Road and 31st Street

**E. THIS PERMIT APPROVES**

1. Plans for construction of:
   [ ] Treatment Facilities [ ] Outfall or Headwall [ ] Impoundment
   [X] Sewers and Appurtenances [X] Stream Crossing [ ] Pump Station
   [ ] Injection Well [ ] _____
2. [ ] The discharge of _____
   to _____
3. [X] An Erosion and Sedimentation Control Plan. Project area is <1.0 acres.
4. [ ] Preparedness, Prevention, Contingency (PPC) Plan.

**F. THIS APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS**

1. All construction, operations, procedures, and discharge shall be in accordance with the application dated May 13, 1991, its supporting documentation, and amendments dated through June 11, 1992. Such application, its supporting documentation and amendments are hereby made part of this permit.
2. Conditions 1, 2, 3, 4, 5, 6, 7, 9, 13, 14, 16, 17, 18, 20, 21, and 22 of the Standard Conditions Relating To Sewerage Part II Permits dated September 2, 1983, and all of the Standard Conditions Relating To Erosion Control for use in Water Quality Management Permits (August, 1991) which conditions are attached and made part of this permit.
3. Special Conditions designated A and B which are attached and made part of this permit.

**G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS**

1. If there is a conflict between the application or its supporting documentation and amendments and the standard or special conditions, the standard or special conditions shall apply.
2. Failure to comply with the rules and regulations of the Department or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of the permit.
3. This permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987 as amended 35 P.S. §691.1 et seq., and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §693.1 et seq. Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

**H. PERMIT ISSUED**

DATE JUL 30 1992

BY Charles A. Duritsa
Charles A. Duritsa
Regional Director

## SPECIAL CONDITIONS FOR PART II PERMIT NO. 0472402-A2

A. The Beaver County Conservation District shall be notified prior to the start of earth moving associated with the construction of the herein approved project.

B. The permittee shall comply with Chapter 102 of the Department's Rules and Regulations regarding erosion control. Chapter 102 requires, in part, that the erosion control plan be available at work sites at all times, that all upslope surface water be diverted away from the project areas, that runoff from project areas pass through facilities for removal of sediment, that all disturbed areas be stabilized as soon as possible after final grade or final earthmoving, that interim stabilization measures be implemented promptly where it is not possible to permanently stabilize a disturbed area immediately after final earthmoving or where the activity ceases for more than 20 days, that erosion and sedimentation control facilities be maintained until stabilization is completed, and that all unnecessary and unusable control measures and facilities be removed upon completion of stabilization.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
SOUTHWEST REGION - FIELD OPERATIONS
WATER QUALITY MANAGEMENT
Highland Building
121 South Highland Avenue
Pittsburgh, Pennsylvania 15206-3988
(412) 645-7100 (answers 24 hrs.)

CERTIFIED MAIL #P 726 223 963

NOV - 5 1991

Perry C. Wayne, Jr.
City Clerk - Coordinator
City of Beaver Falls
715 - 15th street
Beaver Falls, PA 15010

RE: Part II Permit No. 0472402-A1
City of Beaver Falls
Beaver County

Dear Mr. Wayne:

Your Part II permit is enclosed. Please study it carefully, and if you have any questions, please contact me.

Sincerely,

Steven Weitz
Project Manager

SW:jmt: c (r)

Enclosure:

cc: Widmer Engineering, Inc.
Operations

An Equal Opportunity/Affirmative Action Employer

Recycled Paper

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WATER QUALITY MANAGEMENT

WATER QUALITY MANAGEMENT PERMIT NO. 0472402-A1

**A. PERMITTEE**

City of Beaver Falls
715 - 15th Street
Beaver Falls, PA 15010

**B. LOCATION**

Municipality Beaver Falls

County Beaver

**C. TYPE OF FACILITY OR ESTABLISHMENT**

Sewer Replacement

**D. NAME OF PLANT, AREA SERVED, ETC.**

East Trunk Line

**E. THIS PERMIT APPROVES**

1. Plans for construction of:
   [ ] Treatment Facilities [ ] Outfall or Headwall [ ] Impoundment
   [X] Sewers and Appurtenances [X] Stream Crossing [ ] Pump Station
   [ ] Injection Well [ ] _____
2. [ ] The discharge of _____
   to _____
3. [X] An Erosion and Sedimentation Control Plan. Project area is 0.5 acres.
4. [ ] Preparedness, Prevention, Contingency (PPC) Plan.

**F. THIS APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS**

1. All construction, operations, procedures, and discharge shall be in accordance with the application dated March 12, 1991, its supporting documentation, and amendments dated through September 16, 1991. Such application, its supporting documentation and amendments are hereby made part of this permit.
2. Conditions 1, 2, 3, 4, 5, 6, 7, 9, 14, 16, 17, 18, 20, 21, 22 of the Standard Conditions Relating To Sewerage - Part II Permits dated September 2, 1983, and all of the Standard Conditions Relating To Erosion Control for use in Water Quality Management Permits (August, 1991) which conditions are attached and made part of this permit.
3. Special Conditions designated A, B which are attached and made part of this permit.

**G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS**

1. If there is a conflict between the application or its supporting documentation and amendments and the standard or special conditions, the standard or special conditions shall apply.
2. Failure to comply with the rules and regulations of the Department or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of the permit.
3. This permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987 as amended 35 P.S. §691.1 et seq., and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §693.1 et seq. Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

**H. PERMIT ISSUED**

DATE NOV -5 1991

BY _____
Tim V. Dreier, P.E.
Acting Regional Manager

SPECIAL CONDITIONS FOR PART II PERMIT 0472402-A1

A. The Beaver County Conservation District shall be notified prior to the start of earth moving associated with the construction of the herein approved project.

B. The permittee shall comply with Chapter 102 of the Department's Rules and Regulations regarding erosion control. Chapter 102 requires, in part, that the erosion control plan be available at work sites at all times, that all upslope surface water be diverted away from the project areas, that runoff from project areas pass through facilities for removal of sediment, that all disturbed areas be stabilized as soon as possible after final grade or final earthmoving, that interim stabilization measures be implemented promptly where it is not possible to permanently stabilize a disturbed area immediately after final earthmoving or where the activity ceases for more than 20 days, that erosion and sedimentation control facilities be maintained until stabilization is completed, and that all unnecessary and unusable control measures and facilities be removed upon completion of stabilization.

3710-120 REV. 3-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

364481

# WATER QUALITY MANAGEMENT PERMIT

NO. 0472402

A. PERMITTEE: (Name and Address)
City of Beaver Falls
8th Avenue and 15th Street
Beaver Falls, Pennsylvania 15010

B. PROJECT LOCATION
Municipality: Beaver Falls
County: Beaver

C. TYPE OF FACILITY
Modification to Sewage Treatment Plant

D. NAME OF MINE OR AREA SERVED
Beaver Falls, parts of West Mayfield, White and Patterson Townships and Patterson Heights

E. THIS PERMIT APPROVES:

1. Plans For Construction Of:
   a. [ ] Pump Stations; Sewers and Appurtenances
   b. [X] Sewage Treatment Facilities
   c. [ ] Industrial Wastes Treatment Facilities

2. The Discharge Of:
   a. [X] Treated
   [ ] Untreated
   b. [ ] Industrial Wastes
   [X] Sewage

   TO: Beaver River
   (Receiving Waters)

3. The Operation Of: NA
   a. [ ] Mine
   Maximum surface area to be affected shall not exceed _____ acres. (Surface Mines)
   Maximum area to be deep mined _____ acres.

F. YOU ARE HEREBY AUTHORIZED TO CONSTRUCT, OPERATE OR DISCHARGE, AS INDICATED ABOVE, PROVIDED THAT YOU COMPLY WITH THE FOLLOWING:

1. ALL REPRESENTATIONS REGARDING OPERATION, CONSTRUCTION, MAINTENANCE AND CLOSING PROCEDURES AS WELL AS ALL OTHER MATTERS SET FORTH IN YOUR APPLICATION AND ITS SUPPORTING DOCUMENTS (APPLICATION NO. 0472402 DATED February 15, 1972, AND AMENDMENTS DATED April 7, 1972) SUCH APPLICATION, ITS SUPPORTING DOCUMENTS AND AMENDMENTS ARE HEREBY MADE A PART OF THIS PERMIT.

2. CONDITIONS NUMBERED 1,2,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,27,29, and 30 OF THE Sewerage STANDARD CONDITIONS DATED 1972 WHICH CONDITIONS ARE ATTACHED HERETO AND ARE MADE A PART OF THIS PERMIT.

3. SPECIAL CONDITION(S) NUMBERED A WHICH ARE ATTACHED HERETO AND ARE MADE A PART OF THIS PERMIT.

G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:

1. IF THERE IS A CONFLICT BETWEEN THE APPLICATION OR ITS SUPPORTING DOCUMENTS AND AMENDMENTS AND THE STANDARD OR SPECIAL CONDITIONS, THE STANDARD OR SPECIAL CONDITIONS SHALL APPLY.

2. FAILURE TO COMPLY WITH THE RULES AND REGULATIONS OF THE DEPARTMENT OR THE TERMS OR CONDITIONS OF THIS PERMIT SHALL VOID THE AUTHORITY GIVEN TO THE PERMITTEE BY THE ISSUANCE OF THE PERMIT.

3. THIS PERMIT IS ISSUED PURSUANT TO THE CLEAN STREAMS LAW, THE ACT OF JUNE 22, 1937, P.L. 1957, AS AMENDED. ISSUANCE OF THIS PERMIT SHALL NOT RELIEVE THE PERMITTEE OF ANY RESPONSIBILITY UNDER ANY OTHER LAW.

PERMIT ISSUED
NOV 3 1972
DATE _____

DEPARTMENT OF ENVIRONMENTAL RESOURCES

BY _____
Howard G. Luley, P. E.
TITLE Regional Sanitary Engineer

SEWERAGE PERMIT NO. 0472402

This permit is subject to the following special condition:

A. The approval of the overflow lines from the pumping stations is contingent upon their use only in case of power or equipment failure. Should the use of the lines become frequent or should objectionable conditions result therefrom, the permittee, shall, when directed by the Department of Environmental Resources, submit plans for and install equipment to prevent such discharge or overflow.

It is required by law that this permit before being operative shall be recorded in the office of the Recorder of Deeds in Beaver County.

HSE 6307

Sewerage Permit No. 0472402
City of Beaver Falls
Beaver Falls
Beaver County

364483

RECEIVED
'72 DEC 4 PM 1:56
DEP
BU WATER QUALITY MGT.

Commonwealth of Pennsylvania
Department of Environmental Resources

## RECORDER OF DEEDS CERTIFICATE

I hereby certify that on . . NOVEMBER . . 17, 1972
(Date)

there was recorded in Book . . . . . 1001 . . . . . .

page . . . . 114 . . . . . the sewerage permit issued

to . . City . . of . . . BEAVER . FALLS . . . .

bearing date of . . . NOVEMBER . . 6, 1972 . . . .

William B. O'Neil . . .
Recorder of Deeds for

. . . BEAVER . . County

HSE Form

DATE PREPARED: August 1, 1971

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
SANITARY ENGINEERING

APPLICATION FOR SANITARY WATER BOARD PERMIT

For Department of Health use only
APPLICATION NO.: 364476
RECEIVED | DATE

APPLICANT NAME
The City of Beaver Falls

PROJECT LOCATION
(A) MUNICIPALITY
Beaver Falls

TELEPHONE NO. (A.C. 412) 843-7000

MAILING ADDRESS
8th Avenue and 15th Street
Beaver Falls, Pennsylvania 15010

(B) COUNTY
Beaver

HEREBY APPLIES FOR: (CHECK APPROPRIATE BLOCKS IN COLUMNS A, B AND C)

A. APPROVAL OF PLANS FOR CONSTRUCTION OF:
- ☐ PUMP STATIONS; SEWERS AND APPURTENANCES
- ☒ SEWAGE TREATMENT PLANT
- ☐ MINE DRAINAGE TREATMENT PLANT
- ☐ INDUSTRIAL WASTE TREATMENT PLANT

B. APPROVAL TO DISCHARGE:
(1) ☒ TREATED ☐ UNTREATED
(2) ☐ INDUSTRIAL WASTES ☐ MINE DRAINAGE ☒ SEWAGE

C. APPROVAL TO OPERATE:
- ☐ COAL MINE
- ☒ NA

(ALL DISCHARGES OF WASTES ARE PURSUANT TO "THE CLEAN STREAMS LAW")

I HEREBY CERTIFY THAT THE COMPLETENESS REPORT AND ALL PLANS, MODULES, AND DOCUMENTS DESIGNATED THEREIN ARE ATTACHED TO THIS APPLICATION, AND MADE A PART HEREOF.

Nick L. Camp
SIGNATURE OF APPLICANT OR RESPONSIBLE OFFICIAL

NAME OF APPLICANT OR RESPONSIBLE OFFICIAL: Nick L. Camp
TITLE: Mayor
DATE OF APPLICATION: Feb. 15, 1972

ADDRESS: 8th Avenue and 15th Street, Beaver Falls, Pennsylvania 15010

AFFIDAVIT
COMMONWEALTH OF PENNSYLVANIA, COUNTY OF Beaver

I, Nick L. Camp, BEING DULY SWORN, ACCORDING TO LAW, DEPOSE AND SAY THAT I (AM THE APPLICANT) (AM AN OFFICER OR OFFICIAL OF THE APPLICANT) (HAVE THE AUTHORITY TO MAKE THIS APPLICATION) AND THAT THE PLANS, REPORTS AND DOCUMENTS SUBMITTED AS PART OF THE APPLICATION ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SWORN AND SUBSCRIBED TO BEFORE ME THIS 17th DAY OF Feb 19 72

Antoinette Dunn
NOTARY PUBLIC

Nick L. Camp
SIGNATURE OF APPLICANT OR RESPONSIBLE OFFICIAL

THE SECTION BELOW IS TO BE COMPLETED BY THE DESIGN ENGINEER (OR SURVEYOR) AUTHORIZED BY THE APPLICANT TO PREPARE THIS APPLICATION

NAME OF DESIGN ENGINEER (OR SURVEYOR) AND FIRM
Mr. Michael Baker, Jr., Michael Baker, Jr., Inc.

MAILING ADDRESS: ~~P.O. Box 280 Beaver PA 15009~~ P.O. Box 111, Rochester, Pa. 15074
TELEPHONE NUMBER: (A.C. 412) 774-2010

AGREEMENT DATE: 2-16-70
SIGNATURE OF DESIGN ENGINEER (OR SURVEYOR)

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER AND SURVEYOR MICHAEL BAKER III SEAL

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
SANITARY ENGINEERING

0472402
For Department Use Only
364479

# INTERNAL REVIEW AND RECOMMENDATIONS

## REGIONAL ENGINEER'S REVIEW

NAME OF APPLICANT The Cityof Beaver Falls PROJECT LOCATION Beaver Falls Beaver County APPLICATION NUMBER 0472402

BRIEF DESCRIPTION OF PROJECT: This application is for upgrading the existing primary sewage treatment plant to secondary. A trickling filter, two final settling tanks, a divided chlorine contact tank and pump station for the trickling filter will be added. Existing treatment units include one comminutor with bypass bar screen, one grit chamber, three primary settling tanks, two gas chlorinators, two anerobic digesters and six sludge drying beds.

DISCUSSION (Use Additional Sheets If Necessary): The plant design shows an expected population growth rate somewhat slower than expected years ago when the primary plant was designed. This plant is designed to adequately treat a design average flow of 2.5 MGD from an equivalent population of 27,000 by 1995. Design is based upon 90 gpcd. Past plant flows show the sewerage contribution is about 65 gpcd. Therefore, the design basis of 90 gpcd allows for a safety factor as to water use and population growth. (See addendums following module 1.)

(continued attached sheet)

CURRENT ESTIMATE OF COMPLETION DATE OF PROJECT (Industrial Wastes Only)

## RECOMMENDATION AND ACTION

**APPROVAL – RELEVANT LAWS, REGULATIONS, STANDARDS, AND POLICIES HAVE BEEN COMPLIED WITH:**

| Issue By Region | Issue By Central Office | Refuse | Signature | Date |
|---|---|---|---|---|
| ☒ | ☐ | ☐ | Erin V. Dreier REVIEWING ENGINEER | 11/1/72 |
| ☒ | ☐ | ☐ | Thomas R Vayansky FACILITIES ENGINEER | 11/3/72 |
| ☒ | ☐ | ☐ | Howard G Kelly REGIONAL ENGINEER | 11/3/72 |
| | ☐ | ☐ | DIV. FACILITIES ENGINEER | |
| | ☐ | ☐ | DIVISION DIRECTOR | |
| | | ☐ | BUREAU DIRECTOR | |

**PERMIT CONDITIONS:**

1. STANDARD – Sewerage - 1972
1,2,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,27,29, and 30

2. SPECIAL (Use Additional Sheets If Necessary) –

A. Pump station overflows

Sewerage Application No. 0472402
City of Beaver Falls
Beaver Falls
Beaver County

364180

DISCUSSION: (continued)

The new pump station contains four, 2200 gpm pumps to provide an 8.0 MGD pumping capacity to the trickling filter. There is an overflow provided but sewage will already have had primary treatment as the existing raw water pump station is provided with an emergency gasoline driven generator to provide service during power failure. The chlorinators are also connected to the potable water supply through vacuum breakers to provide full time service. The existing station is provided with an overflow for relief because 25% of the sewer system is combined with storm water flows.

The trickling filter will be loaded at 74.7 lbs BOD/day/1000 cu. ft. which is within the Department's standard for plastic media units. BOD removal will be 85%. Discharge will be to the Beaver River, through the existing outfall extending down river to a point below the Fallston Dam. This is below the New Brighton Water Supply intake.

The project also involves using the existing six sludge drying beds. Although the Sewerage Manual requires at least 1.5 sq. ft. of bed area per capita, this project will provide only 1.23 sq. ft. per capita. The engineer has submitted considerable data substantiating the existing beds based upon expected sludge production and actual past operating data. Sewerage Permit No. 0471406 was issued by Central Office to the Midland Municipal Authority, Midland Borough, Beaver County for a similar trickling filter plant and sludge beds having only 1.14 sq. ft. per capita. Based on the data submitted and past issuance of permits, we approve the use of the existing beds.

The quality of the design engineer's work is generally good based on our past experience in dealing with him. His designs have been of good quality and his plants have been well constructed. Therefore, this application is being approved even though there may be some minor inconsistencies and inaccuracies.

# EXHIBIT M2

Pennsylvania Department of Environmental Protection

**400 Waterfront Drive**
**Pittsburgh, PA 15222-4745**

MAY 1 0 2006

**Southwest Regional Office**

412-442-4000
Fax 412-442-4328

**CERTIFIED MAIL NO. 7003 2260 0000 3132 7091**

Diane Izzo
Borough of Eastvale
510 Second Avenue
Beaver Falls, PA 15010

Re: Sewage
Eastvale Pump Station
WQM Part II Permit No. 0405405
APS I.D. No. 572434
Eastvale Borough
Beaver County

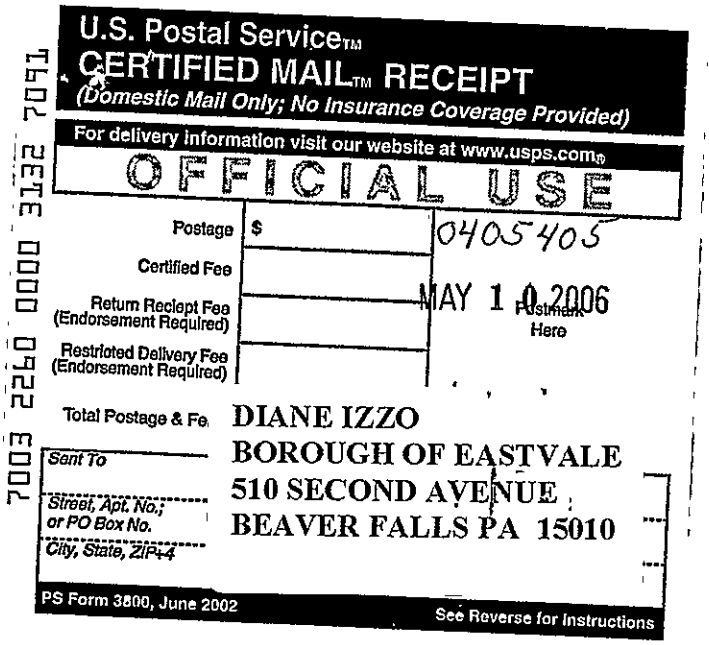
Dear Ms. Izzo:

Your permit is enclosed.

You must comply with all Special Conditions attached to this Permit. Construction must be done in accordance with the permit application and all supporting documentation. Please review the permit conditions and application-supporting documentation submitted with your application before starting construction.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.



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510 SECOND AVENUE

City, State, ZIP+4 BEAVER FALLS PA 15010

PS Form 3800, June 2002 See Reverse for Instructions

7003 2260 0000 3132 7041

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions, please call me at 412-442-4031.

Sincerely,

James M. Vanek, P.E.
Sanitary Engineer
Water Management

Enclosures

cc: Mark T. Kennedy, P.E. – Widmer Engineering, Inc.

bcc: c r
Operations Section
J. Vanek

JMV:dk

OFFICIAL FILE COPY



IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions, please call me at 412-442-4031.

Sincerely,

James M. Vanek, P.E.
Sanitary Engineer
Water Management

Enclosures

cc: Mark T. Kennedy, P.E. – Widmer Engineering, Inc.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER MANAGEMENT

INTERNAL REVIEW AND RECOMMENDATIONS

| Name of Applicant | Borough of Eastvale | File Location | Eastvale Borough Beaver County | Application Number | 0405405 |
|---|---|---|---|---|---|

This review is in response to a new application received on December 27, 2005. Additional information was received on March 13, 2006.

The applicant proposes to construct:

- approximately 1400 feet of 8-inch diameter force main (FRP)
- and a wet and dry well type wastewater pumping station to serve Eastvale Borough and new and existing developments in North Sewickley Township, Beaver County.

The pump station installation includes:

- two pumps, each rated at 610 gpm at 41 feet total dynamic head designed so that each pump is capable of handling the expected peak instantaneous flow.
- mechanical ventilation to provide complete air changes.
- a remote alarm will be activated by the high level alarm float. A signal will also be available for remote signaling through a telephone dialer.
- a standby generator to operate the pumps during a power outage.

The new, upgraded and expanded pump station will use the existing pump station's influent line, dry well, wet well and bypass. The existing wet well will have a 2' x 2' hole cut into it. All of the equipment in the existing dry well will be removed so sewage will flow from the wet well into it. A 16" PVC pipe will direct the sewage into the new 6' diameter wet well and the prefabricated pump station will sit atop of the new wet well.

The size of the pump station is based on the existing population of Eastvale Borough and the anticipated flows from North Sewickley Township's 537 plan. The per capita flow rate was based according to design criteria contained in Pennsylvania Code Title 25, Chapter 73, Section 73.17. Based on the population and design criteria, the expected average daily flow is 0.254 mgd. The peak instantaneous factor is 3.4, which results in a peak instantaneous flow rate of 0.861 mgd or 598 gpm.

The Act 537 Plan was approved for this project. The planning approval was only for North Sewickley Township (letter DEP Code No. 04944-01-001). Planning for Beaver Falls was not performed. The design engineer provided calculations for flow from the Eastvale Bridge to the Beaver Falls STP. The pipe capacity between manholes 92 and 93 is 4.3 MGD and the design engineer believes the upgrade of the Eastvale pump station can be handled by the Beaver Falls collection system.

The required Act 14 notification was submitted with the Part II Permit application and no adverse comments were received.

The design engineer claims the proposed facilities are not within the 100-year flood plain.

Permit issuance in response to this application is recommended.

| RECOMMENDATION AND ACTION | | | |
|---|---|---|---|
| Approve | Refuse | Signature | Date |
| [ ] | [ ] | REVIEWING GEOLOGIST | |
| [X] | [ ] | REVIEWING ENGINEER / James M Dawley | 3/24/06 |
| [X] | [ ] | REGIONAL SECTION CHIEF D A 2 | 4/26/06 |
| [X] | [ ] | REGIONAL MANAGER | 5/8/06 |

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER MANAGEMENT PROGRAM

WATER QUALITY MANAGEMENT PERMIT NO. 0405405

| A. PERMITTEE | B. LOCATION |
|---|---|
| Borough of Eastvale<br>510 Second Avenue<br>Beaver Falls, PA 15010 | Municipality Eastvale Borough<br>County Beaver |
| C. TYPE OF FACILITY OR ESTABLISHMENT | D. NAME OF PLANT, AREA SERVED, ETC. |
| Sewage Pump Station | Eastvale Borough |

E. THIS PERMIT APPROVES

1. Plans for construction of:
   - ☐ Treatment Facilities
   - ☐ Sewers and Appurtenances
   - ☐ Injection Well
   - ☐ Outfall or Headwall
   - ☐ Stream Crossing
   - ☒ Force Main
   - ☐ Impoundment
   - ☒ Pump Station
2. ☐ The discharge of _____ to _____
3. ☒ An Erosion and Sedimentation Control Plan. Project Area is _____ acres.
4. ☐ Preparedness, Prevention, Contingency (PPC) Plan.

F. THIS APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS

1. All construction, operations, procedures, and discharge shall be in accordance with the application dated December 22, 2005, its supporting documentation, and amendments dated through March 15, 2006. Such application, its supporting documentation and amendments are hereby made part of this permit.
2. Conditions 1, 2, 4, 5, 6, 7, 9, 10, 11, 13, 14, 16, 20, 21, 22 of the Standard Conditions Relating to Sewerage - Part II Permits dated September 2, 1983, revised June 1, 2001, and all of the Standard Conditions Relating to Erosion Control for use in Water Quality Management Permits dated August, 1991, which conditions are attached and made part of this permit.
3. Special Conditions designated A, B, C, D, E which are attached and made part of this permit.

G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS

1. If there is a conflict between the application or its supporting documentation and amendments and the standard or special conditions, the standard or special conditions shall apply.
2. Failure to comply with the rules and regulations of the Department or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of the permit.
3. This permit is issued pursuant to the Clean Streams Law, Act of June 22, 1937, P.L. 1987 as amended, 35 P.S. §691.1 et seq., and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §693.1 et seq. Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

H. PERMIT ISSUED

DATE MAY 10 2006

BY Stephen R. Balta
Stephen R. Balta
Water Management Program Manager

SPECIAL CONDITIONS FOR PART II PERMIT 0405405

A. The County Conservation District shall be notified prior to the start of earth moving associated with the construction of the herein approved project.

B. The permittee shall comply with Chapter 102 of the Department's Rules and Regulations regarding erosion control. Chapter 102 requires, in part, that the erosion control plan be available at work sites at all times, that all upslope surface water be diverted away from the project areas, that runoff from project areas pass through facilities for removal of sediment, that all disturbed areas be stabilized as soon as possible after final grade or final earthmoving, that interim stabilization measures be implemented promptly where it is not possible to permanently stabilize a disturbed area immediately after final earthmoving or where the activity ceases for more than 20 days, that erosion and sedimentation control facilities be maintained until stabilization is completed, and that all unnecessary and unusable control measures and facilities be removed upon completion of stabilization.

C. The requirements of Act 1989-32, the Storage Tank and Spill Prevention Act, must be met for installation of the fuel tank to be used with the emergency generator.

D. The Department considers the registered professional engineer whose seal is affixed to these documents to be fully responsible for the adequacy of all aspects of the facility design.

E. If, at any time, this sewer extension and/or pump station covered by this permit creates a public nuisance, including but not limited to, causing malodors or causing environmental harm to the waters of the Commonwealth, the Department may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STANDARD CONDITIONS RELATING TO SEWERAGE - PART II PERMITS
Effective September 2, 1983
Revised June 1, 2001

ONE: During construction, no changes affecting any engineering design parameter shall be made from the plans, designs, and other data herein approved unless the permittee shall first receive written approval thereof from the Department. The sewerage facilities shall be constructed under expert engineering supervision and competent inspection.

TWO: The sewers shall have adequate foundation support as soil conditions require. Trenches shall be back-filled such that the sewers will have proper structural stability, with minimum settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from injury by water, freezing, drying or other harmful conditions until cured.

THREE: Manhole inverts shall be so formed as to facilitate the flow of the sewage and to prevent the stranding of sewage solids, and the whole manhole structure shall have proper structural strength and be so constructed as to prevent undue infiltration, entrance of the street wash or grit, and to provide convenient and safe means of access and maintenance.

FOUR: No stormwater from pavements, area ways, roofs, foundation drains or other sources shall be admitted to the sanitary sewers herein approved.

FIVE: The permittee shall adopt and enforce an ordinance requiring the abandonment of privies, cesspools or similar receptacles for human waste and on-lot sewage disposal systems on the premises of occupied structures which are accessible to public sewers and require the connection of such structures to the public sewers.

SIX: The herein approved sewers shall be maintained in good condition, kept free from deposits by flushing or other proper means of cleaning, and repaired when necessary.

SEVEN: The permittee shall file with the Department of Environmental Resources "as-built" plans showing the correct plan of all sewers and sewerage structures as actually constructed together with any other information in connection therewith that may be required.

EIGHT: The outfall sewer or drain shall be extended to the low water mark of the receiving body of water. Where necessary to assure the proper mixing and waste assimilation an outfall sewer or drain may be extended with appurtenances below the low water mark and into the bed of navigable stream, provided that the permittee has secured an easement, right-of-way, license, or lease from the Department in accordance with Section 15 of the Dam Safety and Encroachment Act, the Act of November 26, 1978, P.L. 1375, as amended.

NINE: The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along, or across private property, with full rights of ingress, egress and regress.

TEN: When the herein approved sewage treatment works is completed and before it is placed in operation, the permittee shall notify the Department in writing so that an inspection of the works may be made by a representative of the Department.

ELEVEN: The various structures and apparatus of the sewage treatment works herein approved shall be maintained in proper condition so that the facility will individually and collectively perform the functions for which they were designed.

TWELVE: If, in the opinion of the Department, these works are not so operated or if by reason of change in the character of wastes or increased load upon the works, or changed use or condition of the receiving body of water, or otherwise the effluent from the said works ceases to be satisfactory or the sewerage facilities shall have created a public nuisance, then upon notice by the Department, the right herein granted shall cease and become null and void unless within the time specified by the Department, the permittee shall adopt such remedial measures as will produce an effluent which, in the opinion of the Department, will be satisfactory.

THIRTEEN: The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper portions with air, and to the highly toxic character of certain gases arising from such digestion or from sewage in insufficiently ventilated compartments or sewers. Therefore, at all places throughout the sewerage facilities where hazard of fire, explosion, or danger from toxic gases may occur, the permittee shall post conspicuously proper warnings of a permanent and legible character and shall provide for the thorough instruction of all employees concerning the aforesaid hazards and in first aid and emergency methods of meeting such hazards and shall further provide, in a conveniently accessible place, all necessary equipment and material therefor.

FOURTEEN: Cross connections between the potable water supply and the sewerage system constitute a potential danger to the public health. Therefore, all direct and indirect connections whereby under normal or abnormal conditions the potable water supply may become contaminated from an inferior water supply from any part of a sewerage system are hereby specifically prohibited. The permittee is further warned against permitting to be made permanent any temporary connection with a potable supply designed to be held in place while being used for flushing or other purposes, and is also cautioned against the danger of back siphonage through portable hose lines and similar avenues of possible contamination.

FIFTEEN: This permit authorizes the construction and operation of the proposed sewerage facilities until such time as facilities for conveyance and treatment at a more suitable location are installed and are capable of receiving and treating the permittee's sewage. Such facilities must be in accordance with the applicable municipal official plan adopted pursuant to Section 5 of the Pennsylvania Sewage Facilities Act, the Act of January 24, 1966, (1965 P.L. 1535, No. 537), as amended. When such municipal sewerage facilities become available, the permittee shall provide for the conveyance of the sewage to these sewerage facilities, abandon the use of the herein-approved facilities and notify the Department accordingly. This permit shall then, upon notice from the Department, terminate and become null and void, and shall be relinquished to the Department.

SIXTEEN: The permittee shall construct the sewerage facilities in a manner compatible with good conservation methods in order to minimize the adverse effect on the environment.

SEVENTEEN: The local waterways patrolman of the Pennsylvania Fish Commission shall be notified when the construction of a stream crossing and outfall is started and completed. A permit must be secured from the Pennsylvania Fish Commission if the use of explosives is required. The permittee shall notify the local waterways patrolman when explosives are to be used.

EIGHTEEN: If future operations by the Commonwealth of Pennsylvania require modifications of the stream crossing and/or outfall, or there shall be unreasonable obstruction to the free passage of loads or navigation from the stream crossing and/or outfall, permittee shall remove or alter the structural work or obstruction without expense to the Commonwealth of Pennsylvania. If upon the revocation of the permit, the work shall not be completed, the permittee, at his own expense and in such time and manner as the Department may require, shall remove any or all portions of the incompleted work and restore the water-course to its former condition. No claims shall be made against the Commonwealth of Pennsylvania on account of any such removal or alteration.

NINETEEN: The sewage treatment plant shall be operated by an operator certified in accordance with the Sewage Treatment Plant and Waterworks Operators' Certification Act, the Act of November 18, 1968, P.L. 1217, as amended.

TWENTY: All industrial waste discharged or proposed for discharge into the sewer system shall be studied to determine the degree of pretreatment necessary in order that the industrial waste will not adversely affect the sewerage facilities or the sewage treatment process. The permittee shall properly control any industrial waste discharge into its sewerage system be regulating the rate of such discharge, requiring necessary pretreatment, and excluding industrial waste, if necessary, to protect the integrity of the permittee's sewerage system.

TWENTY-ONE: Receipt of this permit does not relieve the permittee of its obligations to comply with all federal, interstate, state, or local laws, ordinances, and regulations applicable to the sewerage facilities authorized herein.

TWENTY-TWO: This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, title, easement, or interest in, on, to, or over any lands belonging to the Commonwealth.

August 1991

DEPARTMENT OF ENVIRONMENTAL RESOURCES
STANDARD CONDITIONS RELATING TO EROSION CONTROL
For Use in Water Quality Management Permits

1. By approval of the plans for which this permit is issued, neither the Department nor the Commonwealth of Pennsylvania assumes any responsibility for the feasibility of the plans or the operation of the measures and facilities to be constructed thereunder.

2. If at any time the erosion and sedimentation activities undertaken pursuant to this permit or the discharge of the effluent therefrom is causing or contributing to pollution of the waters of the Commonwealth, the permittee shall forthwith adopt such remedial measures as are acceptable to the Department.

3. This permit does not authorize any earth disturbance controlled by an ordinance enacted by a local municipality. Additional permits must be secured from local municipalities where earthmoving activities are covered by local ordinances.

4. At least seven days before earthmoving will begin, the permittee, by telephone or certified mail, shall notify the Department or its designee of the date for beginning of construction and invite the County Conservation District Representative to attend a pre-construction conference with the contractor. The permittee shall have his erosion control plan available at the site of the activity at all times.

5. All earthmoving activities shall be undertaken in the manner set forth in the erosion and sedimentation control plan identified with this permit. Revisions to the plan shall be pre-approved by the Department.

6. The erosion control measures and facilities shall be constructed under the supervision and competent inspection of an individual trained and experienced in erosion control, and in accordance with plans, designs and other data as herein approved or amended, and with the conditions of this permit. Control facilities shall be frequently inspected to insure effective control.

7. When the herein approved erosion control measures and facilities are completed, the permittee shall notify the County Conservation District so that an inspection of the measures and facilities may be made.

8. No storm water, sewage or industrial wastes not specifically approved herein, shall be admitted to the erosion and sedimentation measures and facilities for which this permit is issued, unless with the approval of the Department.

9. Sediment shall at no time be permitted to accumulate in sedimentation basins to a depth sufficient to limit storage capacity or interfere with the settling efficiency thereof. The sediment removed shall be handled and disposed of in a manner that will not create pollution problems and so that every reasonable and practical precaution is taken to prevent the said material from reaching the waters of the Commonwealth.

10. All slopes, channels, ditches or any disturbed area shall be stabilized as soon as possible after the final grade or final earthmoving has been completed. Where it is not possible to permanently stabilize a disturbed area immediately after the final earthmoving has been completed or where the activity ceases for more than 20 days, interim stabilization measures shall be implemented promptly.

11. Upon completion of the project, all areas which were disturbed by the project shall be stabilized so that accelerated erosion will be prevented. Any erosion and sedimentation control facility required or necessary to protect areas from erosion during the stabilization period shall be maintained until stabilization is completed. Upon completion of stabilization, all unnecessary or unusable control measures and facilities shall be removed, the areas shall be graded and the soils shall be stabilized.

12. The responsibility of carrying out the permit conditions shall rest with the owner, lessee, assignee or other responsible manager of earthmoving that affects the approved erosion controls. Such responsibility passes with each control succession.

# EXHIBIT N1

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

OCT 04 2018

**CERTIFIED MAIL NO. 7000 1670 0005 1025 7979**

James Breznai
Beaver Falls City
715 15th Street
Beaver Falls, PA 15010-4124

Re: Final NPDES Permit- Sewage
Beaver Falls STP
NPDES Permit No. PA0026883
Authorization ID No. 1205044
Beaver Falls City, Beaver County

Dear Mr. Breznai:

Your NPDES permit is enclosed. Please read the permit carefully. The permit expires on the date identified on page 1 of the permit. A renewal application must be submitted to this office 180 days prior to the permit expiration date, if a discharge is expected to continue past the expiration date of the permit.

Enclosed are Discharge Monitoring Report (DMR) templates and DMR instructions. It is recommended that you retain the DMR templates in the event you are unable to submit DMRs electronically through DEP's eDMR system. Routine use of the eDMR system is a requirement of the permit unless the conditions in Part A III.B.3 of the permit are met to submit hard copies.

Also enclosed is a Supplemental Form Inventory, which identifies the forms that are attached to the permit and must be submitted as attachments to eDMR reports, as applicable (see individual form instructions). The submission of other supplemental forms may be required in accordance with the permit. We encourage you to use the spreadsheet versions of supplemental forms that contain appropriate validation and DEP-approved calculations.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on

audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please contact David Ponchione at 412.442.4056.

Sincerely,

Christopher Kriley, P.E.
Environmental Program Manager
Clean Water Program

Enclosures

cc: U.S. Environmental Protection Agency
Daniel Sell-Widmer Engineering Inc.
Regional Office
Central Office, Division of Operations
Operations

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs)

## NPDES PERMIT NO: PA0026883

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

**Beaver Falls City**
**715 15th Street**
**Beaver Falls, PA 15010-4124**

is authorized to discharge from a facility known as **Beaver Falls STP**, located in **Beaver Falls City, Beaver County**, to **Beaver River** in Watershed(s) **20-B** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

**THIS PERMIT SHALL BECOME EFFECTIVE ON** NOV 01 2018

**THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON** OCT 31 2023

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7(b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

**DATE PERMIT ISSUED** OCT 04 2018

**ISSUED BY**

**Christopher Kriley, P.E.**
**Clean Water Program Manager**
**Southwest Regional Office**

**Permit No. PA0026883**

## PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

**I. A.** **For Internal Outfall** 101, **Latitude** 40° 44' 31.00", **Longitude** -80° 19' 10.00", **River Mile Index** 3.4, **Stream Code** 33953

**Receiving Waters:** Beaver River

**Type of Effluent:** Sewage Effluent

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|---|---|
| | Mass Units (lbs/day) (1) | | Concentrations (mg/L) | | | | Minimum (2) Measurement Frequency | Required Sample Type |
| | Average Monthly | Weekly Average | Minimum | Average Monthly | Weekly Average | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/day | Grab |
| Dissolved Oxygen | XXX | XXX | Report Inst Min | XXX | XXX | XXX | 2/week | Grab |
| Total Residual Chlorine (TRC) | XXX | XXX | XXX | 0.5 | XXX | 1.6 | 1/day | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | 1001.4 | 1502.1 | XXX | 25.0 | 37.5 | 50 | 2/week | 8-Hr Composite |
| Biochemical Oxygen Demand (BOD5) Raw Sewage Influent | Report | Report Daily Max | XXX | Report | XXX | XXX | 2/week | 8-Hr Composite |
| Total Suspended Solids Raw Sewage Influent | Report | Report Daily Max | XXX | Report | XXX | XXX | 2/week | 8-Hr Composite |
| Total Suspended Solids | 1201.7 | 1802.5 | XXX | 30.0 | 45.0 | 60 | 2/week | 8-Hr Composite |
| Fecal Coliform (No./100 ml) Oct 1 - Apr 30 | XXX | XXX | XXX | 2000 Geo Mean | XXX | 10000 | 2/week | Grab |
| Fecal Coliform (No./100 ml) May 1 - Sep 30 | XXX | XXX | XXX | 200 Geo Mean | XXX | 1000 | 2/week | Grab |

**Permit No. PA0026883**

**Outfall 101, Continued (from Permit Effective Date through Permit Expiration Date)**

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|---|---|
| | Mass Units (lbs/day) (1) | | Concentrations (mg/L) | | | | Minimum (2) Measurement Frequency | Required Sample Type |
| | Average Monthly | Weekly Average | Minimum | Average Monthly | Weekly Average | Instant. Maximum | | |
| Total Nitrogen | Report Annl Avg | XXX | XXX | Report Annl Avg | XXX | XXX | 1/year | 8-Hr Composite |
| Ammonia-Nitrogen | Report | XXX | XXX | Report | XXX | XXX | 2/week | 8-Hr Composite |
| Total Phosphorus | Report Annl Avg | XXX | XXX | Report Annl Avg | XXX | XXX | 1/year | 8-Hr Composite |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

**At Internal Outfall 101 after the STP disinfection process but prior to where the STP effluent can be mixed with stormwater flow. Outfall 002 is a relief outfall associated with Internal Outfall 101. Discharge from Outfall 002 should only occur when the flow exceeds the capacity of Outfall Pipe 001.**

## PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

1. The permittee may not discharge:

   a. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code § 92a.41(c))

   b. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code § 92a.47(a)(7), § 95.2(2))

   c. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code § 93.6(a))

   d. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))

2. The monthly average percent removal of $BOD_5$ or $CBOD_5$ and TSS must be at least 85% for POTW facilities on a concentration basis except where 25 Pa. Code 92a.47(g) and (h) are applicable to facilities with combined sewer overflows (CSOs) or as otherwise specified in this permit. (25 Pa. Code § 92a.47(a)(3))

3. If the permit requires the reporting of average weekly statistical results, the maximum weekly average concentration and maximum weekly average mass loading shall be reported, regardless of whether the results are obtained for the same or different weeks.

4. The permittee shall monitor the sewage effluent discharge(s) for the effluent parameters identified in the Part A limitations table(s) during all bypass events at the facility, using the sample types that are specified in the limitations table(s). Where the required sample type is "composite", the permittee must commence sample collection within one hour of the start of the bypass, wherever possible. The results shall be reported on the Daily Effluent Monitoring supplemental form (3800-FM-BCW0435) and be incorporated into the calculations used to report self-monitoring data on Discharge Monitoring Reports (DMRs).

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

(1) The hydraulic design capacity of 4.8 million gallons per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to help determine whether a "hydraulic overload" situation exists, as defined in Title 25 Pa. Code Chapter 94.

(2) The effluent limitations for Outfall 101 were determined using an effluent discharge rate of 4.8 MGD.

(3) The organic design capacity of 9,207 lbs $BOD_5$ per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to determine whether an "organic overload" condition exists, as defined in 25 Pa. Code Chapter 94.

(4) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N ($NO_2$+$NO_3$-N), where TKN and $NO_2$+$NO_3$-N are measured in the same sample.

## II. DEFINITIONS

*At Outfall (XXX)* means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

*Average* refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

*Best Management Practices* (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollutant loading to surface waters of the Commonwealth. The term also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

*Bypass* means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

*Calendar Week* is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

*Clean Water Act* means the Federal Water Pollution Control Act, as amended (33 U.S.C.A. §§ 1251 to 1387).

*Composite Sample* (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

*Composite Sample* (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)

*Daily Average Temperature* means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

*Daily Discharge* means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code § 92a.2, 40 CFR 122.2)

*Daily Maximum Discharge Limitation* means the highest allowable "daily discharge."

*Discharge Monitoring Report* (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code § 92a.2, 40 CFR 122.2)

*Estimated Flow* means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

*Geometric Mean* means the average of a set of n sample results given by the $n^{th}$ root of their product.

*Grab Sample* means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

*Hauled-In Wastes* means any waste that is introduced into a treatment facility through any method other than a direct connection to the sewage collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

*Hazardous Substance* means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

*Immersion Stabilization* (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

*Indirect Discharger* means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW) or other treatment works. (25 Pa. Code § 92a.2, 40 CFR 122.2)

*Industrial User* means a source of Indirect Discharge. (40 CFR 403.3)

*Instantaneous Maximum Effluent Limitation* means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code § 92a.2)

*Measured Flow* means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

*Monthly Average Discharge Limitation* means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code § 92a.2)

*Municipality* means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes. (25 Pa. Code § 92a.2)

*Municipal Waste* means garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility. (25 Pa. Code § 271.1)

*Publicly Owned Treatment Works* (POTW) means a treatment works as defined by §212 of the Clean Water Act, owned by a state or municipality. The term includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. The term also includes sewers, pipes or other conveyances if they convey wastewater to a POTW providing treatment. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. (25 Pa Code § 92a.2, 40 CFR 122.2)

*Residual Waste* means garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act. The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under the Clean Streams Law. (25 Pa Code § 287.1)

*Severe Property Damage* means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

*Stormwater* means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code § 92a.2)

*Stormwater Associated With Industrial Activity* means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, and as defined at 40 CFR §122.26(b)(14)(i) – (ix) and (xi) and 25 Pa. Code § 92a.2.

*Toxic Pollutant* means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code § 92a.2)

*Weekly Average Discharge Limitation* means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

## III. SELF-MONITORING, REPORTING AND RECORDKEEPING

### A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures

   a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.

   b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(j)(4), 122.44(i)(1)(iv))

   c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.44, 92a.61(i) and 40 CFR §§ 122.41(e), 122.44(i)(1))

2. The permittee shall use DEP's electronic Discharge Monitoring Report (eDMR) system to report the results of compliance monitoring under this permit (see www.dep.pa.gov/edmr). Permittees that are not using the eDMR system as of the effective date of this permit shall submit the necessary registration and trading partner agreement forms to DEP's Bureau of Clean Water (BCW) within 30 days of the effective date of this permit and begin using the eDMR system when notified by DEP BCW to do so. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

3. Submission of a physical (paper) copy of a Discharge Monitoring Report (DMR) is acceptable under the following circumstances:

   a. For a permittee that is not yet using the eDMR system, the permittee shall submit a physical copy of a DMR to the DEP regional office that issued the permit during the interim period between the submission of registration and trading partner agreement forms to DEP and DEP's notification to begin using the eDMR system.

   b. For any permittee, as a contingency a physical DMR may be mailed to the DEP regional office that issued the permit if there are technological malfunction(s) that prevent the successful submission of a DMR through the eDMR system. In such situations, the permittee shall submit the DMR through the eDMR system within 5 days following remedy of the malfunction(s).

4. DMRs must be completed in accordance with DEP's published DMR instructions (3800-FM-BCW0463). DMRs must be received by DEP no later than 28 days following the end of the monitoring period. DMRs are based on calendar reporting periods and must be received by DEP in accordance with the following schedule:

   - Monthly DMRs must be received within 28 days following the end of each calendar month.
   - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
   - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
   - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

5. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) attached to this permit, or an approved equivalent, and submit the signed, completed forms as attachments to the DMR, through DEP's eDMR system. DEP's Supplemental Laboratory Accreditation Form (3800-FM-BCW0189) must be completed and submitted to DEP with the first DMR following issuance of this permit, and anytime thereafter when changes to laboratories or methods occur. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

6. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:

- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above and for co-permittees, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR § 122.22(b))

7. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting and Notification Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

   Notice is required when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))

   d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code § 92a.24(a) and 40 CFR 122.42(b), the permittee shall provide notice to DEP and EPA as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BCW0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW (40 CFR 122.42(b)(3)). The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.

   a. Introduction of New Pollutants (25 Pa. Code § 92a.24(a), 40 CFR 122.42(b)(1))

      New pollutants are defined as parameters that meet one or more of the following criteria:

(i) Any pollutants that were not detected in the facilities' influent waste stream as reported in the permit application; and have not been approved to be included in the permittee's influent waste stream by DEP in writing.

(ii) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants (40 CFR 122.42(b)(1)).

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code § 92a.24(a), 40 CFR 122.42(b)(2))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or have been previously approved to be included in the permittee's influent waste stream by DEP in writing.

(ii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP and/or EPA, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the POTW, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations, may not result in a hydraulic or organic overload condition as defined in 25 Pa. Code § 94.1, and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BCW0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

(ii) The following conditions apply to the characterization of residual wastes received by the permittee:

(1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BCW0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The $BOD_5$ concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes. The influent $BOD_5$ characterization for the treatment facility, as reported in the annual Municipal Wasteload Management Report per 25 Pa. Code Chapter 94, must be representative of the hauled-in municipal wastes received.

4. Unanticipated Noncompliance or Potential Pollution Reporting

   a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).

      (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

      (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

      (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

   b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

      (i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):

         (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

         (2) Any upset which exceeds any effluent limitation in the permit; and

         (3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement.

      (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

      (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

   The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BCW0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

## PART B

## I. MANAGEMENT REQUIREMENTS

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

4. The permittee shall provide the following information in the annual Municipal Wasteload Management Report, required under the provisions of Title 25 Pa. Code Chapter 94:

   a. The requirements identified in 25 Pa. Code § 94.12.

   b. The identity of any indirect discharger(s) served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimated concentration of each pollutant discharged into the POTW by the indirect discharger.

   c. A "Solids Management Inventory" if specified in Part C of this permit.

   d. The total volume of hauled-in residual and municipal wastes received during the year, by source.

   e. The Annual Report requirements for permittees required to implement an industrial pretreatment program listed in Part C, as applicable.

D. General Pretreatment Requirements

1. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless specifically exempted by the Approval Authority. A POTW with a design flow of 5 MGD or less may be required to develop a POTW Pretreatment Program if the Approval Authority finds that the nature or volume of the industrial influent, treatment process upsets, violations of effluent limitations, contamination of sludge, or other circumstances warrant in order to prevent interference or pass through. (40 CFR 403.8)

2. Each POTW with an approved Pretreatment Program pursuant to 40 CFR 403.8 shall develop and enforce specific limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b), and shall continue to develop these limits as necessary and effectively enforce such limits. This condition applies, for example, when there are planned changes to the waste stream as identified in Part A III.C.2. If the permittee is required to develop or continue implementation of a Pretreatment Program, detailed requirements will be contained in Part C of this permit.

3. For all POTWs, where pollutants contributed by indirect dischargers result in interference or pass through, and a violation is likely to recur, the permittee shall develop and enforce specific limits for indirect dischargers and other users, as appropriate, that together with appropriate facility or operational changes, are necessary to ensure renewed or continued compliance with this permit or sludge use or disposal practices. Where POTWs do not have an approved Pretreatment Program, the permittee shall submit a copy of such limits to DEP when developed. (25 Pa. Code § 92a.47(d))

E. Proper Operation and Maintenance

1. The permittee shall employ operators certified in compliance with the Water and Wastewater Systems Operators Certification Act (63 P.S. §§ 1001-1015.1).

2. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

F. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

G. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This

condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

c. The permittee submitted the necessary notice required in paragraph G.4 below. (40 CFR 122.41(m)(4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in paragraph G.2 above. (40 CFR 122.41(m)(4)(ii))

4. Notice

a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

H. Sanitary Sewer Overflows (SSOs)

An SSO is an overflow of wastewater, or other untreated discharge from a separate sanitary sewer system (which is not a combined sewer system), which results from a flow in excess of the carrying capacity of the system or from some other cause prior to reaching the headworks of the sewage treatment facility. SSOs are not authorized under this permit. The permittee shall immediately report any SSO to DEP in accordance with Part A III.C.4 of this permit.

## II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR 122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

## III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and (40 CFR 122.61(b)(2))

   c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section. (40 CFR 122.61(b)(3))

   d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate Department regulations. (25 Pa. Code § 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

## IV. ANNUAL FEE

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code § 92a.62)

| | |
|---|---|
| Small Flow Treatment Facility (SRSTP and SFTF) | $0 |
| Minor Sewage Facility < 0.05 MGD (million gallons per day) | $250 |
| Minor Sewage Facility ≥ 0.05 and < 1 MGD | $500 |
| Minor Sewage Facility with CSO (Combined Sewer Overflow) | $750 |
| Major Sewage Facility ≥ 1 and < 5 MGD | $1,250 |
| Major Sewage Facility ≥ 5 MGD | $2,500 |
| Major Sewage Facility with CSO | $5,000 |

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major Sewage Facility >=1 and <5 MGD**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code § 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Clean Water
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

## PART C

### I. OTHER REQUIREMENTS

A. No storm water from pavements, area ways, roofs, foundation drains or other sources shall be directly admitted to the sanitary sewers associated with the herein approved discharge.

B. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

C. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 271, 273, 275, 283, and 285 (related to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR 257, Pennsylvania Clean Streams Law, Pennsylvania Solid Waste Management Act of 1980, and the Federal Clean Water Act and its amendments. The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport, and disposal of solid waste materials generated as a result of wastewater treatment.

### II. SOLIDS MANAGEMENT

A. The permittee shall manage and properly dispose of sewage sludge and/or biosolids by performing sludge wasting that maintains an appropriate mass balance of solids within the treatment system. The wasting rate must be developed and implemented considering the specific treatment process type, system loadings, and seasonal variation while maintaining compliance with effluent limitations. Holding excess sludge within clarifiers or in the disinfection process is not permissible.

B. The permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Sewage Sludge/Biosolids Production and Disposal" (Form No. 3800-FM-BCW0438) and "Supplemental Report – Influent & Process Control" (Form No. 3800-FM-BCW0436), as attachments to the DMR on a monthly basis. When applicable, the permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Hauled In Municipal Wastes" (Form No. 3800-FM-BCW0437) and "Supplemental Report – Hauled In Residual Wastes" (Form No. 3800-FM-BCW0450), as attachments to the DMR.

C. By March 31 of each year, the permittee shall submit a "Sewage Sludge Management Inventory" that summarizes the amount of sewage sludge and/or biosolids produced and wasted during the calendar year from the system. The "Sewage Sludge Management Inventory" may be submitted with the Municipal Wasteload Management Report required by Chapter 94. This summary shall include the expected sewage sludge production (estimated using the methodology described in the U.S. EPA handbook, "Improving POTW Performance Using the Composite Correction Approach" (EPA-625/6-84-008)), compared with the actual amount disposed during the year. Sludge quantities shall be expressed as dry weight in addition to gallons or other appropriate units.

### III. WHOLE EFFLUENT TOXICITY (WET)

A. General Requirements

1. The permittee shall conduct chronic WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate chronic survival and reproduction data for the cladoceran, *Ceriodaphnia dubia* and chronic survival and growth data for the fathead minnow, *Pimephales promelas*.

2. Samples shall be collected at Internal Outfall 101 in accordance with paragraph E.

3. The permittee shall perform testing using the following dilution series: 1%, 2%, 30%, 60%, and 100% effluent, with a control, where 1.15% is the facility-specific Target In-Stream Waste Concentration (TIWC).

4. The determination of whether a test endpoint passes or fails shall be made using DEP's WET Analysis Spreadsheet (available at www.dep.pa.gov/wett) by comparing replicate data for the control with replicate data for the TIWC dilution or any dilution greater than the TIWC.

5. The permittee shall submit only valid WET test results to DEP.

B. Test Frequency and Reporting

1. WET testing shall be conducted annually, at a minimum, during the period January 1 – December 31. Annual WET tests must be completed at least 6 months apart, and shall start in the year the permit becomes effective if the permit effective date is prior to October 1.

2. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 45 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below. The permittee shall continue annual WET monitoring, at a minimum, during the permit renewal review period and during any period of administrative extension of this permit.

3. If a test failure is determined for any endpoint during annual monitoring, the permittee shall initiate a re-test for the species with the failure within 45 days of test completion. All endpoints for the species shall be evaluated in the re-test. The results of the re-test shall be submitted to the DEP regional office that issued the permit.

4. If a passing result is determined for all endpoints in a re-test, the permittee may resume annual monitoring.

5. If there is a failure for one or more endpoints in a re-test, the permittee shall initiate or continue quarterly WET testing for both species until there are four consecutive passing results for all endpoints. The results of all tests shall be submitted to the DEP regional office that issued the permit. In addition, the permittee shall initiate a Phase I Toxicity Reduction Evaluation (TRE) as specified in paragraph C, below.

6. The permittee shall attach the WET Analysis Spreadsheet for the latest four consecutive WET tests to the NPDES permit renewal application that is submitted to DEP at least 180 days prior to the permit expiration date.

C. Phase I Toxicity Reduction Evaluation (TRE)

1. The Phase I TRE trigger is one WET endpoint failure followed by a re-test that confirms the failure for the same species. When the TRE process is triggered, quarterly WET testing shall be initiated for both species until there are four consecutive passing results for all endpoints. The Phase I TRE may include a Toxicity Identification Evaluation (TIE) if the permittee cannot immediately identify the possible causes of the effluent toxicity and the possible sources of the causative agents.

2. The permittee shall, within one year following the Phase I TRE trigger, submit a Phase I TRE report to the DEP regional office that issued the permit. The Phase I TRE shall be conducted in accordance with EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. If a TIE is conducted as part of the Phase I TRE, it shall conform to EPA's guidance, "Methods for Aquatic Toxicity Identification Evaluations Phase I" (EPA/600/6-91/003), "Phase II" (EPA/600/R-92/080), "Phase III" (EPA/600/R-92/081) and other relevant EPA guidance. The Phase I TRE report shall be submitted with the fourth quarterly WET test report that is completed following the Phase I TRE trigger. The TRE shall include all activities undertaken to identify the cause(s) and source(s) of toxicity and any control efforts.

3. If all four quarterly WET tests produce passing results for all endpoints during the Phase I TRE process, performance of a Phase II TRE is not required, and annual WET testing in accordance with paragraph B.1 may resume.

4. If the four WET tests produce at least one failing result during the Phase I TRE process, the permittee shall continue quarterly WETT monitoring for both species and initiate a Phase II TRE in accordance with paragraph D. In this case, the Phase I TRE must include a schedule for completion of the Phase II TRE. The schedule must include interim milestones and a final completion date not to exceed two years from the initiation of the Phase II TRE. The permittee shall implement the Phase II TRE in accordance with the schedule unless DEP issues written approval to modify the schedule or cease performance of the Phase II TRE.

5. Re-tests during the TRE process are required for invalid tests but are optional and at the discretion of the permittee for valid tests. The results of all re-tests must be submitted to the DEP regional office that issued the permit along with the required elements in paragraph H.

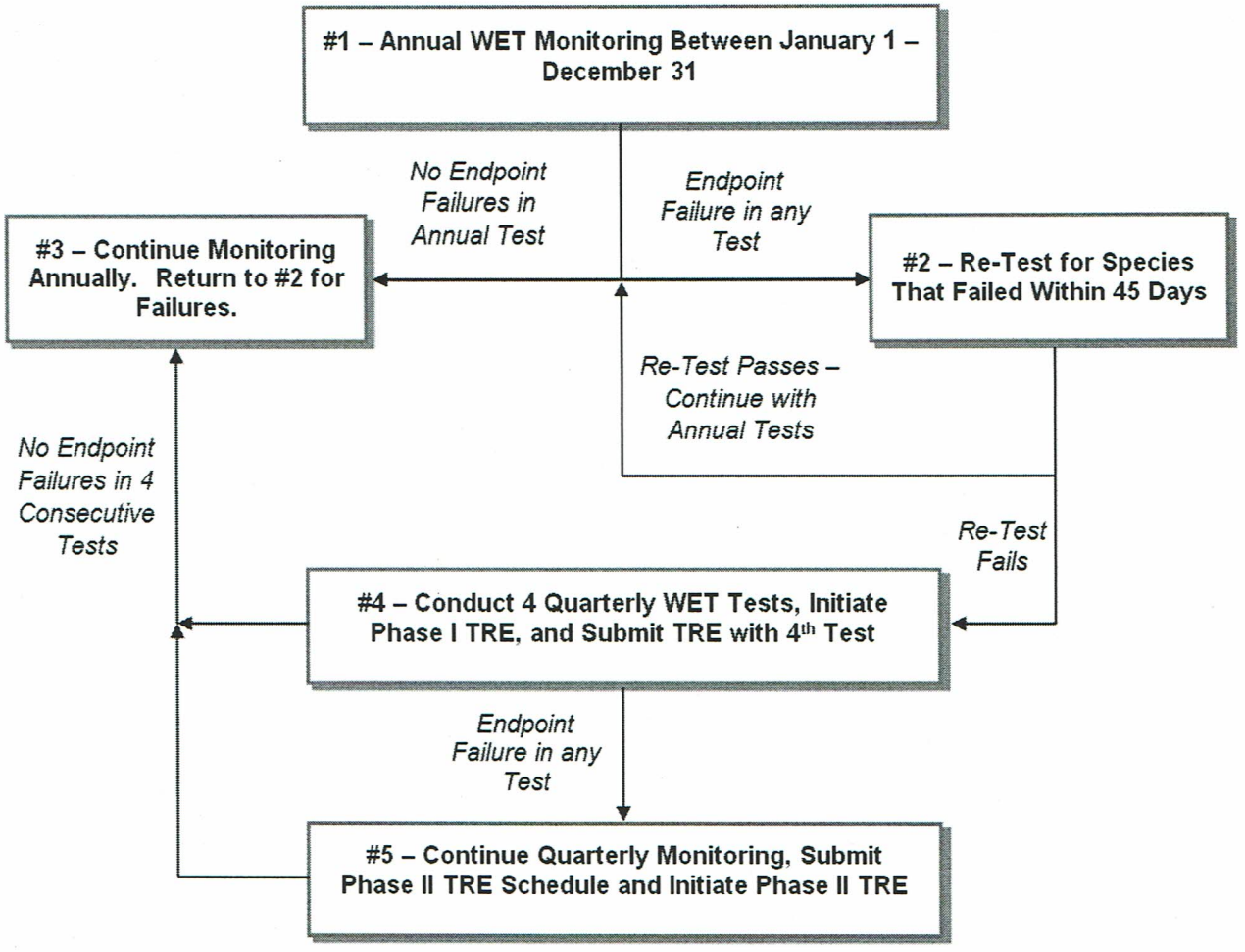
D. Phase II Toxicity Reduction Evaluation (TRE)

1. The Phase II TRE trigger is one WET endpoint failure during performance of the Phase I TRE. A Phase II TRE, if required, shall conform to EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. A Phase II TRE evaluates the possible control options to reduce or eliminate the effluent toxicity and the implementation of controls.

2. Once initiated, the Phase II TRE must continue until the source(s) of toxicity are controlled as evidenced by four consecutive WET test passing results for all endpoints, and a final TRE report must be submitted on or before the date specified in the schedule, unless otherwise approved by DEP in writing.

3. If four consecutive quarterly WET tests produce passing results for all endpoints during the Phase II TRE process, annual WET testing in accordance with paragraph B.1 may be initiated or resume.

An overview of the process described in paragraphs B, C and D is presented below:




E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned, composite samples shall be collected over a seven day exposure period. The samples must be collected at a frequency of not greater than every two hours and must be flow-proportioned. The samples must be collected at the permit compliance sampling location. Samples must be analyzed within 36 hours from the end of the compositing period and must be placed on ice and held at ≤ 6°C. Refer to the sample handling and preservation regulations set forth in 40 CFR 136, 25 Pa. Code Chapter 252, The NELAC Institute (TNI) Standard, and the appropriate EPA methods.

F. Test Conditions and Methods

Laboratories must be accredited by the DEP Laboratory Accreditation Program in order to perform and report WET tests for NPDES permit compliance. Laboratories must be either State or NELAP accredited.

1. Acute tests shall be completed in accordance with EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA-821-R-02-012, latest edition). Forty eight (48) hour static non-renewal tests shall be used.

2. Chronic tests shall be completed in accordance with EPA's "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA-821-R-02-013, latest edition). Seven (7) day tests shall be used with renewal every 24 hours.

3. The quality assurance and control (QA/QC) requirements and test acceptability standards specified in EPA's test methods and the requirements set forth in 25 Pa Code Chapter 252 or the TNI Standard must be followed.

4. If the permittee or its accredited laboratory determines that QA/QC requirements and/or test acceptability standards have not been met, a re-test shall be initiated within 45 days. Original test data must be maintained by the laboratory and be submitted to DEP upon request. The justification for a re-test must be clearly documented and kept on file with the sample results.

G. Chemical Analyses

Chemical analyses must follow the requirements of the EPA methods and applicable State and/or Federal regulations.

1. Chemical analysis on effluent samples shall include pH, Conductivity, Total Alkalinity, Total Hardness, Total Residual Chlorine, Total Ammonia (Unionized Ammonia), Dissolved Oxygen and temperature. Chemical analyses as described in the EPA Methods (above) shall be performed for each sampling event, including each new batch of dilution water and each testing event.

2. In addition to the chemical analyses required above, those parameters listed in Part A of the NPDES permit for the outfall(s) tested shall be analyzed concurrently with the WET test by using the method(s) specified in the permit.

H. WET Report Elements

WET test reports that are submitted to DEP must include the requirements identified in 25 Pa. Code § 252.401(j)(1) – (15) or in the TNI Standard, or equivalent, as well as the following information:

1. A general test description, including the origin and age of test organisms, dates and results of reference toxicant tests, light and temperature regimes, and other documentation that QA and test acceptability criteria as specified in EPA's methods and DEP's QA Summaries have been met.

2. A description of sample collection procedures and sampling location.

3. Name(s) of individual(s) collecting and transporting samples, including sample renewals, and the date(s) and time(s) of sample collection.

4. All chemical and physical data including laboratory quantitation limits and observations made on the species. The hardness shall be reported for each test condition.

5. Copies of raw data sheets and/or bench sheets with data entries and signatures.

6. When effluents are dechlorinated, dechlorination procedures must be described and if applicable a thiosulfate control used in addition to the normal dilution water control. If the thiosulfate control results are significantly different from the normal control, as determined using DEP's WET Analysis Spreadsheet, the thiosulfate control shall be used in the spreadsheet for comparison with the TIWC condition. The WET report must specify which control was used to determine whether the test result is pass or fail.

7. A description of all observations or test conditions that may have affected the test outcome.

8. Control charts for the species tested regarding age, temperature test range, mortality data and all reference toxicant tests.

9. A completed WET test summary report (3800-FM-BCW0485).

10. A DEP WET Analysis Spreadsheet printout that provides control and TIWC replicate data and displays the outcome of the test (pass or fail) for each endpoint tested.

WETT reports shall be submitted to the DEP regional office that issued the permit and, for discharges to the Delaware River basin, the Delaware River Basin Commission (DRBC).

## IV. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the following outfalls:

| Outfall No. | Latitude | Longitude | Description |
|---|---|---|---|
| 004 | 40° 44' 29" | 80° 19' 10" | Stormwater Outfall |
| 201 | NA | NA | Connects to Outfall 001 |

Monitoring requirements and effluent limitations for these outfalls are specified in Part A of this permit, if applicable.

B. Preparedness, Prevention and Contingency (PPC) Plan

1. The permittee shall develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below.

   a. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.

   b. The PPC Plan must describe preventative measures and BMPs that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.

   c. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.

   d. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).

   e. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.

   f. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures.

   g. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313 Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.

   h. Spill Prevention Control and Countermeasure (SPCC) plans may be used to meet the requirements of this section if the minimum requirements are addressed.

2. The permittee shall review and if necessary update the PPC Plan on an annual basis, at a minimum, and when one or more of the following occur:

   a. Applicable DEP or federal regulations are revised, or this permit is revised.

   b. The PPC Plan fails in an emergency.

   c. The facility's design, industrial process, operation, maintenance, or other circumstances change in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency.

d. The list of emergency coordinators or equipment changes.

e. When notified in writing by DEP.

The permittee shall maintain all PPC Plan updates on-site, make the updates available to DEP upon request.

C. Minimum Required BMPs

In addition to BMPs identified in the PPC Plan, the permittee shall implement the following minimum BMPs relating to stormwater pollution prevention:

1. If applicable, post-construction stormwater BMPs that are required under 25 Pa. Code Chapter 102 must be maintained.

2. Manage sludge in accordance with all applicable permit requirements.

3. Store chemicals in secure and covered areas on impervious surfaces away from storm drains.

4. For new facilities and upgrades, design wastewater treatment facilities to avoid, to the maximum extent practicable, stormwater commingling with sanitary wastewater, sewage sludge, and biosolids.

5. Efficiently use herbicides for weed control. Where practicable, use the least toxic herbicide that will achieve pest management objectives. Do not apply during windy conditions.

6. Do not wash parts or equipment over impervious surfaces that wash into storm drains.

7. Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavement, etc., wherever practicable.

D. Routine Inspections.

Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs in the PPC Plan and required by this permit shall be inspected on a semiannual basis, at a minimum, to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed. Documentation of inspections shall be maintained on-site and be made available to DEP upon request.

E. Stormwater Sampling Requirements

If stormwater sampling is required in Part A of this permit, the following requirements apply:

1. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.

2. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is not possible, a grab sample can be taken during the first hour of the discharge, in which case the discharger shall provide an explanation of why a grab sample during the first 30 minutes was not possible.

# EXHIBIT N2

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **01** | **01** | TO | **2017** | **01** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **01/01/2017**
DMR Effective To: **01/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 8.64 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.01 | *** | 7.46 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 771.4 | 1343.9 | lbs/day | *** | 28 | 48 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 36 | *** | lbs/day | *** | 1.43 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 3.45 | 1.89 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .77 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 31 | 160 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 399.1 | 516.9 | lbs/day | *** | 15 | 18.1 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2762 | 3731 | lbs/day | *** | 112 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2626 | 3448 | lbs/day | *** | 112 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring (Oct - Apr) 2017 Jan.xlsx | Daily Effluent Monitoring Form | 2017-02-15T09:38:53-05:00 | |
| Hauled In Municipal Wastes 2017 Jan.xls | Hauled-In Municipal Waste Form | 2017-02-15T09:40:32-05:00 | |
| Hauled In Residual Wastes 2017 Jan Sheet 4.xls | Hauled-In Residual Waste Form | 2017-02-15T09:45:48-05:00 | |
| Hauled In Residual Wastes 2017 Jan Sheet 1.xls | Hauled-In Residual Waste Form | 2017-02-15T09:42:00-05:00 | |
| Hauled In Residual Wastes 2017 Jan Sheet 2.xls | Hauled-In Residual Waste Form | 2017-02-15T09:43:40-05:00 | |
| Hauled In Residual Wastes 2017 Jan Sheet 3.xls | Hauled-In Residual Waste Form | 2017-02-15T09:44:46-05:00 | |
| Daily Influent 2017 Jan.xls | Influent and Process Control Form | 2017-02-15T09:36:42-05:00 | |
| Sewage Sludge 2017 Jan.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-02-15T14:06:56-05:00 | |
| Non-Compliance Form Jan 2017.doc | Other | 2017-02-15T10:47:03-05:00 | Non-compliance form |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39165 | 01/01/2017 | 01/31/2017 | Total Suspended Solids | Weekly Average | 48 | 45 | lbs/day | 101 | See attached comments | None taken | in the month of January the plant experienced over 5" of rain which caused high flows most of the month |

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

### SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2017 | 2 | 15 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **02** | **01** | TO | **2017** | **02** | **28** |

Reorting Frequency: **Monthly**
DMR Effective From: **02/01/2017**
DMR Effective To: **02/28/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.51 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.07 | *** | 7.51 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 274.2 | 420.8 | lbs/day | *** | 13 | 19 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 27 | *** | lbs/day | *** | 1.4 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 2.32 | 1.79 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .61 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <4 | 98 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 231.3 | 285.8 | lbs/day | *** | 11 | 12.9 | mg/L | Grab | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2537 | 4143 | lbs/day | *** | 125 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2080 | 3715 | lbs/day | *** | 102 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring 2017 FEB.xlsx | Daily Effluent Monitoring Form | 2017-03-22T14:04:07-04:00 | |
| Hauled In Municipal Wastes 2017 Feb.xls | Hauled-In Municipal Waste Form | 2017-03-22T13:30:45-04:00 | |
| Hauled In Residual Wastes 2017 Feb Sheet 1.xls | Hauled-In Residual Waste Form | 2017-03-22T13:36:26-04:00 | |
| Hauled In Residual Wastes 2017 Feb Sheet 4.xls | Hauled-In Residual Waste Form | 2017-03-22T13:38:29-04:00 | |
| Hauled In Residual Wastes 2017 Feb Sheet 3.xls | Hauled-In Residual Waste Form | 2017-03-22T13:37:26-04:00 | |
| Hauled In Residual Wastes 2017 Feb Sheet 1.xls | Hauled-In Residual Waste Form | 2017-03-22T13:32:44-04:00 | |
| Daily Influent 2017 Feb.xls | Influent and Process Control Form | 2017-03-22T13:29:08-04:00 | |
| Sewage Sludge 2017 Feb.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-03-22T13:39:43-04:00 | |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 40397 | Final Effluent( 101) | Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample type not in accordance with permit | |

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #47. Composite sampling of influent wastewater is performed at a location downstream of manhole #47 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

### SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2017 | 3 | 22 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **03** | **01** | TO | **2017** | **03** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **03/01/2017**
DMR Effective To: **03/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.52 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.08 | *** | 7.6 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 720.3 | 1798.9 | lbs/day | *** | 24 | 39 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 47 | *** | lbs/day | *** | 1.97 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 3.02 | 9.45 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .65 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <57 | 900 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 306.8 | 491.3 | lbs/day | *** | 12 | 13.3 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2853 | 4936 | lbs/day | *** | 134 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 5073 | 29273 | lbs/day | *** | 187 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring 2017 March.xlsx | Daily Effluent Monitoring Form | 2017-04-23T13:59:44-04:00 | |
| Hauled In Municipal Wastes 2017 March.xls | Hauled-In Municipal Waste Form | 2017-04-23T14:00:49-04:00 | |
| Hauled In Residual Wastes 2017 March sheet 4.xls | Hauled-In Residual Waste Form | 2017-04-23T14:02:33-04:00 | |
| Hauled In Residual Wastes 2017 March sheet 3.xls | Hauled-In Residual Waste Form | 2017-04-23T14:02:07-04:00 | |
| Hauled In Residual Wastes 2017 March sheet 2.xls | Hauled-In Residual Waste Form | 2017-04-23T14:01:34-04:00 | |
| Hauled In Residual Wastes 2017 March sheet 1.xls | Hauled-In Residual Waste Form | 2017-04-23T14:01:11-04:00 | |
| Sewage Sludge 2017 March.xls | Hauled-In Residual Waste Form | 2017-04-23T14:03:21-04:00 | |
| Hauled In Residual Wastes 2017 March sheet 5.xls | Hauled-In Residual Waste Form | 2017-04-23T14:02:55-04:00 | |
| Daily Influent 2017 March.xls | Influent and Process Control Form | 2017-04-23T14:00:19-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 4 | 23 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **04** | **01** | TO | **2017** | **04** | **30** |

Reorting Frequency: **Monthly**
DMR Effective From: **04/01/2017**
DMR Effective To: **04/30/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.61 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.07 | *** | 7.78 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 585.5 | 1010.1 | lbs/day | *** | 24 | 28 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 34 | *** | lbs/day | *** | 1.61 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 3.24 | 1.88 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .74 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <13 | 180 | CFU/100 ml | 8-Hr Composite | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 324.5 | 484.2 | lbs/day | *** | 13 | 14.6 | mg/L | 4-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2965 | 5479 | lbs/day | *** | 139 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2528 | 6813 | lbs/day | *** | 122 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Hauled In Residual Wastes 2017 April sheet 5.xls | Hauled-In Residual Waste Form | 2017-05-24T09:42:47-04:00 | |
| Hauled In Residual Wastes 2017 April sheet 4.xls | Hauled-In Residual Waste Form | 2017-05-24T09:39:50-04:00 | |
| Sewage Sludge 2017 April.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-05-24T09:43:52-04:00 | |
| Daily Influent 2017 April.xls | Influent and Process Control Form | 2017-05-24T09:52:45-04:00 | |
| Hauled In Municipal Wastes 2017 April.xls | Hauled-In Municipal Waste Form | 2017-05-24T09:29:56-04:00 | |
| Hauled In Residual Wastes 2017 April sheet 1.xls | Hauled-In Residual Waste Form | 2017-05-24T09:35:01-04:00 | |
| Hauled In Residual Wastes 2017 April sheet 2.xls | Hauled-In Residual Waste Form | 2017-05-24T09:37:07-04:00 | |
| Daily Effluent Monitoring 2017 April.xlsx | Daily Effluent Monitoring Form | 2017-05-24T09:23:08-04:00 | |
| Hauled In Residual Wastes 2017 April sheet 3.xls | Hauled-In Residual Waste Form | 2017-05-24T09:38:23-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 42530 | Final Effluent( 101) | Fecal Coliform | Sample type not in accordance with permit | |
| 42530 | Final Effluent( 101) | Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample type not in accordance with permit | |

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 5 | 24 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **05** | **01** | TO | **2017** | **05** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **05/01/2017**
DMR Effective To: **05/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.38 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.16 | *** | 7.69 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 634.9 | 1571.8 | lbs/day | *** | 27 | 50 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 47 | *** | lbs/day | *** | 2.15 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 2.67 | 6.07 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .3 | .82 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <42 | 220 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 265.4 | 519.7 | lbs/day | *** | 12 | 17.6 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2771 | 3979 | lbs/day | *** | 151 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2742 | 4750 | lbs/day | *** | 156 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Hauled In Residual Wastes 2017 May Sheet 2.xls | Hauled-In Residual Waste Form | 2017-06-25T13:40:53-04:00 | |
| Hauled In Residual Wastes 2017 May Sheet 3.xls | Hauled-In Residual Waste Form | 2017-06-25T13:41:18-04:00 | |
| Hauled In Residual Wastes 2017 May Sheet 4.xls | Hauled-In Residual Waste Form | 2017-06-25T13:41:39-04:00 | |
| Hauled In Residual Wastes 2017 May Sheet 5.xls | Hauled-In Residual Waste Form | 2017-06-25T13:42:02-04:00 | |
| Hauled In Residual Wastes 2017 May Sheet 6.xls | Hauled-In Residual Waste Form | 2017-06-25T13:42:34-04:00 | |
| Sewage Sludge 2017 May.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-06-25T13:42:58-04:00 | |
| Non-Complicance Form May 2017.pdf | Other | 2017-06-25T14:01:47-04:00 | Non-Compliance Form |
| Daily Influent 2017 May.xls | Influent and Process Control Form | 2017-06-25T13:37:56-04:00 | |
| Hauled In Municipal Wastes 2017 May.xls | Hauled-In Municipal Waste Form | 2017-06-25T13:38:22-04:00 | |
| Hauled In Residual Wastes 2017 May Sheet 1.xls | Hauled-In Residual Waste Form | 2017-06-25T13:40:27-04:00 | |
| Daily Effluent Monitoring 2017 May.xlsx | Daily Effluent Monitoring Form | 2017-06-25T13:37:30-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 43701 | 05/01/2017 | 05/31/2017 | Total Suspended Solids | Weekly Average | 50 | 45 | lbs/day | 101 | Other | None taken | In the Month of May, the plant experienced over 5" of rain resulting in higher flows than normal for most of the month. |

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #47. Composite sampling of influent wastewater is performed at a location downstream of manhole #47 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 6 | 25 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **06** | **01** | TO | **2017** | **06** | **30** |

Reorting Frequency: **Monthly**
DMR Effective From: **06/01/2017**
DMR Effective To: **06/30/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 6.68 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.04 | *** | 7.49 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 381.8 | 676.8 | lbs/day | *** | 27 | 45 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 39 | *** | lbs/day | *** | 2.77 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 1.74 | 1.37 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .89 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <10 | 120.0 | CFU/100 ml | 8-Hr Composite | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 166.0 | 213.9 | lbs/day | *** | 12 | 15.0 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2492 | 3949 | lbs/day | *** | 179 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2701 | 5972 | lbs/day | *** | 192 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring 2017 June.xlsx | Daily Effluent Monitoring Form | 2017-07-19T09:20:48-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 1.xls | Hauled-In Residual Waste Form | 2017-07-19T09:32:34-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 4.xls | Hauled-In Residual Waste Form | 2017-07-19T09:45:01-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 5.xls | Hauled-In Residual Waste Form | 2017-07-19T09:46:31-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 3.xls | Hauled-In Residual Waste Form | 2017-07-19T09:36:50-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 6.xls | Hauled-In Residual Waste Form | 2017-07-19T09:47:39-04:00 | |
| Sewage Sludge 2017 June.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-07-19T09:49:04-04:00 | |
| Hauled In Residual Wastes 2017 June Sheet 2.xls | Hauled-In Residual Waste Form | 2017-07-19T09:34:39-04:00 | |
| Daily Influent 2017 June.xls | Influent and Process Control Form | 2017-07-19T09:27:07-04:00 | |
| Hauled In Municipal Wastes 2017 June.xls | Hauled-In Municipal Waste Form | 2017-07-19T09:29:27-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 44650 | Final Effluent( 101) | Fecal Coliform | Sample type not in accordance with permit | |

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 7 | 19 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2017 | 07 | 01 | TO | 2017 | 07 | 31 |

Reorting Frequency: **Monthly**
DMR Effective From: **07/01/2017**
DMR Effective To: **07/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 6.75 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.16 | *** | 7.63 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 222.2 | 285.2 | lbs/day | *** | 15 | 19 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 45 | *** | lbs/day | *** | 3.02 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 2.07 | 4.24 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .5 | .67 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <11 | 90 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 157.1 | 191.2 | lbs/day | *** | 10 | 13.3 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2753 | 4860 | lbs/day | *** | 181 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2104 | 4524 | lbs/day | *** | 143 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring July 2017.xlsx | Daily Effluent Monitoring Form | 2017-08-27T10:49:54-04:00 | |
| Hauled In Municipal Wastes 2017 July.xls | Hauled-In Municipal Waste Form | 2017-08-27T10:50:42-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 6.xls | Hauled-In Residual Waste Form | 2017-08-27T10:52:56-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 5.xls | Hauled-In Residual Waste Form | 2017-08-27T10:52:36-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 4.xls | Hauled-In Residual Waste Form | 2017-08-27T10:52:14-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 3.xls | Hauled-In Residual Waste Form | 2017-08-27T10:51:55-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 2.xls | Hauled-In Residual Waste Form | 2017-08-27T10:51:25-04:00 | |
| Hauled In Residual Wastes 2017 July sheet 1.xls | Hauled-In Residual Waste Form | 2017-08-27T10:51:05-04:00 | |
| Daily Influent 2017 July.xls | Influent and Process Control Form | 2017-08-27T10:50:18-04:00 | |
| Sewage Sludge 2017 July.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-08-27T10:53:23-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 8 | 27 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **08** | **01** | TO | **2017** | **08** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **08/01/2017**
DMR Effective To: **08/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 6.2 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.09 | *** | 7.7 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 77.6 | 155.8 | lbs/day | *** | 7 | 13 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 56 | *** | lbs/day | *** | 5.08 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 1.31 | 1.88 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .59 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 7 | 230 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 96.4 | 155.8 | lbs/day | *** | 9 | 14.0 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2.283 | 3.846 | lbs/day | *** | 210 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2.662 | 4.837 | lbs/day | *** | 246 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Hauled In Residual Wastes August 2017 Sheet 4.xls | Hauled-In Residual Waste Form | 2017-09-19T09:19:24-04:00 | |
| Sewage Sludge 2017 August 2017.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-09-19T09:23:12-04:00 | |
| Hauled In Residual Wastes August 2017 Sheet 1.xls | Hauled-In Residual Waste Form | 2017-09-19T09:14:25-04:00 | |
| Hauled In Residual Wastes August 2017 Sheet 2.xls | Hauled-In Residual Waste Form | 2017-09-19T09:16:13-04:00 | |
| Daily Influent 2017 August 2017.xls | Influent and Process Control Form | 2017-09-19T09:10:30-04:00 | |
| Hauled In Residual Wastes August 2017 Sheet 6.xls | Hauled-In Residual Waste Form | 2017-09-19T09:21:34-04:00 | |
| Hauled In Residual Wastes August 2017 Sheet 5.xls | Hauled-In Residual Waste Form | 2017-09-19T09:20:28-04:00 | |
| Hauled In Residual Wastes August 2017 Sheet 3.xls | Hauled-In Residual Waste Form | 2017-09-19T09:17:50-04:00 | |
| Hauled In Municipal Wastes August 2017.xls | Hauled-In Municipal Waste Form | 2017-09-19T09:12:11-04:00 | |
| Daily Effluent Monitoring August 2017.xlsx | Daily Effluent Monitoring Form | 2017-09-19T09:07:40-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

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|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2017 | 9 | 19 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **09** | **01** | TO | **2017** | **09** | **30** |

Reorting Frequency: **Monthly**
DMR Effective From: **09/01/2017**
DMR Effective To: **09/30/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 5.73 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 6.93 | *** | 7.46 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 79.7 | 134.4 | lbs/day | *** | 8 | 10 | mg/L | Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 28 | *** | lbs/day | *** | 2.93 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 1.18 | 1.76 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .3 | .47 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 3 | 33 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 102.8 | 135.3 | lbs/day | *** | 10 | 10.9 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2565 | 4667 | lbs/day | *** | 267 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 3446 | 9281 | lbs/day | *** | 358 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Influent September 2017.xls | Influent and Process Control Form | 2017-10-18T09:07:08-04:00 | |
| Hauled In Municipal Wastes September 2017.xls | Hauled-In Municipal Waste Form | 2017-10-18T09:10:11-04:00 | |
| Daily Effluent Monitoring September 2017.xlsx | Daily Effluent Monitoring Form | 2017-10-18T09:02:54-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 2.xls | Hauled-In Residual Waste Form | 2017-10-18T09:15:54-04:00 | |
| Sewage Sludge September 2017.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-10-18T09:24:56-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 4.xls | Hauled-In Residual Waste Form | 2017-10-18T09:19:09-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 5.xls | Hauled-In Residual Waste Form | 2017-10-18T09:20:51-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 1.xls | Hauled-In Residual Waste Form | 2017-10-18T09:13:08-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 3.xls | Hauled-In Residual Waste Form | 2017-10-18T09:17:30-04:00 | |
| Hauled In Residual Wastes September 2017 Sheet 6.xls | Hauled-In Residual Waste Form | 2017-10-18T09:22:44-04:00 | |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 48248 | Final Effluent( 101) | Total Suspended Solids | Sample type not in accordance with permit | |

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

### SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 10 | 18 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **10** | **01** | TO | **2017** | **10** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **10/01/2017**
DMR Effective To: **10/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 6.85 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.0 | *** | 7.5 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | <134.7 | 309.8 | lbs/day | *** | <11 | 24 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 52 | *** | lbs/day | *** | 4.89 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 1.35 | 2.15 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .76 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <21 | 58 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 104.0 | 129.8 | lbs/day | *** | 9 | 10.1 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2013 | 3703 | lbs/day | *** | 176 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 2493 | 4437 | lbs/day | *** | 220 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring Oct 2017.xlsx | Daily Effluent Monitoring Form | 2017-11-26T13:42:43-05:00 | |
| Hauled In Municipal Wastes October 2017.xls | Hauled-In Municipal Waste Form | 2017-11-26T13:43:34-05:00 | |
| Hauled In Residual Wastes October 2017 Sheet 5.xls | Hauled-In Residual Waste Form | 2017-11-26T13:45:56-05:00 | |
| Hauled In Residual Wastes October 2017 Sheet 4.xls | Hauled-In Residual Waste Form | 2017-11-26T13:45:32-05:00 | |
| Hauled In Residual Wastes October 2017 Sheet 3.xls | Hauled-In Residual Waste Form | 2017-11-26T13:45:06-05:00 | |
| Hauled In Residual Wastes October 2017 Sheet 2.xls | Hauled-In Residual Waste Form | 2017-11-26T13:44:42-05:00 | |
| Hauled In Residual Wastes October 2017 Sheet 1.xls | Hauled-In Residual Waste Form | 2017-11-26T13:44:02-05:00 | |
| Daily Influent October 2017.xls | Influent and Process Control Form | 2017-11-26T13:43:07-05:00 | |
| Sewage Sludge October 2017.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-11-26T13:46:18-05:00 | |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

### SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2017 | 11 | 26 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2017 | 11 | 01 | TO | 2017 | 11 | 30 |

Reorting Frequency: **Monthly**
DMR Effective From: **11/01/2017**
DMR Effective To: **11/30/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.98 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.17 | *** | 7.66 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 336.9 | 775.4 | lbs/day | *** | 12 | 16 | mg/L | Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 93 | *** | lbs/day | *** | 4.17 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 2.88 | 10.3 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .79 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <13 | 700 | CFU/100 ml | 8-Hr Composite | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 272.6 | 653.8 | lbs/day | *** | 9 | 11.5 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 3.188 | 10004 | lbs/day | *** | 126 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 1948 | 3447 | lbs/day | *** | 101 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring November 2017.xlsx | Daily Effluent Monitoring Form | 2017-12-20T09:01:45-05:00 | |
| Hauled In Municipal Wastes November 2017.xls | Hauled-In Municipal Waste Form | 2017-12-20T09:21:02-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 3.xls | Hauled-In Residual Waste Form | 2017-12-20T09:27:14-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 1.xls | Hauled-In Residual Waste Form | 2017-12-20T09:23:32-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 5.xls | Hauled-In Residual Waste Form | 2017-12-20T09:30:29-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 6.xls | Hauled-In Residual Waste Form | 2017-12-20T09:31:49-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 4.xls | Hauled-In Residual Waste Form | 2017-12-20T09:28:49-05:00 | |
| Sewage Sludge November 2017.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2017-12-20T09:33:27-05:00 | |
| Daily Influent November 2017.xls | Influent and Process Control Form | 2017-12-20T09:12:52-05:00 | |
| Hauled In Residual Wastes November 2017 Sheet 2.xls | Hauled-In Residual Waste Form | 2017-12-20T09:25:19-05:00 | |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 50437 | Final Effluent( 101) | Fecal Coliform | Sample type not in accordance with permit | |
| 50437 | Final Effluent( 101) | Total Suspended Solids | Sample type not in accordance with permit | |

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

### SUBMISSION INFORMATION

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| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2017 | 12 | 20 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2017** | **12** | **01** | TO | **2017** | **12** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **12/01/2017**
DMR Effective To: **12/31/2017**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 8.1 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.05 | *** | 7.61 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 208.2 | 275.6 | lbs/day | *** | 13 | 17 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 86 | *** | lbs/day | *** | 5.65 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 1.86 | 2.98 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .5 | .83 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 51 | 220 | CFU/100 ml | 8-Hr Composite | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 151.6 | 170.8 | lbs/day | *** | 10 | 11.3 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 2.745 | 4.776 | lbs/day | *** | 179 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 3.673 | 8.506 | lbs/day | *** | 233 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Hauled In Residual Wastes 2017 December Sheet 3.xls | Hauled-In Residual Waste Form | 2018-01-18T09:42:57-05:00 | |
| Sewage Sludge 2017 December.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-01-18T09:48:44-05:00 | |
| Hauled In Residual Wastes 2017 December Sheet 5.xls | Hauled-In Residual Waste Form | 2018-01-18T09:47:25-05:00 | |
| Daily Influent 2017 December.xls | Influent and Process Control Form | 2018-01-18T09:32:59-05:00 | |
| Annual Stormwater Inspection 12-5-17.pdf | Stormwater Annual Inspection Report | 2018-01-18T09:28:54-05:00 | |
| Hauled In Municipal Wastes 2017 December.xls | Hauled-In Municipal Waste Form | 2018-01-18T09:34:42-05:00 | |
| Hauled In Residual Wastes 2017 December Sheet 1.xls | Hauled-In Residual Waste Form | 2018-01-18T09:39:38-05:00 | |
| Hauled In Residual Wastes 2017 December Sheet 2.xls | Hauled-In Residual Waste Form | 2018-01-18T09:41:31-05:00 | |
| Hauled In Residual Wastes 2017 December Sheet 4.xls | Hauled-In Residual Waste Form | 2018-01-18T09:45:47-05:00 | |
| Daily Effluent Monitoring 2017 December.xlsx | Daily Effluent Monitoring Form | 2018-01-18T09:31:19-05:00 | |

### PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|
| 51277 | Final Effluent( 101) | Fecal Coliform | Sample type not in accordance with permit | |

### COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | | | |

### SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2018 | 1 | 18 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **01** | **01** | TO | **2018** | **01** | **31** |

Reorting Frequency: **Monthly**
DMR Effective From: **01/01/2018**
DMR Effective To: **01/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.53 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.14 | *** | 7.51 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 268.1 | 631.0 | lbs/day | *** | 11 | 24 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 88 | *** | lbs/day | *** | 3.34 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 3.06 | 11.31 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .5 | .92 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 46 | 460 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 219.9 | 631.0 | lbs/day | *** | 9 | 11.2 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 3161 | 4933 | lbs/day | *** | 188 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 4258 | 17014 | lbs/day | *** | 188 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring Jan 2018.xlsx | Daily Effluent Monitoring Form | 2018-02-14T09:40:21-05:00 | |
| Hauled In Municipal Wastes Jan 2018.xls | Hauled-In Municipal Waste Form | 2018-02-14T09:43:52-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-02-14T09:50:04-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-02-14T09:51:20-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-02-14T09:54:17-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 10.xls | Hauled-In Residual Waste Form | 2018-02-14T10:05:19-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-02-14T09:59:12-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-02-14T09:56:35-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-02-14T09:45:56-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-02-14T09:48:12-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-02-14T10:03:44-05:00 | |
| Hauled In Residual Wastes Jan 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-02-14T10:02:14-05:00 | |
| Daily Influent Jan 2018.xls | Influent and Process Control Form | 2018-02-14T09:42:29-05:00 | |
| Sewage Sludge Jan 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-02-14T10:06:47-05:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes.j | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

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|---|---|---|---|---|---|---|---|
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| DURISHJ | | | AREA CODE | NUMBER | 2018 | 2 | 14 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **02** | **01** | TO | **2018** | **02** | **28** |

Reorting Frequency: **Monthly**
DMR Effective From: **02/01/2018**
DMR Effective To: **02/28/2018**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.85 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.13 | *** | 7.53 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 1183.3 | 2278.7 | lbs/day | *** | 24 | 38 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 127 | *** | lbs/day | *** | 3.23 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 4.87 | 14.21 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .3 | .62 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 140 | 1800 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 502.6 | 972.5 | lbs/day | *** | 11 | 14.9 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 6660 | 20542 | lbs/day | *** | 172 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 3067 | 5231 | lbs/day | *** | 83 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring Feb 2018.xlsx | Daily Effluent Monitoring Form | 2018-03-21T10:39:46-04:00 | |
| Hauled In Municipal Wastes Feb 2018.xls | Hauled-In Municipal Waste Form | 2018-03-21T10:43:25-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 16.xls | Hauled-In Residual Waste Form | 2018-03-21T11:11:17-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 14.xls | Hauled-In Residual Waste Form | 2018-03-21T11:08:54-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 5.xls | Hauled-In Residual Waste Form | 2018-03-21T10:52:53-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-03-21T10:51:45-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 13.xls | Hauled-In Residual Waste Form | 2018-03-21T11:07:35-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 11.xls | Hauled-In Residual Waste Form | 2018-03-21T11:04:44-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-03-21T10:48:37-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 18.xls | Hauled-In Residual Waste Form | 2018-03-21T11:13:50-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-03-21T10:58:57-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-03-21T10:54:14-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-03-21T10:55:23-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 10.xls | Hauled-In Residual Waste Form | 2018-03-21T11:03:09-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-03-21T11:01:35-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-03-21T10:47:13-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-03-21T10:50:23-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 12.xls | Hauled-In Residual Waste Form | 2018-03-21T11:06:00-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 15.xls | Hauled-In Residual Waste Form | 2018-03-21T11:10:10-04:00 | |
| Hauled In Residual Wastes Feb 2018 Sheet 17.xls | Hauled-In Residual Waste Form | 2018-03-21T11:12:29-04:00 | |
| Daily Influent 2018 Feb.xls | Influent and Process Control Form | 2018-03-21T10:41:54-04:00 | |
| Sewage Sludge 2018 Feb.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-03-21T11:15:06-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 54308 | 02/01/2018 | 02/28/2018 | Total Suspended Solids | Weekly Average | 2278.7 | 1802.5 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 6.5 inches of rain we received during the month of February. |

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #47. Composite sampling of influent wastewater is performed at a location downstream of manhole #47 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2018 | 3 | 21 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2018 | 03 | 01 | TO | 2018 | 03 | 31 |

Reorting Frequency: **Monthly**
DMR Effective From: **03/01/2018**
DMR Effective To: **03/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.32 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.1 | *** | 7.81 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 523.4 | 714.1 | lbs/day | *** | 24 | 34 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 246 | *** | lbs/day | *** | 11.67 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 3.2 | 8.23 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .4 | .66 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 83 | 360 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 257.2 | 335.0 | lbs/day | *** | 12 | 14.3 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 4086 | 6125 | lbs/day | *** | 183 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 3438 | 7026 | lbs/day | *** | 161 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Hauled In Residual Wastes March 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-04-26T11:26:40-04:00 | |
| Daily Influent March 2018.xls | Influent and Process Control Form | 2018-04-26T11:21:58-04:00 | |
| Hauled In Municipal Wastes March 2018.xls | Hauled-In Municipal Waste Form | 2018-04-26T11:22:40-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 5.xls | Hauled-In Residual Waste Form | 2018-04-26T11:25:03-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-04-26T11:23:20-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-04-26T11:24:14-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-04-26T11:25:54-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 15.xls | Hauled-In Residual Waste Form | 2018-04-26T11:29:04-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-04-26T11:25:27-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 11.xls | Hauled-In Residual Waste Form | 2018-04-26T11:27:24-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 14.xls | Hauled-In Residual Waste Form | 2018-04-26T11:28:38-04:00 | |
| Daily Effluent Monitoring March 2018.xlsx | Daily Effluent Monitoring Form | 2018-04-26T11:21:14-04:00 | |
| Sewage Sludge March 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-04-26T11:29:30-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-04-26T11:23:49-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-04-26T11:24:40-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 12.xls | Hauled-In Residual Waste Form | 2018-04-26T11:27:48-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 13.xls | Hauled-In Residual Waste Form | 2018-04-26T11:28:13-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 10.xls | Hauled-In Residual Waste Form | 2018-04-26T11:27:03-04:00 | |
| Hauled In Residual Wastes March 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-04-26T11:26:18-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2018 | 4 | 26 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **04** | **01** | TO | **2018** | **04** | **30** |

Reorting Frequency: **Monthly**
DMR Effective From: **04/01/2018**
DMR Effective To: **04/30/2018**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 7.35 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 7.14 | *** | 7.8 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 904.8 | 1372.8 | lbs/day | *** | 26 | 33 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 296 | *** | lbs/day | *** | 7.87 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 4.0 | 10.69 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .3 | .55 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | <38 | 700 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 466.0 | 941.3 | lbs/day | *** | 12 | 16.7 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 4289 | 9760 | lbs/day | *** | 123 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 4260 | 9634 | lbs/day | *** | 121 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Influent April 2018.xls | Influent and Process Control Form | 2018-05-24T12:24:50-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-05-24T12:28:13-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-05-24T12:28:37-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-05-24T12:28:58-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-05-24T12:29:19-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 11.xls | Hauled-In Residual Waste Form | 2018-05-24T12:30:04-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 14.xls | Hauled-In Residual Waste Form | 2018-05-24T12:31:04-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 16.xls | Hauled-In Residual Waste Form | 2018-05-24T12:31:58-04:00 | |
| Sewage Sludge April 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-05-24T12:32:21-04:00 | |
| Hauled In Municipal Wastes April 2018.xls | Hauled-In Municipal Waste Form | 2018-05-24T12:25:41-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-05-24T12:26:07-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-05-24T12:27:04-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 5.xls | Hauled-In Residual Waste Form | 2018-05-24T12:27:51-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 10.xls | Hauled-In Residual Waste Form | 2018-05-24T12:29:42-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-05-24T12:27:26-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 12.xls | Hauled-In Residual Waste Form | 2018-05-24T12:30:24-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 13.xls | Hauled-In Residual Waste Form | 2018-05-24T12:30:43-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 15.xls | Hauled-In Residual Waste Form | 2018-05-24T12:31:38-04:00 | |
| Daily Effluent Monitoring April 2018.xlsx | Daily Effluent Monitoring Form | 2018-05-24T12:13:43-04:00 | |
| Hauled In Residual Wastes April 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-05-24T12:26:36-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

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|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| DURISHJ | | | AREA CODE | NUMBER | 2018 | 5 | 24 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2018 | 05 | 01 | TO | 2018 | 05 | 31 |

Reorting Frequency: **Monthly**
DMR Effective From: **05/01/2018**
DMR Effective To: **05/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due **09/01/2017**
No Discharge? **No**

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLE TYPE | SAMPLE FREQUENCY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen | Sample Measurement | *** | *** | *** | 6.94 | *** | *** | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | Monitor & Report Min | *** | *** | | Grab | 2/week |
| pH | Sample Measurement | *** | *** | *** | 6.87 | *** | 7.64 | S.U. | Grab | 1/day |
| | Permit Measurement | *** | *** | | 6.0 Min | *** | 9.0 Max | | Grab | 2/week |
| Total Suspended Solids | Sample Measurement | 560.2 | 1173.7 | lbs/day | *** | 29 | 53 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 8-Hr Composite | 2/week |
| Ammonia-Nitrogen | Sample Measurement | 88 | *** | lbs/day | *** | 4.73 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Flow | Sample Measurement | 2.2 | 3.09 | MGD | *** | *** | *** | *** | Recorded | Continuous |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Recorded | Continuous |
| Total Residual Chlorine (TRC) | Sample Measurement | *** | *** | *** | *** | .3 | .67 | mg/L | Grab | 1/day |
| | Permit Measurement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | Grab | See Permit |
| Fecal Coliform | Sample Measurement | *** | *** | *** | *** | 247 | 2100 | CFU/100 ml | Grab | 2/week |
| | Permit Measurement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | Grab | 2/week |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) | Sample Measurement | 241.9 | 350.0 | lbs/day | *** | 13 | 15.5 | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 8-Hr Composite | 2/week |
| Biochemical Oxygen Demand (BOD5) | Sample Measurement | 4359 | 9120 | lbs/day | *** | 229 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| Total Suspended Solids | Sample Measurement | 5758 | 15673 | lbs/day | *** | 291 | *** | mg/L | 8-Hr Composite | 2/week |
| | Permit Measurement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 8-Hr Composite | 2/week |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Influent May 2018.xls | Influent and Process Control Form | 2018-06-25T10:41:51-04:00 | |
| Daily Effluent Monitoring May 2018.xlsx | Daily Effluent Monitoring Form | 2018-06-26T11:26:25-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-06-25T10:43:43-04:00 | |
| Sewage Sludge May 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-06-25T10:49:53-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 5.xls | Hauled-In Residual Waste Form | 2018-06-25T10:45:29-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-06-25T10:45:04-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 10.xls | Hauled-In Residual Waste Form | 2018-06-25T10:48:48-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-06-25T10:44:33-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-06-25T10:46:04-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-06-25T10:48:21-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 11.xls | Hauled-In Residual Waste Form | 2018-06-25T10:49:17-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-06-25T10:47:37-04:00 | |
| Hauled In Municipal Wastes May 2018.xls | Hauled-In Municipal Waste Form | 2018-06-25T10:42:34-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-06-25T10:43:02-04:00 | |
| Hauled In Residual Wastes May 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-06-25T10:48:00-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point ID | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 58773 | 05/01/2018 | 05/31/2018 | Fecal Coliform | Geometric Mean | 247 | 200 | | Final Effluent (101) | Fixed film sloughing | Increased solids wasting rate | Our trickling filters started sloughing off at the beginning of May and lasted into the beginning of June. |
| 58774 | 05/01/2018 | 05/31/2018 | Total Suspended Solids | Weekly Average | 53 | 45 | lbs/day | Final Effluent (101) | Organic load exceeding plant or unit design | See attached comments | The influent TSS on 5/13/2018 was unusually high at 720 mg/L which made our effluent TSS higher than normal at 96 mg/L. This put the weely average over by 8 mg/L. This event also occured during slough off. |
| 58775 | 05/01/2018 | 05/31/2018 | Fecal Coliform | Instantaneous Maximum | 2100 | 1000 | | Final Effluent (101) | Insufficient/overdose chemical feed | Increased chemical feed | There was a high chlorine demand during the Fecal Grab sample resulting in a 0.09 mg/L TRC. The chlorine dosing rate was increased imediately after. |

## UNAUTHORISED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| | | | AREA CODE | NUMBER | 2018 | 6 | 26 |
| DURISHJ | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2018 | 06 | 01 | TO | 2018 | 06 | 30 |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2018**
DMR Effective To: **06/30/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.22 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.0 | *** | 7.43 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Min | *** | 9.0 Max | | 2/week | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 426.4 | 606.3 | lbs/day | *** | 24 | 29 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 86 | *** | lbs/day | *** | 4.62 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.98 | 2.54 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | 1.0 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | See Permit | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <37 | 380 | CFU/100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 207.8 | 256.3 | lbs/day | *** | 12 | 14.6 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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3800-FM-BPNPSM0462 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **06** | **01** | TO | **2018** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2018**
DMR Effective To: **06/30/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4006 | 6789 | lbs/day | *** | 238 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3539 | 5124 | lbs/day | *** | 213 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comment |
|---|---|---|---|
| Daily Effluent Monitoring June 2018.xlsx | Daily Effluent Monitoring Form | 2018-07-27T11:10:06-04:00 | |
| Hauled In Municipal Wastes June 2018.xls | Hauled-In Municipal Waste Form | 2018-07-27T11:11:03-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 5.xls | Hauled-In Residual Waste Form | 2018-07-27T11:13:31-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 6.xls | Hauled-In Residual Waste Form | 2018-07-27T11:14:02-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 8.xls | Hauled-In Residual Waste Form | 2018-07-27T11:15:05-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 4.xls | Hauled-In Residual Waste Form | 2018-07-27T11:13:06-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 3.xls | Hauled-In Residual Waste Form | 2018-07-27T11:12:41-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 7.xls | Hauled-In Residual Waste Form | 2018-07-27T11:14:29-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 2.xls | Hauled-In Residual Waste Form | 2018-07-27T11:12:04-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 9.xls | Hauled-In Residual Waste Form | 2018-07-27T11:15:29-04:00 | |
| Hauled In Residual Wastes June 2018 Sheet 1.xls | Hauled-In Residual Waste Form | 2018-07-27T11:11:33-04:00 | |
| Daily Influent June 2018.xls | Influent and Process Control Form | 2018-07-27T11:10:35-04:00 | |
| Sewage Sludge June 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-07-27T11:15:59-04:00 | |

## PERMIT VIOLATIONS

| Non Compliance ID | Event Begin Date | Event End Date | Parameter | Limit Type | Reported Value | Permitted Value | Load Units | Sampling Point | Cause Of NC | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non Compliance ID | Event Begin Date | Event End Date | Time Discovered | Substance Discharged | Event Location | Volume | Duration | Receiving Waters | Impact On Water | Cause Of Discharge | DEP Notified | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non Compliance ID | Stage Code (Sampling Point) | Reported Parameter | Non Compliance Type | Comments |
|---|---|---|---|---|

## COMMENTS DETAILS

| Comment | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr, | S18320 | 724-561-6511 |

## SUBMISSION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
| durishj | | | 724 | -561-6511 | 2018 | 7 | 27 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **07** | **01** | TO | **2018** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2018**
DMR Effective To: **07/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.18 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7 | *** | 7.57 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Min | *** | 9.0 Max | | 2/week | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 127.1 | 209.4 | lbs/day | *** | 9 | 15 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 56 | *** | lbs/day | *** | 3.89 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.85 | 3.48 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | 1.49 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | See Permit | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <7 | 92 | CFU/100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 117.5 | 147.9 | lbs/day | *** | 8 | 10.4 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **07** | **01** | TO | **2018** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2018**
DMR Effective To: **07/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2909 | 4604 | lbs/day | *** | 210 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4179 | 11774 | lbs/day | *** | 303 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Wastes July 2018 - Sheet (4).xls | Hauled-In Residual Waste Form | 2018-08-24T11:00:08-04:00 | |
| Hauled In Municipal Wastes July 2018.xls | Hauled-In Municipal Waste Form | 2018-08-24T10:57:45-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (7).xls | Hauled-In Residual Waste Form | 2018-08-24T11:01:23-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (2).xls | Hauled-In Residual Waste Form | 2018-08-24T10:59:18-04:00 | |
| Sewage Sludge July 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-08-24T10:58:22-04:00 | |
| Daily Effluent Monitoring July 2018.xlsx | Daily Effluent Monitoring Form | 2018-08-24T10:56:20-04:00 | |
| Daily Influent July 2018.xls | Influent and Process Control Form | 2018-08-24T10:57:11-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (1).xls | Hauled-In Residual Waste Form | 2018-08-24T10:58:52-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (3).xls | Hauled-In Residual Waste Form | 2018-08-24T10:59:42-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (5).xls | Hauled-In Residual Waste Form | 2018-08-24T11:00:35-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (6).xls | Hauled-In Residual Waste Form | 2018-08-24T11:00:59-04:00 | |
| Hauled In Residual Wastes July 2018 - Sheet (8).xls | Hauled-In Residual Waste Form | 2018-08-24T11:01:50-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Comments |
|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr, | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Joseph Durish | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| durishj | | | (724) | 561-6511 | 2018 | 8 | 24 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2018 | 08 | 01 | TO | 2018 | 08 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2018**
DMR Effective To: **08/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.15 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.01 | *** | 7.64 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Min | *** | 9.0 Max | | 2/week | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 313.8 | 429.3 | lbs/day | *** | 21 | 24 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 102 | *** | lbs/day | *** | 7.2 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.85 | 3.28 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | 1.02 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | See Permit | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <34 | 209 | CFU/100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 154.4 | 193.4 | lbs/day | *** | 10 | 10.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **08** | **01** | TO | **2018** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2018**
DMR Effective To: **08/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4454 | 12539 | lbs/day | *** | 223 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3971 | 10979 | lbs/day | *** | 210 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent Monitoring AUG 2018.xlsx | Daily Effluent Monitoring Form | 2018-09-25T09:10:09-04:00 | |
| Hauled In Municipal Wastes AUG 2018.xls | Hauled-In Municipal Waste Form | 2018-09-25T09:11:47-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (8).xls | Hauled-In Residual Waste Form | 2018-09-25T09:19:01-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (9).xls | Hauled-In Residual Waste Form | 2018-09-25T09:19:28-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (7).xls | Hauled-In Residual Waste Form | 2018-09-25T09:17:36-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (6).xls | Hauled-In Residual Waste Form | 2018-09-25T09:16:54-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (4).xls | Hauled-In Residual Waste Form | 2018-09-25T09:15:18-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (1).xls | Hauled-In Residual Waste Form | 2018-09-25T09:13:10-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (3).xls | Hauled-In Residual Waste Form | 2018-09-25T09:14:34-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (2).xls | Hauled-In Residual Waste Form | 2018-09-25T09:14:06-04:00 | |
| Hauled In Residual Wastes AUG 2018 - Sheet (5).xls | Hauled-In Residual Waste Form | 2018-09-25T09:16:14-04:00 | |
| Daily Influent AUG 2018.xls | Influent and Process Control Form | 2018-09-25T09:11:10-04:00 | |
| Sewage Sludge AUG 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-09-25T09:12:22-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr, | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2018** | **9** | **25** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **09** | **01** | TO | **2018** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2018**
DMR Effective To: **09/30/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.92 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.02 | *** | 7.84 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Min | *** | 9.0 Max | | 2/week | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 1811.7 | 5656.3 | lbs/day | *** | 32 | 77 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 194 | *** | lbs/day | *** | 4 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.85 | 14.71 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .84 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | See Permit | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <101 | 600 | CFU/100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 553.9 | 1200.3 | lbs/day | *** | 13 | 15.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **09** | **01** | TO | **2018** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2018**
DMR Effective To: **09/30/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4033 | 9640 | lbs/day | *** | 129 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3596 | 7746 | lbs/day | *** | 122 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Municipal Wastes SEPT 2018.xls | Hauled-In Municipal Waste Form | 2018-10-22T10:48:15-04:00 | |
| Daily Effluent Monitoring SEPT 2018.xlsx | Daily Effluent Monitoring Form | 2018-10-22T10:46:56-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (2).xls | Hauled-In Residual Waste Form | 2018-10-22T10:49:40-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (3).xls | Hauled-In Residual Waste Form | 2018-10-22T10:50:03-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (12).xls | Hauled-In Residual Waste Form | 2018-10-22T10:53:08-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (11).xls | Hauled-In Residual Waste Form | 2018-10-22T10:53:33-04:00 | |
| Daily Influent SEPT 2018.xls | Influent and Process Control Form | 2018-10-22T10:47:49-04:00 | |
| Sewage Sludge SEPT 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-10-22T10:48:47-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (1).xls | Hauled-In Residual Waste Form | 2018-10-22T10:49:15-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (4).xls | Hauled-In Residual Waste Form | 2018-10-22T10:50:29-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (5).xls | Hauled-In Residual Waste Form | 2018-10-22T10:50:56-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (6).xls | Hauled-In Residual Waste Form | 2018-10-22T10:51:24-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (7).xls | Hauled-In Residual Waste Form | 2018-10-22T10:51:52-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (8).xls | Hauled-In Residual Waste Form | 2018-10-22T10:52:13-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (9).xls | Hauled-In Residual Waste Form | 2018-10-22T10:52:36-04:00 | |
| Hauled In Residual Wastes SEPT 2018 - Sheet (10).xls | Hauled-In Residual Waste Form | 2018-10-22T10:54:00-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 73247 | 09/01/2018 | 09/30/2018 | Total Suspended Solids | Average Monthly | 1811.7 | 1201.7 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver STP was hydraulically overloaded from the 11.11 inches of we received during the month if September. |
| 73248 | 09/01/2018 | 09/30/2018 | Total Suspended Solids | Weekly Average | 5656.3 | 1802.5 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver STP was hydraulically overloaded from the 11.11 inches of we received during the month if September. |
| 73249 | 09/01/2018 | 09/30/2018 | Total Suspended Solids | Average Monthly | 32 | 30 | mg/L | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver STP was hydraulically overloaded from the 11.11 inches of we received during the month if September. |
| 73250 | 09/01/2018 | 09/30/2018 | Total Suspended Solids | Weekly Average | 77 | 45 | mg/L | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver STP was hydraulically overloaded from the 11.11 inches of we received during the month if September. |

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2018** | **10** | **22** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **10** | **01** | TO | **2018** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2018**
DMR Effective To: **10/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.1 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.04 | *** | 7.69 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Min | *** | 9.0 Max | | 2/week | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 513.0 | 766.2 | lbs/day | *** | 27 | 35 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30 Avg Mo | 45 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 85 | *** | lbs/day | *** | 4.22 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.34 | 3.44 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .64 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | See Permit | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <30 | 840 | CFU/100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 221.8 | 303.7 | lbs/day | *** | 11 | 13.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **10** | **01** | TO | **2018** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2018**
DMR Effective To: **10/31/2018**
Permit Expires: **02/28/2018**
Permit Application Due: **09/01/2017**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3429 | 4577 | lbs/day | *** | 180 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3308 | 4182 | lbs/day | *** | 174 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Wastes OCT 2018 - Sheet (8).xls | Hauled-In Residual Waste Form | 2018-11-15T10:49:01-05:00 | |
| Daily Influent OCT 2018.xls | Influent and Process Control Form | 2018-11-13T13:27:01-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (3).xls | Hauled-In Residual Waste Form | 2018-11-13T13:29:03-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (4) .xls | Hauled-In Residual Waste Form | 2018-11-13T13:29:31-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (6) .xls | Hauled-In Residual Waste Form | 2018-11-13T13:30:28-05:00 | |
| Daily Effluent Monitoring OCT 2018.xlsx | Daily Effluent Monitoring Form | 2018-11-13T13:26:34-05:00 | |
| Hauled In Municipal Wastes OCT 2018.xls | Hauled-In Municipal Waste Form | 2018-11-13T13:27:23-05:00 | |
| Sewage Sludge OCT 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-11-13T13:27:50-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (1).xls | Hauled-In Residual Waste Form | 2018-11-13T13:28:17-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (2).xls | Hauled-In Residual Waste Form | 2018-11-13T13:28:39-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (5) .xls | Hauled-In Residual Waste Form | 2018-11-13T13:29:58-05:00 | |
| Hauled In Residual Wastes OCT 2018 - Sheet (7).xls | Hauled-In Residual Waste Form | 2018-11-13T13:30:54-05:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr, | S18320 | (724)-561-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2018** | **11** | **15** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2018 | 11 | 01 | TO | 2018 | 11 | 30 |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2018**
DMR Effective To: **11/30/2018**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.33 | *** | *** | mg/L | 2/week | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.27 | *** | 7.66 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | <851.9 | 1322.2 | lbs/day | *** | 26.0 | 35.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 127 | *** | lbs/day | *** | 3.71 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.69 | 5.89 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .83 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 222 | 900 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 371.7 | 460.7 | lbs/day | *** | 12.0 | 14.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **11** | **01** | TO | **2018** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2018**
DMR Effective To: **11/30/2018**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3454 | 5014 | lbs/day | *** | 110 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2993 | 10149 | lbs/day | *** | 92 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Wastes NOV 2018 - Sheet (1).xls | Hauled-In Residual Waste Form | 2018-12-13T09:25:57-05:00 | |
| Sewage Sludge NOV 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2018-12-13T09:25:24-05:00 | |
| Daily Influent NOV 2018.xls | Influent and Process Control Form | 2018-12-13T09:24:27-05:00 | |
| Hauled In Municipal Wastes NOV 2018.xls | Hauled-In Municipal Waste Form | 2018-12-13T09:24:55-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (2).xls | Hauled-In Residual Waste Form | 2018-12-13T09:26:22-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (4).xls | Hauled-In Residual Waste Form | 2018-12-13T09:27:35-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (5).xls | Hauled-In Residual Waste Form | 2018-12-13T09:28:01-05:00 | |
| Daily Effluent Monitoring NOV 2018.xlsx | Daily Effluent Monitoring Form | 2018-12-13T09:24:02-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (9).xls | Hauled-In Residual Waste Form | 2018-12-13T09:26:49-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (3).xls | Hauled-In Residual Waste Form | 2018-12-13T09:27:12-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (8).xls | Hauled-In Residual Waste Form | 2018-12-13T09:28:27-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (7).xls | Hauled-In Residual Waste Form | 2018-12-13T09:28:51-05:00 | |
| Hauled In Residual Wastes NOV 2018 - Sheet (6).xls | Hauled-In Residual Waste Form | 2018-12-13T09:29:30-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2018** | **12** | **13** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2018 | 12 | 01 | TO | 2018 | 12 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2018**
DMR Effective To: **12/31/2018**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.5 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.22 | *** | 7.58 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 501.7 | 753.9 | lbs/day | *** | 21.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <47 | *** | lbs/day | *** | <2.06 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.11 | 9.19 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .72 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 209 | 520 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 247.7 | 345.8 | lbs/day | *** | 10.0 | 12.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2018** | **12** | **01** | TO | **2018** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2018**
DMR Effective To: **12/31/2018**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3965 | 8672 | lbs/day | *** | 180 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4321 | 14909 | lbs/day | *** | 207 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Wastes DEC 2018 -Sheet (3) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:18:15-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (8) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:21:17-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (10).xls | Hauled-In Residual Waste Form | 2019-01-10T08:22:56-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (5) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:19:35-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (6) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:20:06-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (9).xls | Hauled-In Residual Waste Form | 2019-01-10T08:21:59-05:00 | |
| Sewage Sludge DEC 2018.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-01-10T08:16:37-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (4) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:18:45-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (7) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:20:37-05:00 | |
| Annual Stormwater Inspection for outfall 004,201 12-15-18.pdf | Stormwater Annual Inspection Report | 2019-01-10T11:47:25-05:00 | |
| Stormwater Insp additional info for outfall 201,004 12-15-18.pdf | Stormwater Additional Information Form | 2019-01-10T11:49:00-05:00 | |
| Daily Influent DEC 2018.xls | Influent and Process Control Form | 2019-01-10T08:15:24-05:00 | |
| Hauled In Municipal Wastes DEC 2018.xls | Hauled-In Municipal Waste Form | 2019-01-10T08:15:55-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (2) .xls | Hauled-In Residual Waste Form | 2019-01-10T08:17:42-05:00 | |
| Daily Effluent Monitoring DEC 2018.xlsx | Daily Effluent Monitoring Form | 2019-01-10T08:14:30-05:00 | |
| Hauled In Residual Wastes DEC 2018 -Sheet (1).xls | Hauled-In Residual Waste Form | 2019-01-10T08:17:15-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2019** | **1** | **10** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **01** | **01** | TO | **2019** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2019**
DMR Effective To: **01/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.56 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.25 | *** | 7.64 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 688.1 | 865.4 | lbs/day | *** | 29.0 | 45.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <61 | *** | lbs/day | *** | <2.66 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.17 | 7.93 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .57 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 199 | 780 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 330.7 | 432.3 | lbs/day | *** | 13.0 | 17.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **01** | **01** | TO | **2019** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2019**
DMR Effective To: **01/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3252 | 4780 | lbs/day | *** | 123 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2143 | 3816 | lbs/day | *** | 87 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent JAN 2019.xlsx | Daily Effluent Monitoring Form | 2019-02-11T13:50:14-05:00 | |
| Hauled-In Municipal Wastes JAN 2019.xls | Hauled-In Municipal Waste Form | 2019-02-11T11:58:08-05:00 | |
| Sewage Sludge JAN 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-02-11T11:58:46-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-02-11T12:00:25-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-02-11T12:00:48-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-02-11T13:10:17-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-02-11T13:10:57-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-02-11T13:11:30-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (10).xls | Hauled-In Residual Waste Form | 2019-02-11T13:11:58-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-02-11T13:09:05-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-02-11T13:09:49-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-02-11T11:59:34-05:00 | |
| Daily Influent JAN 2019.xls | Influent and Process Control Form | 2019-02-11T11:56:53-05:00 | |
| Hauled-In Residual Wastes JAN 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-02-11T13:08:08-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **2** | **12** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **02** | **01** | TO | **2019** | **02** | **28** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2019**
DMR Effective To: **02/28/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.74 | *** | *** | mg/L | 2/week | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.98 | *** | 7.58 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 749.6 | 1250.4 | lbs/day | *** | 22.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 101 | *** | lbs/day | *** | 3.02 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 4.2 | 7.17 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .61 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 557 | 1600 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 396.7 | 634.8 | lbs/day | *** | 12.0 | 13.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **02** | **01** | TO | **2019** | **02** | **28** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2019**
DMR Effective To: **02/28/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4509 | 10735 | lbs/day | *** | 133 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3286 | 10538 | lbs/day | *** | 103 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes FEB 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-03-13T10:45:33-04:00 | |
| Daily Influent FEB 2019.xls | Influent and Process Control Form | 2019-03-13T10:41:47-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-03-13T10:43:35-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-03-13T10:45:16-04:00 | |
| Hauled-In Municipal Wastes FEB 2019.xls | Hauled-In Municipal Waste Form | 2019-03-13T10:42:13-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-03-13T10:42:46-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-03-13T10:43:13-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-03-13T10:44:01-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-03-13T10:44:26-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-03-13T10:44:50-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-03-13T10:45:52-04:00 | |
| Sewage Sludge FEB 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-03-13T11:33:24-04:00 | |
| Daily Effluent FEB 2019.xlsx | Daily Effluent Monitoring Form | 2019-03-13T10:41:20-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (10).xls | Hauled-In Residual Waste Form | 2019-03-13T10:46:16-04:00 | |
| Hauled-In Residual Wastes FEB 2019 - Sheet (11).xls | Hauled-In Residual Waste Form | 2019-03-13T10:46:36-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **3** | **13** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **03** | **01** | TO | **2019** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2019**
DMR Effective To: **03/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 8.22 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.01 | *** | 7.47 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 466.8 | 860.2 | lbs/day | *** | 20.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 71 | *** | lbs/day | *** | 3 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.57 | 5.34 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .59 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 545 | 1400 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 237.3 | 370.7 | lbs/day | *** | 10.0 | 10.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **03** | **01** | TO | **2019** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2019**
DMR Effective To: **03/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3627 | 12170 | lbs/day | *** | 159 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4063 | 18910 | lbs/day | *** | 183 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Influent MAR 2019.xls | Influent and Process Control Form | 2019-04-11T13:02:58-04:00 | |
| Daily Effluent MAR 2019.xlsx | Daily Effluent Monitoring Form | 2019-04-11T13:02:31-04:00 | |
| Hauled-In Municipal Wastes MAR 2019.xls | Hauled-In Municipal Waste Form | 2019-04-11T13:03:21-04:00 | |
| Sewage Sludge MAR 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-04-11T13:03:48-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (11).xls | Hauled-In Residual Waste Form | 2019-04-11T13:04:25-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-04-11T13:05:22-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (10).xls | Hauled-In Residual Waste Form | 2019-04-11T13:04:47-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-04-11T13:05:47-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-04-11T13:06:10-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-04-11T13:08:30-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-04-11T13:06:32-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-04-11T13:07:21-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-04-11T13:08:08-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-04-11T13:06:57-04:00 | |
| Hauled-In Residual Wastes MAR 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-04-11T13:07:44-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **4** | **11** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **04** | **01** | TO | **2019** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2019**
DMR Effective To: **04/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.45 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.96 | *** | 7.48 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 620.1 | 1073.1 | lbs/day | *** | 27.0 | 38.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <72 | *** | lbs/day | *** | <2.89 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.54 | 5.07 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .67 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <118 | 1880 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 231.7 | 268.4 | lbs/day | *** | 10.0 | 11.4 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **04** | **01** | TO | **2019** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2019**
DMR Effective To: **04/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2384 | 4223 | lbs/day | *** | 118 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2294 | 4441 | lbs/day | *** | 109 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes APR 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-05-14T09:41:38-04:00 | |
| Daily Influent APR 2019.xls | Influent and Process Control Form | 2019-05-14T09:37:43-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-05-14T09:40:24-04:00 | |
| Sewage Sludge APR 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-05-14T09:38:38-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-05-14T09:39:35-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-05-14T09:39:59-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-05-14T09:41:13-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-05-14T09:40:48-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-05-14T09:42:22-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-05-14T09:42:51-04:00 | |
| Daily Effluent APR 2019.xlsx | Daily Effluent Monitoring Form | 2019-05-14T09:36:58-04:00 | |
| Hauled-In Municipal Wastes APR 2019.xls | Hauled-In Municipal Waste Form | 2019-05-14T09:38:06-04:00 | |
| Hauled-In Residual Wastes APR 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-05-14T09:39:10-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2019** | **5** | **14** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2019 | 05 | 01 | TO | 2019 | 05 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2019**
DMR Effective To: **05/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.7 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.81 | *** | 7.48 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 1143.1 | 3542.1 | lbs/day | *** | 26.0 | 44.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <37 | *** | lbs/day | *** | <1.31 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.64 | 11.83 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .68 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 173 | 1940 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 404.9 | 937.9 | lbs/day | *** | 13.0 | 14.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **05** | **01** | TO | **2019** | **05** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2019**
DMR Effective To: **05/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3950 | 6318 | lbs/day | *** | 190 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 5736 | 17114 | lbs/day | *** | 325 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes MAY 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-06-18T09:45:29-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (10).xls | Hauled-In Residual Waste Form | 2019-06-18T09:47:29-04:00 | |
| Daily Influent MAY 2019.xls | Influent and Process Control Form | 2019-06-18T09:42:24-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-06-18T09:43:54-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-06-18T09:44:19-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-06-18T09:44:42-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-06-18T09:45:07-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-06-18T09:46:42-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-06-18T09:47:03-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-06-18T09:45:53-04:00 | |
| Hauled-In Residual Wastes MAY 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-06-18T09:46:22-04:00 | |
| Daily Effluent MAY 2019.xlsx | Daily Effluent Monitoring Form | 2019-06-18T09:41:56-04:00 | |
| Sewage Sludge MAY 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-06-18T09:42:54-04:00 | |
| Hauled-In Municipal Wastes MAY 2019.xls | Hauled-In Municipal Waste Form | 2019-06-18T09:43:29-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 89260 | 05/01/2019 | 05/31/2019 | Total Suspended Solids | Weekly Average | 3542.1 | 1802.5 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 3.15 inches of rain we had received during the sampling period from 5/25-5/29. |
| 89261 | 05/01/2019 | 05/31/2019 | Fecal Coliform | Instantaneous Maximum | 1940 | 1000 | No./100 ml | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 3.15 inches of rain we had received during the sampling period from 5/25-5/29. |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-651-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **6** | **18** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **06** | **01** | TO | **2019** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2019**
DMR Effective To: **06/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.83 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.07 | *** | 7.66 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 1897.5 | 3989.7 | lbs/day | *** | 36.0 | 68.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <78.0 | *** | lbs/day | *** | <1.92 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 4 | 10.67 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .56 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 215 | 940 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 471.2 | 912.6 | lbs/day | *** | 10.0 | 16.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **06** | **01** | TO | **2019** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2019**
DMR Effective To: **06/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3807 | 12311 | lbs/day | *** | 96 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2894 | 6051 | lbs/day | *** | 75 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent JUN 2019.xlsx | Daily Effluent Monitoring Form | 2019-07-15T11:00:21-04:00 | |
| Hauled-In Municipal Wastes JUN 2019.xls | Hauled-In Municipal Waste Form | 2019-07-15T11:01:13-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-07-15T11:06:44-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-07-15T11:06:18-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-07-15T11:02:35-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-07-15T11:03:47-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (10).xls | Hauled-In Residual Waste Form | 2019-07-15T11:07:45-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-07-15T11:07:12-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-07-15T11:02:58-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-07-15T11:02:12-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-07-15T11:01:39-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (11).xls | Hauled-In Residual Waste Form | 2019-07-15T11:08:10-04:00 | |
| Hauled-In Residual Wastes JUN 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-07-15T11:03:23-04:00 | |
| Daily Influent JUN 2019.xls | Influent and Process Control Form | 2019-07-15T11:00:47-04:00 | |
| Sewage Sludge JUN 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-07-15T11:08:46-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 91220 | 06/01/2019 | 06/30/2019 | Total Suspended Solids | Average Monthly | 1897.5 | 1201.7 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 10.32 inches of rain we received during the month of June 2019. |
| 91221 | 06/01/2019 | 06/30/2019 | Total Suspended Solids | Weekly Average | 3989.7 | 1802.5 | lbs/day | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 10.32 inches of rain we received during the month of June 2019. |
| 91222 | 06/01/2019 | 06/30/2019 | Total Suspended Solids | Average Monthly | 36 | 30 | mg/L | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 10.32 inches of rain we received during the month of June 2019. |
| 91223 | 06/01/2019 | 06/30/2019 | Fecal Coliform | Geometric Mean | 215 | 200 | No./100 ml | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 10.32 inches of rain we received during the month of June 2019. |
| 91224 | 06/01/2019 | 06/30/2019 | Total Suspended Solids | Weekly Average | 68 | 45 | mg/L | Final Effluent (101) | Hydraulic flow exceeding plant or unit design | See attached comments | The Beaver Falls STP was hydraulically overloaded from the 10.32 inches of rain we received during the month of June 2019. |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **7** | **15** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **07** | **01** | TO | **2019** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2019**
DMR Effective To: **07/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.03 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.87 | *** | 7.58 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 284.7 | 349.9 | lbs/day | *** | 13.0 | 17.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 40 | *** | lbs/day | *** | 1.7 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.87 | 5.89 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .72 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <17 | 74 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 165.6 | 214.9 | lbs/day | *** | 8.0 | 8.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **07** | **01** | TO | **2019** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2019**
DMR Effective To: **07/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2887 | 5961 | lbs/day | *** | 138 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2357 | 4551 | lbs/day | *** | 114 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes JUL 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-08-14T10:49:21-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-08-14T10:49:49-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-08-14T10:50:11-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-08-14T10:50:31-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (9).xls | Hauled-In Residual Waste Form | 2019-08-14T10:53:24-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-08-14T10:50:50-04:00 | |
| Daily Effluent JUL 2019.xlsx | Daily Effluent Monitoring Form | 2019-08-14T10:46:12-04:00 | |
| Daily Influent JUL 2019.xls | Influent and Process Control Form | 2019-08-14T10:46:40-04:00 | |
| Hauled-In Municipal Wastes JUL 2019.xls | Hauled-In Municipal Waste Form | 2019-08-14T10:47:10-04:00 | |
| Sewage Sludge JUL 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-08-14T10:47:41-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-08-14T10:48:06-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-08-14T10:48:29-04:00 | |
| Hauled-In Residual Wastes JUL 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-08-14T10:48:53-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2019** | **8** | **14** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **08** | **01** | TO | **2019** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2019**
DMR Effective To: **08/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.15 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.83 | *** | 7.46 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 233.1 | 396.9 | lbs/day | *** | 18.0 | 30.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 62 | *** | lbs/day | *** | 4.57 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.6 | 2.53 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .82 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <15 | 98 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 124.0 | 136.1 | lbs/day | *** | 9.0 | 9.6 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **08** | **01** | TO | **2019** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2019**
DMR Effective To: **08/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3783 | 10156 | lbs/day | *** | 282 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4193 | 9082 | lbs/day | *** | 312 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent AUG 2019.xlsx | Daily Effluent Monitoring Form | 2019-09-22T10:43:48-04:00 | |
| Daily Influent AUG 2019.xls | Influent and Process Control Form | 2019-09-22T10:44:16-04:00 | |
| Hauled-In Municipal Wastes AUG 2019.xls | Hauled-In Municipal Waste Form | 2019-09-22T10:44:40-04:00 | |
| Sewage Sludge AUG 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-09-22T10:45:22-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-09-22T10:45:50-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-09-22T10:46:15-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-09-22T10:47:10-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-09-22T10:47:57-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-09-22T10:48:41-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-09-22T10:49:25-04:00 | |
| Hauled-In Residual Wastes AUG 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-09-22T10:49:50-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **9** | **23** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **09** | **01** | TO | **2019** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2019**
DMR Effective To: **09/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.19 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.9 | *** | 7.39 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 201.8 | 252.1 | lbs/day | *** | 16.0 | 20.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | <62 | *** | lbs/day | *** | <4.97 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.39 | 2.75 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .95 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <14 | 100 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 114.9 | 151.3 | lbs/day | *** | 9.0 | 12.4 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **09** | **01** | TO | **2019** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2019**
DMR Effective To: **09/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2402 | 3800 | lbs/day | *** | 192 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3498 | 9668 | lbs/day | *** | 280 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes SEP 2019 -Sheet (5).xls | Hauled-In Residual Waste Form | 2019-10-14T10:56:32-04:00 | |
| Hauled-In Residual Wastes SEP 2019 -Sheet (4).xls | Hauled-In Residual Waste Form | 2019-10-14T10:56:11-04:00 | |
| Hauled-In Residual Wastes SEP 2019 -Sheet (6).xls | Hauled-In Residual Waste Form | 2019-10-14T10:56:54-04:00 | |
| Daily Influent SEP 2019.xls | Influent and Process Control Form | 2019-10-14T10:53:29-04:00 | |
| Daily Effluent SEP 2019.xlsx | Daily Effluent Monitoring Form | 2019-10-14T10:52:56-04:00 | |
| Hauled-In Municipal Wastes SEP 2019.xls | Hauled-In Municipal Waste Form | 2019-10-14T10:53:59-04:00 | |
| Sewage Sludge SEP 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-10-14T10:54:26-04:00 | |
| Hauled-In Residual Wastes SEP 2019 -Sheet (1).xls | Hauled-In Residual Waste Form | 2019-10-14T10:54:58-04:00 | |
| Hauled-In Residual Wastes SEP 2019 -Sheet (2).xls | Hauled-In Residual Waste Form | 2019-10-14T10:55:23-04:00 | |
| Hauled-In Residual Wastes SEP 2019 -Sheet (3).xls | Hauled-In Residual Waste Form | 2019-10-14T10:55:46-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **10** | **14** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **10** | **01** | TO | **2019** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2019**
DMR Effective To: **10/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.83 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.98 | *** | 7.56 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 282.7 | 803.5 | lbs/day | *** | 15.0 | 34.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 91.0 | *** | lbs/day | *** | 5.38 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2 | 8.31 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .7 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | 175 | 1020 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 191.5 | 227.0 | lbs/day | *** | 11.0 | 12.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **10** | **01** | TO | **2019** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2019**
DMR Effective To: **10/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3177 | 5381 | lbs/day | *** | 197 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3082 | 7913 | lbs/day | *** | 188 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Stormwater Additional Information Form October 2019.docx | Stormwater Additional Information Form | 2019-11-18T11:33:41-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (4).xls | Hauled-In Residual Waste Form | 2019-11-18T11:10:06-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (6).xls | Hauled-In Residual Waste Form | 2019-11-18T11:11:03-05:00 | |
| Daily Effluent OCT 2019.xlsx | Daily Effluent Monitoring Form | 2019-11-18T11:07:04-05:00 | |
| Daily Influent OCT 2019.xls | Influent and Process Control Form | 2019-11-18T11:07:28-05:00 | |
| Hauled-In Municipal Wastes OCT 2019.xls | Hauled-In Municipal Waste Form | 2019-11-18T11:07:52-05:00 | |
| Sewage Sludge OCT 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-11-18T11:08:23-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (1).xls | Hauled-In Residual Waste Form | 2019-11-18T11:08:50-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (5).xls | Hauled-In Residual Waste Form | 2019-11-18T11:10:32-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (7).xls | Hauled-In Residual Waste Form | 2019-11-18T11:11:28-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (8).xls | Hauled-In Residual Waste Form | 2019-11-18T11:11:50-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (2).xls | Hauled-In Residual Waste Form | 2019-11-18T11:09:18-05:00 | |
| Stormwater Annual Inspection Report OCT 2019.docx | Stormwater Annual Inspection Report | 2019-11-18T11:35:50-05:00 | |
| Hauled-In Residual Wastes OCT 2019 -Sheet (3).xls | Hauled-In Residual Waste Form | 2019-11-18T11:09:43-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **11** | **18** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **11** | **01** | TO | **2019** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2019**
DMR Effective To: **11/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.78 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.97 | *** | 7.52 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 306.0 | 474.8 | lbs/day | *** | 15.0 | 18.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 55 | *** | lbs/day | *** | 3.15 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.14 | 4.87 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | <.5 | .76 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <45 | 460 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 146.5 | 177.2 | lbs/day | *** | 8.0 | 8.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **11** | **01** | TO | **2019** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2019**
DMR Effective To: **11/30/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2951 | 4003 | lbs/day | *** | 163 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3278 | 11558 | lbs/day | *** | 190 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent NOV 2019.xlsx | Daily Effluent Monitoring Form | 2019-12-09T13:04:20-05:00 | |
| Hauled-In Municipal Wastes NOV 2019.xls | Hauled-In Municipal Waste Form | 2019-12-09T13:05:18-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2019-12-09T13:06:31-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2019-12-09T13:08:29-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2019-12-09T13:09:12-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2019-12-09T13:06:55-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2019-12-09T13:08:04-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2019-12-09T13:07:38-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2019-12-09T13:07:17-05:00 | |
| Hauled-In Residual Wastes NOV 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2019-12-09T13:06:10-05:00 | |
| Daily Influent NOV 2019.xls | Influent and Process Control Form | 2019-12-09T13:04:49-05:00 | |
| Sewage Sludge NOV 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2019-12-09T13:05:42-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **12** | **9** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **12** | **01** | TO | **2019** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2019**
DMR Effective To: **12/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.0 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.94 | *** | 7.41 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | <317.6 | 601.2 | lbs/day | *** | <16.0 | 26.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 61.0 | *** | lbs/day | *** | 2.79 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.61 | 4.66 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .67 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) | Sample Measurement | *** | *** | *** | *** | <20 | 420 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 212.0 | 362.1 | lbs/day | *** | 10.0 | 14.6 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2019** | **12** | **01** | TO | **2019** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2019**
DMR Effective To: **12/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2840 | 4729 | lbs/day | *** | 144 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3260 | 6755 | lbs/day | *** | 157 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled-In Residual Wastes DEC 2019 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-01-08T11:15:40-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-01-08T11:16:12-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-01-08T11:16:43-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-01-08T11:17:19-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (8).xls | Hauled-In Residual Waste Form | 2020-01-08T11:17:56-05:00 | |
| Sewage Sludge DEC 2019.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-01-08T11:47:43-05:00 | |
| Daily Effluent DEC 2019.xlsx | Daily Effluent Monitoring Form | 2020-01-08T11:12:20-05:00 | |
| Hauled-In Municipal Wastes DEC 2019.xls | Hauled-In Municipal Waste Form | 2020-01-08T11:13:29-05:00 | |
| Daily Influent DEC 2019.xls | Influent and Process Control Form | 2020-01-08T11:12:52-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-01-08T11:14:08-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-01-08T11:14:41-05:00 | |
| Hauled-In Residual Wastes DEC 2019 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-01-08T11:15:12-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2020** | **1** | **8** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
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# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | **2019** | **01** | **01** | TO | **2019** | **12** | **31** |

Reporting Frequency: **Annually**
DMR Effective From: **01/01/2019**
DMR Effective To: **12/31/2019**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Total Nitrogen (00600) | Sample Measurement | 318 | *** | lbs/day | *** | 24.47 | *** | mg/L | 1/year | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Annl Avg | *** | | *** | Monitor & Report Annl Avg | *** | | 1/year | 8-Hr Composite |
| Total Phosphorus (00665) | Sample Measurement | 37 | *** | lbs/day | *** | 2.86 | *** | mg/L | 1/year | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Annl Avg | *** | | *** | Monitor & Report Annl Avg | *** | | 1/year | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent SEP 2019.xlsx | Daily Effluent Monitoring Form | 2019-10-14T11:09:25-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2019** | **10** | **14** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **01** | **01** | TO | **2020** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2020**
DMR Effective To: **01/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.62 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.04 | *** | 7.42 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 421.6 | 705.9 | lbs/day | *** | 15.0 | 24.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 2.27 | *** | lbs/day | *** | 57 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.98 | 7.13 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .77 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 11 | 140 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 225.7 | 328.8 | lbs/day | *** | 8.0 | 10.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **01** | **01** | TO | **2020** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2020**
DMR Effective To: **01/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2454 | 4409 | lbs/day | *** | 93 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 1358 | 2234 | lbs/day | *** | 56 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent JAN 2020.xlsx | Daily Effluent Monitoring Form | 2020-02-11T11:41:00-05:00 | |
| Hauled In Municipal Waste JAN 2020.xls | Hauled-In Municipal Waste Form | 2020-02-11T11:42:15-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-02-11T11:44:06-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-02-11T11:43:33-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-02-11T11:47:16-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-02-11T11:46:25-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-02-11T11:45:48-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-02-11T11:45:15-05:00 | |
| Hauled In Residual Waste JAN 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-02-11T11:44:40-05:00 | |
| Daily Influent JAN 2020.xls | Influent and Process Control Form | 2020-02-11T11:41:36-05:00 | |
| Sewage Sludge JAN 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-02-11T11:42:56-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2020** | **02** | **11** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **02** | **01** | TO | **2020** | **02** | **29** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2020**
DMR Effective To: **02/29/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 8.33 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.03 | *** | 7.46 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 517.1 | 840.8 | lbs/day | *** | 22.0 | 26.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 37 | *** | lbs/day | *** | 1.74 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.06 | 5.63 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .54 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 30 | 102 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 181.7 | 207.1 | lbs/day | *** | 8.0 | 10.1 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **02** | **01** | TO | **2020** | **02** | **29** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2020**
DMR Effective To: **02/29/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3102 | 6440 | lbs/day | *** | 141 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4679 | 18240 | lbs/day | *** | 214 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste FEB 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-03-10T09:51:05-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-03-10T09:52:39-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-03-10T09:50:09-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-03-10T09:53:08-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (8).xls | Hauled-In Residual Waste Form | 2020-03-10T09:53:34-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-03-10T09:51:39-04:00 | |
| Daily Effluent FEB 2020.xlsx | Daily Effluent Monitoring Form | 2020-03-10T09:48:08-04:00 | |
| Daily Influent FEB 2020.xls | Influent and Process Control Form | 2020-03-10T09:48:36-04:00 | |
| Sewage Sludge FEB 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-03-10T09:49:38-04:00 | |
| Hauled In Municipal Waste FEB 2020.xls | Hauled-In Municipal Waste Form | 2020-03-10T09:49:07-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-03-10T09:50:36-04:00 | |
| Hauled In Residual Waste FEB 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-03-10T09:52:10-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2020** | **03** | **10** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **03** | **01** | TO | **2020** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2020**
DMR Effective To: **03/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.83 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.91 | *** | 7.47 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 537.4 | 678.9 | lbs/day | *** | 20.0 | 35.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 79.0 | *** | lbs/day | *** | 2.98 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.73 | 11.62 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .63 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 36 | 66 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 281.4 | 342.9 | lbs/day | *** | 10.0 | 10.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **03** | **01** | TO | **2020** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2020**
DMR Effective To: **03/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4159 | 8934 | lbs/day | *** | 143 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4171 | 12353 | lbs/day | *** | 167 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Sewage Sludge MAR 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-04-16T10:24:02-04:00 | |
| Daily Effluent MAR 2020.xlsx | Daily Effluent Monitoring Form | 2020-04-09T13:27:01-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-04-09T13:34:55-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (8).xls | Hauled-In Residual Waste Form | 2020-04-09T13:41:01-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-04-09T13:37:56-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-04-09T13:40:07-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-04-09T13:36:44-04:00 | |
| Daily Influent MAR 2020.xls | Influent and Process Control Form | 2020-04-09T13:27:57-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-04-09T13:39:17-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (9).xls | Hauled-In Residual Waste Form | 2020-04-09T13:42:02-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-04-09T13:30:40-04:00 | |
| Hauled In Residual Waste MAR 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-04-09T13:35:52-04:00 | |
| Hauled In Municipal Waste MAR 2020.xls | Hauled-In Municipal Waste Form | 2020-04-09T13:28:28-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2020** | **04** | **16** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **04** | **01** | TO | **2020** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2020**
DMR Effective To: **04/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.0 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.84 | *** | 7.36 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 545.1 | 1072.8 | lbs/day | *** | 24.0 | 40.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 50.0 | *** | lbs/day | *** | 2.18 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.9 | 8.89 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .45 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 41 | 135 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 247.3 | 505.2 | lbs/day | *** | 11.0 | 12.2 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| | MONITORING PERIOD | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **04** | **01** | TO | **2020** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2020**
DMR Effective To: **04/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3949 | 5334 | lbs/day | *** | 183 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3164 | 5239 | lbs/day | *** | 143 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste APR 2020 - Sheet (8).xls | Hauled-In Residual Waste Form | 2020-05-14T09:44:55-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-05-14T09:42:36-04:00 | |
| Daily Influent APR 2020.xls | Influent and Process Control Form | 2020-05-14T09:41:22-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-05-14T09:43:12-04:00 | |
| Daily Effluent APR 2020.xlsx | Daily Effluent Monitoring Form | 2020-05-14T09:41:05-04:00 | |
| Ammonia Nitrogen(4-2020) Retests.pdf | Letter Explaining Non-Compliance | 2020-05-14T10:27:12-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-05-14T09:42:55-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-05-14T09:44:18-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-05-14T09:44:35-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (9).xls | Hauled-In Residual Waste Form | 2020-05-14T09:45:13-04:00 | |
| Hauled In Municipal Waste APR 2020.xls | Hauled-In Municipal Waste Form | 2020-05-14T09:41:42-04:00 | |
| Sewage Sludge APR 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-05-14T09:42:19-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-05-14T09:43:29-04:00 | |
| Hauled In Residual Waste APR 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-05-14T09:43:47-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2020** | **05** | **14** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **05** | **01** | TO | **2020** | **05** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2020**
DMR Effective To: **05/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.97 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.73 | *** | 7.47 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 459.7 | 618.5 | lbs/day | *** | 27.0 | 35.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 87 | *** | lbs/day | *** | 4.24 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.17 | 5.23 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .85 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 53 | 136 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 190.7 | 246.7 | lbs/day | *** | 11.0 | 12.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **05** | **01** | TO | **2020** | **05** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2020**
DMR Effective To: **05/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4234 | 8975 | lbs/day | *** | 250 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4519 | 11764 | lbs/day | *** | 281 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent MAY 2020.xlsx | Daily Effluent Monitoring Form | 2020-06-18T11:56:46-04:00 | |
| Hauled In Municipal Waste MAY 2020.xls | Hauled-In Municipal Waste Form | 2020-06-18T11:09:36-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (8).xls | Hauled-In Residual Waste Form | 2020-06-18T11:13:10-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (7).xls | Hauled-In Residual Waste Form | 2020-06-18T11:12:34-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-06-18T11:12:07-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-06-18T11:11:39-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-06-18T11:11:19-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-06-18T11:10:58-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-06-18T11:10:31-04:00 | |
| Hauled In Residual Waste MAY 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-06-18T11:10:00-04:00 | |
| Daily Influent MAY 2020.xls | Influent and Process Control Form | 2020-06-18T11:08:59-04:00 | |
| Sewage Sludge MAY 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-06-18T11:13:43-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish, Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| **durishj** | | | **(724)** | **561-6511** | **2020** | **06** | **18** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **06** | **01** | TO | **2020** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2020**
DMR Effective To: **06/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.73 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.68 | *** | 7.21 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | < 201.2 | 470.8 | lbs/day | *** | < 17.0 | 33.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 36 | *** | lbs/day | *** | 3.19 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.37 | 2.16 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .48 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 32 | 62 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 109.7 | 174.7 | lbs/day | *** | 10.0 | 12.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **06** | **01** | TO | **2020** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2020**
DMR Effective To: **06/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3068 | 6184 | lbs/day | *** | 285 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4042 | 12590 | lbs/day | *** | 385 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Municipal Waste JUN 2020.xls | Hauled-In Municipal Waste Form | 2020-07-16T14:00:36-04:00 | |
| Hauled In Residual Waste JUN 2020 Sheet 4.xls | Hauled-In Residual Waste Form | 2020-07-16T14:03:50-04:00 | |
| Hauled In Residual Waste JUN 2020 Sheet 2.xls | Hauled-In Residual Waste Form | 2020-07-16T14:03:12-04:00 | |
| Hauled In Residual Waste JUN 2020 Sheet 5.xls | Hauled-In Residual Waste Form | 2020-07-16T14:04:07-04:00 | |
| Sewage Sludge JUN 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-07-16T14:04:45-04:00 | |
| Hauled In Residual Waste JUN 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-07-16T14:01:27-04:00 | |
| Hauled In Residual Waste JUN 2020 Sheet 3.xls | Hauled-In Residual Waste Form | 2020-07-16T14:03:34-04:00 | |
| Hauled In Residual Waste JUN 2020 Sheet 6.xls | Hauled-In Residual Waste Form | 2020-07-16T14:04:24-04:00 | |
| Daily Effluent JUN 2020.xlsx | Daily Effluent Monitoring Form | 2020-07-16T13:59:36-04:00 | |
| Daily Influent JUN 2020.xls | Influent and Process Control Form | 2020-07-16T14:00:12-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Joseph Durish** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **561-6511** | **2020** | **07** | **16** |
| **durishj** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **07** | **01** | TO | **2020** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2020**
DMR Effective To: **07/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.46 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.68 | *** | 7.16 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 106.4 | 160.0 | lbs/day | *** | 12.0 | 18.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 24.0 | *** | lbs/day | *** | 2.67 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.1 | 1.69 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .51 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | < 12 | 112 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 95.4 | 112.5 | lbs/day | *** | 11.0 | 13.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **07** | **01** | TO | **2020** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2020**
DMR Effective To: **07/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2441 | 5702 | lbs/day | *** | 270 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2671 | 9226 | lbs/day | *** | 296 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent JUL 2020.xlsx | Daily Effluent Monitoring Form | 2020-08-16T09:35:35-04:00 | |
| Hauled In Municipal Waste JUL 2020.xls | Hauled-In Municipal Waste Form | 2020-08-16T09:36:46-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (6).xls | Hauled-In Residual Waste Form | 2020-09-08T11:01:56-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (1).xls | Hauled-In Residual Waste Form | 2020-08-16T09:37:30-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (5).xls | Hauled-In Residual Waste Form | 2020-08-16T09:39:15-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (4).xls | Hauled-In Residual Waste Form | 2020-08-16T09:38:49-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (2).xls | Hauled-In Residual Waste Form | 2020-08-16T09:37:54-04:00 | |
| Hauled In Residual Waste JUL 2020 - Sheet (3).xls | Hauled-In Residual Waste Form | 2020-08-16T09:38:17-04:00 | |
| Daily Influent JUL 2020.xls | Influent and Process Control Form | 2020-08-16T09:35:54-04:00 | |
| Sewage Sludge JUL 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-08-25T09:39:30-04:00 | |
| annual stormwater inspection 7-7-2020.pdf | Stormwater Annual Inspection Report | 2020-08-16T09:41:01-04:00 | |
| Storm Water Additional Information 7-7-2020 outfall 201.pdf | Stormwater Additional Information Form | 2020-08-16T09:42:03-04:00 | |
| Storm Water Additional Information 7-7-2020 outfall 004.pdf | Stormwater Additional Information Form | 2020-08-16T09:41:34-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Joseph M. Durish Jr. | S18320 | (724)-561-6511 |

### SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
| **summersa** | | | **(724)** | **462-6915** | **2020** | **09** | **08** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **08** | **01** | TO | **2020** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2020**
DMR Effective To: **08/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.3 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.61 | *** | 7.19 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 165.5 | 288.0 | lbs/day | *** | 19.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 21 | *** | lbs/day | *** | 2.43 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.3 | 5.29 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .83 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 33 | 96 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 101.6 | 122.5 | lbs/day | *** | 11.0 | 15.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **08** | **01** | TO | **2020** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2020**
DMR Effective To: **08/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3548 | 6820 | lbs/day | *** | 397 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 5385 | 19285 | lbs/day | *** | 615 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Influent AUG 2020.xls | Influent and Process Control Form | 2020-09-14T11:00:31-04:00 | |
| Hauled In Municipal Waste AUG 2020.xls | Hauled-In Municipal Waste Form | 2020-09-14T11:01:05-04:00 | |
| Hauled In Residual Waste AUG 2020 Sheet 1.xls | Hauled-In Residual Waste Form | 2020-09-14T11:01:26-04:00 | |
| Hauled In Residual Waste AUG 2020 Sheet 4.xls | Hauled-In Residual Waste Form | 2020-09-14T11:03:15-04:00 | |
| Daily Effluent AUG 2020.xlsx | Daily Effluent Monitoring Form | 2020-09-14T11:00:12-04:00 | |
| Sewage Sludge AUG 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-09-14T11:00:48-04:00 | |
| Hauled In Residual Waste AUG 2020 Sheet 2.xls | Hauled-In Residual Waste Form | 2020-09-14T11:01:43-04:00 | |
| Hauled In Residual Waste AUG 2020 Sheet 3.xls | Hauled-In Residual Waste Form | 2020-09-14T11:02:59-04:00 | |
| Hauled In Residual Waste AUG 2020 Sheet 5.xls | Hauled-In Residual Waste Form | 2020-09-14T11:03:34-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2020** | **09** | **14** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **09** | **01** | TO | **2020** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2020**
DMR Effective To: **09/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.87 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.67 | *** | 7.28 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 423.5 | 1428.5 | lbs/day | *** | 19.0 | 44.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 71 | *** | lbs/day | *** | 3.15 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.58 | 4.51 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .89 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 18 | 42 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 202.1 | 487.6 | lbs/day | *** | 12.0 | 16.1 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **09** | **01** | TO | **2020** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2020**
DMR Effective To: **09/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4378 | 13386 | lbs/day | *** | 285 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4809 | 14278 | lbs/day | *** | 324 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Influent SEPT 2020.xls | Influent and Process Control Form | 2020-10-12T11:06:49-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 4.xls | Hauled-In Residual Waste Form | 2020-10-12T11:08:39-04:00 | |
| Daily Effluent SEPT 2020.xlsx | Daily Effluent Monitoring Form | 2020-10-12T11:06:30-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 1.xls | Hauled-In Residual Waste Form | 2020-10-12T11:07:53-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 2.xls | Hauled-In Residual Waste Form | 2020-10-12T11:08:07-04:00 | |
| Hauled In Municipal Waste SEPT 2020.xls | Hauled-In Municipal Waste Form | 2020-10-12T11:07:09-04:00 | |
| Sewage Sludge SEPT 2020.xls | Sewage Sludge / Biosolids Production and Disposal Form | 2020-10-12T11:07:37-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 3.xls | Hauled-In Residual Waste Form | 2020-10-12T11:08:22-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 5.xls | Hauled-In Residual Waste Form | 2020-10-12T11:08:54-04:00 | |
| Hauled In Residual Waste SEPT 2020 Sheet 6.xls | Hauled-In Residual Waste Form | 2020-10-12T11:09:07-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2020** | **10** | **12** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **10** | **01** | TO | **2020** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2020**
DMR Effective To: **10/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.22 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.62 | *** | 7.2 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | < 143.8 | 231.7 | lbs/day | *** | < 13.0 | 24.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 43.0 | *** | lbs/day | *** | 4.16 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.34 | 3.49 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .74 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 19 | 122 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 105.6 | 171.2 | lbs/day | *** | 10.0 | 12.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **10** | **01** | TO | **2020** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2020**
DMR Effective To: **10/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2904 | 3965 | lbs/day | *** | 286 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4386 | 11789 | lbs/day | *** | 437 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Sewage Sludge OCT 2020 .xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2020-11-19T13:23:59-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 1 .xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:24:42-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:24:58-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:25:11-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:25:38-05:00 | |
| Daily Effluent OCT 2020.xlsx | Daily Effluent Monitoring Form | 2020-11-19T13:22:27-05:00 | |
| Daily Influent OCT 2020 .xlsx | Influent and Process Control Form | 2020-11-19T13:23:03-05:00 | |
| Hauled In Municipal Waste OCT 2020 .xlsx | Hauled-In Municipal Waste Form | 2020-11-19T13:23:33-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:25:25-05:00 | |
| Hauled In Residual Waste OCT 2020 Sheet 6.xlsx | Hauled-In Residual Waste Form | 2020-11-19T13:25:52-05:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2020** | **11** | **19** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **11** | **01** | TO | **2020** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2020**
DMR Effective To: **11/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.16 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.85 | *** | 7.22 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 150.8 | 232.9 | lbs/day | *** | 11.0 | 18.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 48 | *** | lbs/day | *** | 3.79 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.58 | 2.43 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | 1.0 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | 12 | 72 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 127.3 | 160.4 | lbs/day | *** | 10.0 | 11.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **11** | **01** | TO | **2020** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2020**
DMR Effective To: **11/30/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2090 | 4359 | lbs/day | *** | 152 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2000 | 4654 | lbs/day | *** | 145 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Municipal Waste NOV 2020.xlsx | Hauled-In Municipal Waste Form | 2020-12-14T11:14:13-05:00 | |
| Hauled In Residual Waste NOV 2020 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2020-12-14T11:15:30-05:00 | |
| Hauled In Residual Waste NOV 2020 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2020-12-14T11:14:59-05:00 | |
| Hauled In Residual Waste NOV 2020 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2020-12-14T11:15:14-05:00 | |
| Sewage Sludge NOV 2020.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2020-12-14T11:14:38-05:00 | |
| Hauled In Residual Waste NOV 2020 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2020-12-14T11:15:44-05:00 | |
| Daily Influent NOV 2020 .xlsx | Influent and Process Control Form | 2020-12-14T11:13:49-05:00 | |
| Hauled In Residual Waste NOV 2020 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2020-12-14T11:15:58-05:00 | |
| Daily Effluent NOV 2020.xlsx | Daily Effluent Monitoring Form | 2021-01-22T09:10:28-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **01** | **22** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2020 | 12 | 01 | TO | 2020 | 12 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2020**
DMR Effective To: **12/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.17 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.83 | *** | 7.41 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 291.4 | 709.0 | lbs/day | *** | 15.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 25 | *** | lbs/day | *** | 1.48 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.11 | 4.11 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .75 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 23 | 116 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 196.0 | 284.9 | lbs/day | *** | 12.0 | 4.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2020** | **12** | **01** | TO | **2020** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2020**
DMR Effective To: **12/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3655 | 4789 | lbs/day | *** | 237 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3403 | 11361 | lbs/day | *** | 243 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste DEC 2020 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-01-13T12:28:26-05:00 | |
| Hauled In Municipal Waste DEC 2020.xlsx | Hauled-In Municipal Waste Form | 2021-01-13T12:29:35-05:00 | |
| Hauled In Residual Waste DEC 2020 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-01-13T12:27:55-05:00 | |
| Hauled In Residual Waste DEC 2020 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-01-13T12:28:50-05:00 | |
| Hauled In Residual Waste DEC 2020 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-01-13T12:26:28-05:00 | |
| Hauled In Residual Waste DEC 2020 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-01-13T12:28:10-05:00 | |
| Daily Effluent DEC 2020.xlsx | Daily Effluent Monitoring Form | 2021-01-22T09:14:36-05:00 | |
| Daily Influent DEC 2020.xlsx | Influent and Process Control Form | 2021-01-22T09:14:22-05:00 | |
| Sewage Sludge DEC 2020.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-01-22T09:14:07-05:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **01** | **22** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | **2020** | **01** | **01** | TO | **2020** | **12** | **31** |

Reporting Frequency: **Annually**
DMR Effective From: **01/01/2020**
DMR Effective To: **12/31/2020**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Total Nitrogen (00600) | Sample Measurement | 224 | *** | lbs/day | *** | 18.8 | *** | mg/L | 1/year | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Annl Avg | *** | | *** | Monitor & Report Annl Avg | *** | | 1/year | 8-Hr Composite |
| Total Phosphorus (00665) | Sample Measurement | 23 | *** | lbs/day | *** | 1.96 | *** | mg/L | 1/year | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Annl Avg | *** | | *** | Monitor & Report Annl Avg | *** | | 1/year | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent SEPT 2020.xlsx | Daily Effluent Monitoring Form | 2020-10-12T11:14:29-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2020** | **10** | **12** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **01** | **01** | TO | **2021** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2021**
DMR Effective To: **01/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.94 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.08 | *** | 7.37 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 153.2 | 217.3 | lbs/day | *** | 9.0 | 11.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 36.0 | *** | lbs/day | *** | 2.23 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.18 | 5.06 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .52 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 6 | 80 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 138.8 | 234.8 | lbs/day | *** | 8.0 | 8.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **01** | **01** | TO | **2021** | **01** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2021**
DMR Effective To: **01/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4217 | 11079 | lbs/day | *** | 261 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4899 | 26121 | lbs/day | *** | 314 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste JAN 2021 Sheet 6.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:25:20-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 7.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:25:33-05:00 | |
| Hauled In Municipal Waste JAN 2021.xlsx | Hauled-In Municipal Waste Form | 2021-02-10T09:23:35-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:24:15-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:24:30-05:00 | |
| Sewage Sludge JAN 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-02-10T13:39:06-05:00 | |
| Daily Influent JAN 2021 .xlsx | Influent and Process Control Form | 2021-02-10T09:23:20-05:00 | |
| Daily Effluent JAN 2021.xlsx | Daily Effluent Monitoring Form | 2021-02-10T09:23:02-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:23:57-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:24:49-05:00 | |
| Hauled In Residual Waste JAN 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-02-10T09:25:05-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

### SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
| | | | **(724)** | **462-6915** | **2021** | **02** | **10** |
| **summersa** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **02** | **01** | TO | **2021** | **02** | **28** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2021**
DMR Effective To: **02/28/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.32 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.94 | *** | 7.36 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 187.4 | 227.0 | lbs/day | *** | 10.0 | 14.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 46.0 | *** | lbs/day | *** | 2.67 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.07 | 4.53 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .59 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 17 | 72 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 178.4 | 186.3 | lbs/day | *** | 9.0 | 9.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **02** | **01** | TO | **2021** | **02** | **28** |

Reporting Frequency: **Monthly**
DMR Effective From: **02/01/2021**
DMR Effective To: **02/28/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4003 | 7980 | lbs/day | *** | 209 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3372 | 7367 | lbs/day | *** | 173 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled_In_Municipal_Waste_FEB_2021[1].xlsx | Hauled-In Municipal Waste Form | 2021-03-24T11:18:13-04:00 | |
| Sewage_Sludge_FEB_2021[1].xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-03-24T11:18:37-04:00 | |
| Hauled_In_Residual_Waste_FEB_2021_4[1].xlsx | Hauled-In Residual Waste Form | 2021-03-24T11:20:09-04:00 | |
| Hauled_In_Residual_Waste_FEB_2021_2[1].xlsx | Hauled-In Residual Waste Form | 2021-03-24T11:19:26-04:00 | |
| Daily_Influent_FEB_2021[1].xlsx | Influent and Process Control Form | 2021-03-24T11:17:48-04:00 | |
| Hauled_In_Residual_Waste_FEB_2021_1[1].xlsx | Hauled-In Residual Waste Form | 2021-03-24T11:19:00-04:00 | |
| Hauled_In_Residual_Waste_FEB_2021_5[1].xlsx | Hauled-In Residual Waste Form | 2021-03-24T11:20:29-04:00 | |
| Daily_Effluent_FEB_2021[1].xlsx | Daily Effluent Monitoring Form | 2021-03-24T11:17:13-04:00 | |
| Hauled_In_Residual_Waste_FEB_2021_3[1].xlsx | Hauled-In Residual Waste Form | 2021-03-24T11:19:49-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **03** | **24** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **03** | **01** | TO | **2021** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2021**
DMR Effective To: **03/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.04 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.85 | *** | 7.54 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 549.2 | 922.4 | lbs/day | *** | 29.0 | 51.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 72.0 | *** | lbs/day | *** | 3.87 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.38 | 5.55 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .45 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | 32 | 148 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 303.2 | 422.5 | lbs/day | *** | 16.0 | 22.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| | MONITORING PERIOD | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **03** | **01** | TO | **2021** | **03** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **03/01/2021**
DMR Effective To: **03/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3419 | 6353 | lbs/day | *** | 186 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2816 | 7215 | lbs/day | *** | 150 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste MAR 2021 1.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:41:30-04:00 | |
| Daily Effluent MAR 2021.xlsx | Daily Effluent Monitoring Form | 2021-04-13T11:40:07-04:00 | |
| Daily Influent MAR 2021.xlsx | Influent and Process Control Form | 2021-04-13T11:40:26-04:00 | |
| Hauled In Residual Waste MAR 2021 2.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:41:46-04:00 | |
| Hauled In Residual Waste MAR 2021 4.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:42:20-04:00 | |
| Hauled In Municipal Waste MAR 2021.xlsx | Hauled-In Municipal Waste Form | 2021-04-13T11:40:46-04:00 | |
| Hauled In Residual Waste MAR 2021 3.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:42:03-04:00 | |
| Hauled In Residual Waste MAR 2021 6.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:42:54-04:00 | |
| Sewage Sludge MAR 2021 .xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-04-13T11:41:10-04:00 | |
| Hauled In Residual Waste MAR 2021 5.xlsx | Hauled-In Residual Waste Form | 2021-04-13T11:42:36-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 135083 | 03/01/2021 | 03/31/2021 | Total Suspended Solids | Weekly Average | 51 | 45 | mg/L | Final Effluent (101) | See attached comments | See attached comments | The TSS violation occurred because the return rate while emptying our holding tank was too fast, to correct this problem we have slowed the rate of return to our headworks. |

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

### SUBMISSION INFORMATION

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
| **jsuasum** | | | **(724)** | **462-6915** | **2021** | **04** | **14** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **04** | **01** | TO | **2021** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2021**
DMR Effective To: **04/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.83 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.06 | *** | 7.52 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 344.7 | 481.1 | lbs/day | *** | 22.0 | 32.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | < 59 | *** | lbs/day | *** | < 3.68 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.93 | 3.23 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .5 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | 43 | 96 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 251.8 | 346.9 | lbs/day | *** | 15.0 | 16.2 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **04** | **01** | TO | **2021** | **04** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2021**
DMR Effective To: **04/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 6215 | 24880 | lbs/day | *** | 403 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 6347 | 29841 | lbs/day | *** | 416 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent APR 2021.xlsx | Daily Effluent Monitoring Form | 2021-05-18T11:09:21-04:00 | |
| Hauled In Municipal Waste APR 2021.xlsx | Hauled-In Municipal Waste Form | 2021-05-18T11:10:12-04:00 | |
| Hauled In Residual Waste APR 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-05-18T11:12:04-04:00 | |
| Hauled In Residual Waste APR 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-05-18T11:11:44-04:00 | |
| Hauled In Residual Waste APR 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-05-18T11:13:11-04:00 | |
| Hauled In Residual Waste APR 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-05-18T11:11:24-04:00 | |
| Hauled In Residual Waste APR 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-05-18T11:12:24-04:00 | |
| Daily Influent APR 2021.xlsx | Influent and Process Control Form | 2021-05-18T11:09:40-04:00 | |
| Sewage Sludge APR 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-05-18T11:10:57-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **05** | **18** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2021 | 05 | 01 | TO | 2021 | 05 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2021**
DMR Effective To: **05/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.18 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.75 | *** | 7.43 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 533.8 | 1192.7 | lbs/day | *** | 22.0 | 27.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | < 31 | *** | lbs/day | *** | < 1.38 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.6 | 7.6 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .5 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 51 | 210 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 297.6 | 682.8 | lbs/day | *** | 13.0 | 16.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **05** | **01** | TO | **2021** | **05** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **05/01/2021**
DMR Effective To: **05/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3904 | 10486 | lbs/day | *** | 175 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3061 | 9258 | lbs/day | *** | 147 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent MAY 2021.xlsx | Daily Effluent Monitoring Form | 2021-06-12T09:08:00-04:00 | |
| Hauled In Municipal Waste MAY 2021.xlsx | Hauled-In Municipal Waste Form | 2021-06-12T09:08:58-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 6.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:12:59-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:12:30-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:11:51-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:11:26-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:10:59-04:00 | |
| Hauled In Residual Waste MAY 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-06-12T09:10:21-04:00 | |
| Daily Influent MAY 2021.xlsx | Influent and Process Control Form | 2021-06-12T09:08:18-04:00 | |
| Sewage Sludge MAY 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-06-12T09:09:27-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **06** | **12** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **06** | **01** | TO | **2021** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2021**
DMR Effective To: **06/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.53 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.67 | *** | 7.2 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 226.9 | 301.5 | lbs/day | *** | 18.0 | 23.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 25.0 | *** | lbs/day | *** | 1.95 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.59 | 2.17 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .62 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 27 | 84 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 185.3 | 263.1 | lbs/day | *** | 15.0 | 20.4 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **06** | **01** | TO | **2021** | **06** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2021**
DMR Effective To: **06/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2273 | 4157 | lbs/day | *** | 182 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3210 | 7823 | lbs/day | *** | 255 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent JUNE 2021.xlsx | Daily Effluent Monitoring Form | 2021-07-22T09:58:14-04:00 | |
| Hauled In Municipal Waste JUNE 2021.xlsx | Hauled-In Municipal Waste Form | 2021-07-22T09:58:50-04:00 | |
| Hauled In Residual Waste JUNE 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-07-22T10:00:35-04:00 | |
| Hauled In Residual Waste JUNE 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-07-22T10:00:20-04:00 | |
| Hauled In Residual Waste JUNE 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-07-22T09:59:46-04:00 | |
| Hauled In Residual Waste JUNE 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-07-22T09:59:32-04:00 | |
| Hauled In Residual Waste JUNE 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-07-22T10:00:03-04:00 | |
| Daily Influent JUNE 2021.xlsx | Influent and Process Control Form | 2021-07-22T09:58:33-04:00 | |
| Sewage Sludge JUNE 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-07-22T09:59:11-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **07** | **22** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2021 | 07 | 01 | TO | 2021 | 07 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2021**
DMR Effective To: **07/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.28 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.7 | *** | 7.37 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 219.6 | 375.3 | lbs/day | *** | 17.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | < 31 | *** | lbs/day | *** | < 2.31 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.72 | 4.66 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .77 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 27 | 72 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 177.9 | 195.6 | lbs/day | *** | 14.0 | 16.4 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **07** | **01** | TO | **2021** | **07** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **07/01/2021**
DMR Effective To: **07/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3032 | 5122 | lbs/day | *** | 235 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 3013 | 6368 | lbs/day | *** | 226 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Municipal Waste JULY 2021.xlsx | Hauled-In Municipal Waste Form | 2021-08-13T12:21:46-04:00 | |
| Hauled In Residual Waste JULY 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-08-13T12:22:07-04:00 | |
| Hauled In Residual Waste JULY 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-08-13T12:22:23-04:00 | |
| Hauled In Residual Waste JULY 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-08-13T12:22:38-04:00 | |
| Hauled In Residual Waste JULY 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-08-13T12:22:53-04:00 | |
| Daily Effluent JULY 2021.xlsx | Daily Effluent Monitoring Form | 2021-08-11T10:16:57-04:00 | |
| Daily Influent JULY 2021.xlsx | Influent and Process Control Form | 2021-08-11T10:17:15-04:00 | |
| Sewage Sludge JULY 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-08-11T10:17:35-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **08** | **14** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **08** | **01** | TO | **2021** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2021**
DMR Effective To: **08/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 4.03 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.67 | *** | 7.29 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 239.2 | 279.4 | lbs/day | *** | 18.0 | 26.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 39.0 | *** | lbs/day | *** | 2.87 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.14 | 8.88 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .84 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | 30 | 86 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 185.9 | 243.3 | lbs/day | *** | 13.0 | 15.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **08** | **01** | TO | **2021** | **08** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **08/01/2021**
DMR Effective To: **08/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4623 | 9819 | lbs/day | *** | 328 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 5234 | 19275 | lbs/day | *** | 354 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent AUG 2021.xlsx | Daily Effluent Monitoring Form | 2021-09-23T10:47:17-04:00 | |
| Hauled In Municipal Waste AUG 2021.xlsx | Hauled-In Municipal Waste Form | 2021-09-12T09:41:40-04:00 | |
| Hauled In Residual Waste AUG 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-09-12T09:42:54-04:00 | |
| Hauled In Residual Waste AUG 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-09-12T09:42:25-04:00 | |
| Hauled In Residual Waste AUG 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-09-12T09:42:12-04:00 | |
| Hauled In Residual Waste AUG 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-09-12T09:43:25-04:00 | |
| Hauled In Residual Waste AUG 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-09-12T09:43:10-04:00 | |
| Daily Influent AUG 2021.xlsx | Influent and Process Control Form | 2021-09-12T09:41:22-04:00 | |
| Sewage Sludge AUG 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-09-12T09:41:57-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **09** | **23** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **09** | **01** | TO | **2021** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2021**
DMR Effective To: **09/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 2.98 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.83 | *** | 7.34 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 232.0 | 371.5 | lbs/day | *** | 18.0 | 30.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 60.0 | *** | lbs/day | *** | 4.67 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.61 | 2.68 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .83 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | < 45 | 1620 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 164.7 | 206.0 | lbs/day | *** | 13.0 | 15.1 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **09** | **01** | TO | **2021** | **09** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **09/01/2021**
DMR Effective To: **09/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 6225 | 16919 | lbs/day | *** | 501 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 13919 | 52659 | lbs/day | *** | 1105 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent SEPT 2021.xlsx | Daily Effluent Monitoring Form | 2021-10-16T11:06:08-04:00 | |
| Hauled In Municipal Waste SEPT 2021.xlsx | Hauled-In Municipal Waste Form | 2021-10-16T11:06:50-04:00 | |
| Hauled In Residual Waste SEPT 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-10-16T11:07:54-04:00 | |
| Hauled In Residual Waste SEPT 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2021-10-16T11:08:08-04:00 | |
| Hauled In Residual Waste SEPT 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-10-16T11:07:25-04:00 | |
| Hauled In Residual Waste SEPT 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-10-16T11:07:06-04:00 | |
| Hauled In Residual Waste SEPT 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-10-16T11:07:41-04:00 | |
| Daily Influent SEPT 2021.xlsx | Influent and Process Control Form | 2021-10-16T11:06:27-04:00 | |
| Sewage Sludge SEPT 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-10-16T11:08:24-04:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 148290 | 09/01/2021 | 09/30/2021 | Fecal Coliform | Instantaneous Maximum | 1620 | 1000 | No./100 ml | Final Effluent (101) | See attached comments | See attached comments | One of our industrial users, PTC Alliance, reported an “upset event” of high levels of nickel and zinc that falls inline with our sampling date. We also had a primary clarifier offline for repairs during the sample date. |

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

### SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|
| **jsuasum** | | | **(724)** | **462-6915** | **2021** | **10** | **22** |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2021 | 10 | 01 | TO | 2021 | 10 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2021**
DMR Effective To: **10/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 2.82 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.82 | *** | 7.31 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 350.8 | 401.6 | lbs/day | *** | 23.0 | 32.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 47.0 | *** | lbs/day | *** | 3.15 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.05 | 7.52 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .66 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 64 | 1020 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 254.3 | 475.1 | lbs/day | *** | 18.0 | 41.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **10** | **01** | TO | **2021** | **10** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **10/01/2021**
DMR Effective To: **10/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 4711 | 11011 | lbs/day | *** | 329 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 4929 | 18775 | lbs/day | *** | 366 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent OCT 2021.xlsx | Daily Effluent Monitoring Form | 2021-11-18T09:03:50-05:00 | |
| Hauled In Municipal Waste OCT 2021.xlsx | Hauled-In Municipal Waste Form | 2021-11-18T09:04:29-05:00 | |
| Hauled In Residual Waste OCT 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-11-18T09:05:01-05:00 | |
| Hauled In Residual Waste OCT 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-11-18T09:04:46-05:00 | |
| Hauled In Residual Waste OCT 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-11-18T09:05:55-05:00 | |
| Hauled In Residual Waste OCT 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-11-18T09:05:36-05:00 | |
| Daily Influent OCT 2021.xlsx | Influent and Process Control Form | 2021-11-18T09:04:09-05:00 | |
| Sewage Sludge OCT 2021.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-11-18T09:58:58-05:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 151317 | 10/01/2021 | 10/31/2021 | Carbonaceous Biochemical Oxygen Demand (CBOD5) | Weekly Average | 41.3 | 37.5 | mg/L | Final Effluent (101) | | | |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **11** | **18** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2021 | 11 | 01 | TO | 2021 | 11 | 30 |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2021**
DMR Effective To: **11/30/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.3 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.72 | *** | 7.21 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 226.6 | 669.2 | lbs/day | *** | 15.0 | 34.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 39.0 | *** | lbs/day | *** | 2.84 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.66 | 2.36 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .5 | .69 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 19 | 48 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 167.7 | 284.9 | lbs/day | *** | 12.0 | 21.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **11** | **01** | TO | **2021** | **11** | **30** |

Reporting Frequency: **Monthly**
DMR Effective From: **11/01/2021**
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No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 5700 | 19265 | lbs/day | *** | 422 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 5835 | 13871 | lbs/day | *** | 437 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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## DISCHARGE MONITORING REPORT (DMR)

### ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent NOV 2021.xlsx | Daily Effluent Monitoring Form | 2021-12-16T08:08:15-05:00 | |
| Hauled In Municipal Waste NOV 2021.xlsx | Hauled-In Municipal Waste Form | 2021-12-15T11:43:54-05:00 | |
| Hauled In Residual Waste NOV 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2021-12-15T11:45:21-05:00 | |
| Hauled In Residual Waste NOV 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2021-12-15T11:44:42-05:00 | |
| Hauled In Residual Waste NOV 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2021-12-15T11:44:20-05:00 | |
| Hauled In Residual Waste NOV 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2021-12-15T11:45:02-05:00 | |
| Daily Influent NOV 2021.xlsx | Influent and Process Control Form | 2021-12-15T11:43:17-05:00 | |
| Sewage Sludge NOV 2021 Sheet 2.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-12-15T11:46:05-05:00 | |
| Sewage Sludge NOV 2021 Sheet 1.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2021-12-15T11:45:45-05:00 | |

### PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

### UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

### COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled¿in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

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|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2021** | **12** | **16** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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## DISCHARGE MONITORING REPORT (DMR)

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ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **12** | **01** | TO | **2021** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2021**
DMR Effective To: **12/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.48 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.73 | *** | 7.29 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 438.2 | 836.5 | lbs/day | *** | 21.0 | 32.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 58.0 | *** | lbs/day | *** | 3.11 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.31 | 4.3 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .3 | .57 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 15 | 50 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 205.7 | 332.8 | lbs/day | *** | 10.0 | 12.5 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | **2021** | **12** | **01** | TO | **2021** | **12** | **31** |

Reporting Frequency: **Monthly**
DMR Effective From: **12/01/2021**
DMR Effective To: **12/31/2021**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3377 | 7009 | lbs/day | *** | 176 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 5887 | 24109 | lbs/day | *** | 328 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent DEC 2021.xlsx | Daily Effluent Monitoring Form | 2022-01-21T09:44:44-05:00 | |
| Daily Influent DEC 2021.xlsx | Influent and Process Control Form | 2022-01-21T09:45:03-05:00 | |
| Sewage Sludge DEC 2021 Sheet 2.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2022-01-21T09:45:40-05:00 | |
| Sewage Sludge DEC 2021 Sheet 1.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2022-01-21T09:45:22-05:00 | |
| Hauled In Municipal Waste DEC 2021.xlsx | Hauled-In Municipal Waste Form | 2022-01-27T10:42:14-05:00 | |
| Hauled In Residual Waste DEC 2021 Sheet 4.xlsx | Hauled-In Residual Waste Form | 2022-01-27T10:43:29-05:00 | |
| Hauled In Residual Waste DEC 2021 Sheet 1.xlsx | Hauled-In Residual Waste Form | 2022-01-27T10:42:35-05:00 | |
| Hauled In Residual Waste DEC 2021 Sheet 2.xlsx | Hauled-In Residual Waste Form | 2022-01-27T10:42:55-05:00 | |
| Hauled In Residual Waste DEC 2021 Sheet 3.xlsx | Hauled-In Residual Waste Form | 2022-01-27T10:43:12-05:00 | |
| Hauled In Residual Waste DEC 2021 Sheet 5.xlsx | Hauled-In Residual Waste Form | 2022-01-27T10:43:47-05:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Aaron L. Summers | S22301 | (724)-462-6915 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Aaron Summers** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | **(724)** | **462-6915** | **2022** | **01** | **27** |
| **jsuasum** | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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# EXHIBIT O1

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 12, 2021

# NOTICE OF VIOLATION

City of Beaver Falls
ATTN Joseph Durish Jr.
715 15th Street
Beaver Falls PA 15010

Re: Sewage
Beaver Falls STP
NPDES Permit No. PA002688
City of Beaver Falls, Beaver County

Dear Mr. Durish:

This is to confirm the results of the Department's inspection conducted July 6, 2021. The electronic Inspection Report noted conditions which are violations of your NPDES permit and/or The Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. Sections 691.1 - 691.1001 (The Clean Streams Law). The report may also note conditions that may contribute to or develop into violations of your NPDES permit and/or The Clean Streams Law and therefore need to be addressed. Any violation of The Clean Streams Law is subject to penalties provided by law.

This Notice of Violation is neither an order nor any other final action of the Department of Environmental Protection (Department). It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions, please call me at 724-847-5279.

Sincerely,

Water Quality Specialist

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**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**BUREAU OF CLEAN WATER**

# SEWAGE INSPECTION REPORT

| Permit Number | Inspection Date | Entry Time | Exit Time | Inspection Type | Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 07/06/2021 | 09:30 | 11:40 | CEI | 3214839 |

| | | | |
|---|---|---|---|
| **Municipality** | Beaver Falls | **County** | Beaver |
| **Facility Name** | CITY OF BEAVER FALLS STP | **Permittee Name** | BEAVER FALLS CITY BEAVER CNTY |
| **24-Hour Emergency Contact Person/Phone** | Joe Durish / (724) 561-6511 | **Email** | bfstp@outlook.com |
| **Physical Location Address** | LOWER SEVENTH AVE, BEAVER FALLS, PA, 15010 | | |
| **Permit Expiration Date** | 10/31/2023 | **Next Submittal Renewal Due Date** | 05/04/2023 |

**Violations*** Violation(s) Noted

1. **92A.44:** NPDES - Violation of effluent limits in Part A of permit
   TSS March 2021

**Recommendations**

--Relocate trash bin to outside of chlorine room

| | | | |
|---|---|---|---|
| **Person Interviewed** Aaron Summers | **Date** 07/06/2021 | **Inspector** AMANDA J SCHMIDT | **Date** 07/06/2021 |
| **Signature** | **Phone Number** (724) 843-7184 | **Signature** | **Phone Number** (724) 847-5279 |
| **Title** Chief Operator | | **Title** WTR QLTY SPCST | |
| **Email** bfstp@outlook.com | | **Email** amschmidt@pa.gov | |

**This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. *Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.**

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**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**BUREAU OF CLEAN WATER**

## SEWAGE INSPECTION REPORT

| Facility Details Section | | | |
|---|---|---|---|
| **Responsible Official** | STEPHEN JOHNSON | **Title** | CITY ADMIN |
| **Business Phone** | (724) 843-2808 | **Email** | bfwpcp@hotmail.com |
| **Permittee Address** | 715 15TH ST, BEAVER FALLS, PA, 15010-4124 | | |
| **Certified Operator** | SUMMERS AARON L | **Client ID** | 350280 |
| **Certificates** | A,E-2,4 | **Certification Status** | Active |
| **Expiration Date** | 09/30/2022 | | |
| **Is a Copy of the permit(s) on-site?** | Yes | | |
| **Has the interviewed operator/person reviewed the facility's permit(s)?** | Yes | | |

**Non-Compliances**

1. **25 Pa. Code 92a.41(a)(10):** Failure to maintain proper sample temperature.

**Comments**

Inspection performed for routine monitoring.

Responsible official is now Joe Durish Jr.

**Participants:**
---

## SEWAGE INSPECTION REPORT

**1 Mon,Rpts&Rcds: 0472402 - TRTMT PLT**

### Influent Sampling

| | | | |
|---|---|---|---|
| MRR-1 | Is influent monitoring required by the permit? | Yes | |
| MRR-2 | Are influent samples collected? | Yes | |
| MRR-3 | Is the influent sampling location prior to all treatment? | Yes | |
| MRR-4 | Is the influent sampling location prior to all return flows? | Yes | |
| MRR-5 | Are representative influent samples collected? | Yes | |

### Effluent Sampling

| | | | |
|---|---|---|---|
| MRR-6 | Is the effluent sample collected at the location identified in the permit? | Yes | |
| MRR-7 | Where is the effluent sample collection location? | IMP 001 | |
| MRR-8 | Is the effluent sample location after all treatment? | Yes | |
| MRR-9 | Are representative effluent samples collected? | Yes | |

### Sample Collection

| | | | |
|---|---|---|---|
| MRR-10 | Are samples collected as required by the permit? | Yes | |
| MRR-11 | Is proper sampling equipment / containers used during collection? | Yes | |
| MRR-12 | Are the proper type of samples collected in accordance with the permit? | Yes | |
| MRR-13 | Are the samples collected at the frequency in accordance with the permit? | Yes | |
| MRR-14 | Is the proper sample size (minimum aliquot 100 mL) collected? | Yes | |
| MRR-15 | Is proper temperature control provided during collection, storage and shipping? | Yes | |
| MRR-16 | Is the temperature of the sampler or storage refrigerator monitored using an NIST traceable thermometer and recorded? | Yes | |
| MRR-17 | Is the sample storage temperature <=6 °C ? | No | 1 |
| MRR-18 | What is the sample storage temperature?<br><br>**Notes:** New composite sampler on order | 9 | |

### On-site Lab Accreditation-by-Rule

| | | | |
|---|---|---|---|
| MRR-19 | Does the facility analyze accredited-by-rule parameters only? | No | |

### Lab Accreditation

| | | | |
|---|---|---|---|
| MRR-23 | Does the on-site laboratory analyze permit parameters? | No | |
| MRR-29 | Are permit parameters analyzed by a contract lab? | Yes | |

| | | | |
|---|---|---|---|
| MRR-30 | Contract Lab Name, City, Phone | CMA Env Labs | |
| MRR-31 | Contract Laboratory Accreditation ID | 33-00411 | |
| MRR-32 | Is the contract lab accredited for those permit parameters? | Yes | |
| MRR-33 | Have any changes occurred with the accredited-by-rule or the accredited parameters or labs? | No | |

**Analysis**

| | | | |
|---|---|---|---|
| MRR-35 | Are approved test methods (per 40 CFR Part 136 or others) used for permit parameters? | Yes | |
| MRR-36 | Are the methods used sufficiently sensitive for permit parameters? | Not Observed | |
| MRR-37 | Are the samples analyzed within the required holding time? | Yes | |
| MRR-38 | Are laboratory equipment/meters calibrated in accordance with the manufacturers' specifications? | Yes | |
| MRR-39 | Are laboratory meters operated and maintained in accordance with the manufacturers' specifications? | Yes | |
| MRR-40 | Are pH buffers and other reagent standards current? | Yes | |

**Records**

| | | | |
|---|---|---|---|
| MRR-41 | Are sampling, calibration, laboratory results, chain-of-custody and other required records readily available for review and complete? | Yes | |
| MRR-42 | Do the sampling records include collector, date/time, location information? | Yes | |
| MRR-43 | Do the analysis records include the analyst's name, the analysis date and time, the test method used, the quantitation limits, and the results? | Yes | |
| MRR-44 | Are the required facility records retained for a minimum of 3 years? | Yes | |
| MRR-45 | Are the required sludge use and disposal records retained for a minimum of 5 years? | Yes | |
| MRR-46 | Was access provided to information or to facility records upon request? | Yes | |

**Reports**

| | | | |
|---|---|---|---|
| MRR-47 | Identify the month/year of the DMRs and supporting data reviewed. | May 2021-pH, TRC,TSS | |
| MRR-48 | Are the reviewed DMRs and supplemental reports properly completed? | Yes | |
| MRR-49 | Are the reviewed bench sheets/lab reports consistent with the reported data? | Yes | |
| MRR-50 | Are samples collected more frequently than required in the permit? | No | |
| MRR-52 | Are DMRs submitted on time? | Yes | |
| MRR-53 | Are the required supplemental reports submitted? | Yes | |
| MRR-54 | Is the facility using the eDMR system, if required? | Yes | |

## 2 Flow Measurement: 0472402 - TRTMT PLT

### Flow Measurement

| | | | |
|---|---|---|---|
| Q-2 | If influent flows are measured, are they measured before all return lines and after hauled-in waste? | Yes | |
| Q-3 | Is a flume present? | No | |
| Q-6 | Is a weir present? | Yes | |
| Q-7 | Are weirs clean with a visible air space below nappe? | Yes | |
| Q-8 | What is the max flow that can be measured at the primary device (flume or weir)? | 15.415 | |

### Meter & Recorder

| | | | |
|---|---|---|---|
| Q-9 | Does the permit require continuous flow monitoring and recording? | Yes | |
| Q-10 | Does the facility have the required flow monitoring and recording capabilities? | Yes | |
| Q-11 | What type of flow meter is used? | Ultrasonic | |
| Q-12 | What type of flow recorder is used? | Totalizer | |
| Q-13 | Are the meter and recorder operable and operating? | Yes | |
| Q-14 | What is the date of the most recent flow meter calibration? | 1/22/21 | |
| Q-15 | What is the calibration range of the flow meter? | 0-15.92 MGD | |
| Q-16 | What is the flow range of the recorder? | 0-15.92 MGD | |
| Q-17 | What is the current flow meter reading (MGD or gpm)? | 1.77 MGD | |

### High Flows

| | | | |
|---|---|---|---|
| Q-18 | Does the permit require a High Flow Management Plan? | Not Applicable | |
| Q-19 | At what flow (gpm or MGD) is the plan to be implemented? | 7.5 MGD | |
| Q-20 | Is the plan being implemented? | Yes | |

## 3 TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

| | | | |
|---|---|---|---|
| TP-1 | Are all treatment units operable? | Yes | |
| TP-2 | Are the treatment units/equipment as described in the WQM permit(s) or in the previous inspection report? | Yes | |

### Stand-by Power

| | | | |
|---|---|---|---|
| TP-7 | Is stand-by power provided? | Yes | |

| | | | |
|---|---|---|---|
| TP-8 | Type of Stand-by Power | Emergency generator | |
| TP-9 | How often is the stand-by power unit maintained? | Weekly | |
| TP-10 | How often is the stand-by power unit exercised? | Weekly | |
| TP-11 | Is the stand-by power unit exercised under load? | Yes | |
| TP-12 | Is the stand-by power system operable and maintained? | Yes | |

**Alarms**

| | | | |
|---|---|---|---|
| TP-13 | Is an alarm system available? | Yes | |
| TP-14 | Type of Alarm | Other | |
| TP-15 | How often is the alarm system tested? | Twice Yearly | |
| TP-16 | What conditions trigger an alarm? Select all that apply. | Other<br>Power failure<br>High level<br>Pump faults<br>Pump failure<br>Intrusion<br>Leaks | |
| TP-17 | Is the alarm system(s) operable? | Yes | |

**Chemicals**

| | | | |
|---|---|---|---|
| TP-18 | Are chemicals used for treatment or otherwise added to the waste stream? | Yes | |
| TP-19 | Which chemicals are added? | Polymer | |
| TP-20 | What is the purpose of the chemical addition? | Sludge | |
| TP-21 | Where are the chemicals added? | NS4375 | |
| TP-22 | Are chemicals properly handled and stored to prevent a pollution incident? | Yes | |

**Bypasses**

| | | | |
|---|---|---|---|
| TP-23 | Did a treatment plant bypass occur since the last inspection? | No | |

**Planned Changes**

| | | | |
|---|---|---|---|
| TP-35 | Have any changes (new pollutants, different or increased volume or loadings) to the waste stream from industrial or hauled-in wastes occurred since the last inspection? | No | |

**4 O&M: 0472402 - TRTMT PLT**

**O&M**

| | | | |
|---|---|---|---|
| | | | |

| | | | |
|---|---|---|---|
| OM-1 | Which of the following treatment plant and equipment records are available? | Other | |
| OM-2 | Is a daily operations log on-site? | Yes | |
| OM-3 | Is the daily operations log up to date? | Yes | |
| OM-4 | Which operational conditions/actions are recorded in the log? | Observations<br>Process adjustments<br>Problems or Concerns | |
| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) | Yes | |
| OM-6 | Is an influent/process control supplemental report form completed and submitted with the DMR? | Yes | |
| OM-7 | Does the daily operations log include maintenance and repair records?<br><br>**Notes:** Seperate | Yes | |
| OM-10 | Are the PM and repair logs up to date? | Yes | |
| OM-11 | Were major equipment repairs/replacements done since the last inspection?<br><br>**Notes:** New Grit hopper, New pressure relief valves on digesters, Replaced belt on filter press, New combustible gas meters on the influent. | Yes | |
| OM-12 | Is a spare parts inventory, either written or electronic, maintained? | Yes | |
| OM-13 | Are spare parts and equipment (pumps, motors) maintained on-site or readily available? | Yes | |

**Solids Management**

| | | | |
|---|---|---|---|
| OM-14 | What is the sludge storage capacity? | 460,000 gallons | |
| OM-15 | How much sludge was removed from the facility in the past year? | 345.82 tons | |
| OM-16 | How does the facility determine how much sludge to waste? | Obs dig.<br>Supernatant | |
| OM-17 | Is sludge/biosolids production & disposal information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-18 | Does the facility test the removed sludge for %TS? | Yes | |
| OM-19 | Who provides sludge hauling/disposal/land application? | Brunner | |
| OM-20 | Where is the sludge disposal/biosolids application location? | Brunner Landfill | |
| OM-21 | How and where are other solid materials, such as collected screenings and grit, disposed? | Brunner Landfill | |
| OM-22 | Has the facility obtained or assured that contracted agents have the necessary permits and approvals for the disposal of solid materials? | Yes | |
| OM-23 | Are solid materials handled and disposed of in compliance with a disposal permit and requirements? | Yes | |
| OM-24 | Is the facility in compliance with all other Part C Special Conditions regarding Solids Management? | Yes | |

**Hauled in Wastes**

| | | | |
|---|---|---|---|
| OM-25 | Does the facility accept hauled-in wastes? | Yes | |
| OM-26 | Does the facility accept hauled-in Municipal Wastes? | Yes | |

| | | | |
|---|---|---|---|
| OM-26 | Does the facility accept hauled-in Municipal Wastes? | Yes | |
| OM-27 | Which types of municipal wastes are accepted? | Septage Wastewater sludge Holding tank | |
| OM-28 | Is hauled-in municipal waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-29 | Are hauled-in Residual Wastes accepted? | Yes | |
| OM-30 | Which types of residual wastes are accepted? | Other Landfill Leachate | |
| OM-31 | Is hauled-in residual waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-32 | At what flow does the facility stop accepting hauled-in wastes? | N/A | |
| OM-33 | Have the maximum amounts of hauled-in wastes that can be accepted (daily, weekly, etc.) been determined? | Yes | |
| OM-34 | Does the influent sampling location capture all hauled-in waste? | Yes | |
| OM-35 | Is all hauled in waste accounted for in the influent loading? | Yes | |
| OM-36 | Is the facility in compliance with other the Part C Hauled-In Waste Restrictions? | Yes | |

**Stormwater**

| | | | |
|---|---|---|---|
| OM-37 | Does the permit include a special condition or other requirements regarding stormwater management? | Yes | |
| OM-38 | Has a PPC Plan for stormwater discharges been submitted? | Yes | |
| OM-39 | Is the Stormwater PPC Plan available on-site? | Yes | |
| OM-40 | When was the Stormwater PPC Plan last updated? | August 2020 | |
| OM-41 | Is the facility in compliance with all permit requirements applicable to stormwater outfalls? | Yes | |

**Special Conditions**

| | | | |
|---|---|---|---|
| OM-42 | Is the facility subject to industrial pretreatment requirements, or does the permit include a Part C Special Condition regarding Industrial Pretreatment? | No | |
| OM-45 | Does the permit contain a condition regarding whole effluent toxicity (WET) tests? | Yes | |
| OM-46 | Has WET testing been conducted? | Yes | |
| OM-47 | Is the facility in compliance with all other permit requirements applicable to WET testing? | Yes | |
| OM-48 | Are any other special conditions in the permit not covered in this inspection report? | No | |

## 5 DP Discharge Point: 001 - OUTFALL 001

**Outfall**

| | | | |
|---|---|---|---|
| DP-1 | Outfall Observations | Ok | |

| | | | |
|---|---|---|---|
| DP-2 | Were field measurements taken? | No | |
| DP-4 | Were effluent samples collected for laboratory analysis? | No | |

**Downstream**

| | | | |
|---|---|---|---|
| DP-10 | Is the receiving stream clear of floating or deposited materials, scum, sheen, foam, oil, grease or other substances associated with the discharge? | Yes | |
| DP-11 | Were downstream field measurements taken? | No | |
| DP-13 | Were downstream samples collected for laboratory analysis? | No | |

**Upstream**

| | | | |
|---|---|---|---|
| DP-19 | Was the stream observed upstream from the outfall? | Yes | |
| DP-20 | Were upstream field measurements taken? | No | |
| DP-22 | Were upstream samples collected for laboratory analysis? | No | |

**7 PS Pump Stations: 0472402 - TRTMT PLT**

**Pump Stations**

| | | | |
|---|---|---|---|
| PS-1 | How many pump stations are part of the facility's collection system? | 8 | |
| PS-2 | Are pump station flows recorded? | Yes | |
| PS-3 | How are flows measured? | Metered | |
| PS-4 | What type of flow meter/sensor is in use? | Magnetic | |
| PS-5 | When was the most recent flow meter calibration done? | N/A | |
| PS-7 | Are pump stations monitored with alarms? | Yes | |
| PS-8 | Are the alarms operable? | Not Observed | |
| PS-9 | Are the pump stations equipped with backup auxiliary power? | Yes | |
| PS-10 | Type of Stand-by Power | Emergency generator | |
| PS-11 | Is the stand-by power system operable? | Yes | |
| PS-12 | Is the stand-by power system maintained in accordance with manufacturer's recommendations? | Yes | |
| PS-13 | How often is the stand-by power unit maintained? | Weekly | |
| PS-14 | How often is the stand-by power unit exercised? | Weekly | |
| PS-15 | Is the stand-by power unit exercised under load? | Yes | |

**OpCert: 0472402 - TRTMT PLT**

Operator Certification

| | | | |
|---|---|---|---|
| OP-1 | Is a properly certified operator employed for the treatment plant? | Yes | |
| OP-2 | Is at least one collection system pump station part of the permitted facility? | Yes | |
| OP-3 | Is an operator with a valid E-4 certificate employed for the operation of the facility's collection system pump station(s)? | Yes | |
| OP-4 | How many properly certified available operators make process control decisions at this facility? | 4 | |
| OP-5 | Is at least one available operator's current certificate displayed at the treatment plant? | Yes | |
| OP-6 | Have the available operators been provided with a copy of the current NPDES/WQM Permits? | Yes | |
| OP-7 | On which days of the week is an available operator at the plant? | Sunday<br>Monday<br>Tuesday<br>Wednesday<br>Thursday<br>Friday<br>Saturday | |
| OP-8 | How many hours are spent at the plant by the available operator(s) each day (weekdays/weekends/holidays)? | 8.5-all | |
| OP-9 | Does the operator notify the owner about violations or conditions that may cause a violation, and needed resources? | Yes | |
| OP-10 | How does the operator notify the owner about known violations or conditions that may cause a violation, and about needed resources? | Email<br>Phone call | |
| OP-11 | Does the owner respond to the operator's notification about needed resources? | Yes | |
| OP-12 | Does the operator act to resolve the condition(s) and/or violation(s)? | Yes | |
| OP-13 | Are non-certified or not properly certified persons expected to perform work that requires process control decisions? | No | |
| OP-19 | If the available operator/operator in charge (OIC) has changed, was a change of operator form submitted to DEP within 10 days? | Not Observed | |

Circuit Rider

| | | | |
|---|---|---|---|
| OP-20 | Is the facility operated by a circuit rider? | No | |

## 6 CV Conveyance: 0472402 - TRTMT PLT

Collection System

| | | | |
|---|---|---|---|
| CV-1 | Does the permitted entity own, operate & maintain the entire collection system? | No | |
| CV-2 | How many collection systems owned by others contribute to this facility's system? | 8 | |
| CV-3 | Are the contributing collection systems causing problems with this facility or it's collection system? | Not Observed | |
| CV-4 | Is collection system maintenance performed? | Yes | |
| CV-5 | Is maintenance regularly scheduled? | Yes | |
| CV-6 | Is maintenance done as problems occur? | Yes | |

| | | | |
|---|---|---|---|
| CV-7 | Which types of maintenance are performed? | Televising etc. | |
| CV-8 | Does the system experience infiltration and/or inflow that causes or could cause O&M problems or interferes with treatment? | Yes | |
| CV-9 | Is an I&I program in place? | Yes | |
| CV-10 | Select the I&I detection work performed since last inspection | Other<br>Downspout/Floor Drain Inspections<br>Televising | |
| CV-11 | Select the I&I removal work performed since last inspection | Other<br>Manhole Repair<br>Pipe Replacement | |

**Sanitary Sewer Overflows**

| | | | |
|---|---|---|---|
| CV-12 | Have any sanitary sewer overflows occurred since the last inspection? | No | |

## 3 TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

| | |
|---|---|
| TP-1 | Are all treatment units operable? |

| Treatment Units | Total | On-Line | Inoperable | Comments |
|---|---|---|---|---|
| Grit Removal | 1 | 1 | 0 | |
| Primary Clarifier | 3 | 3 | 0 | |
| Belt Filter Press | 1 | 1 | 0 | |
| Sludge Holding Tank/Lagoon | 1 | 1 | | For Skimmer |
| Aeration Basin | 1 | 1 | 0 | |
| Grease Removal | 1 | 1 | 0 | |
| Other | 1 | 1 | 0 | Sludge Decant Tank |
| Secondary Clarifier | 5 | 4 | 0 | 1 tank down for maintenance |
| Other | 2 | 2 | 0 | Primary and secondary wet wells |
| Trickling Filter | 2 | 2 | 0 | |
| Chlorine Contact Tank | 2 | 2 | 0 | Gas chlorination |
| Anaerobic Digester | 2 | 2 | 0 | |

## 4 O&M: 0472402 - TRTMT PLT

### O&M

| | |
|---|---|
| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) |

| Parameter / Calculation | Frequency Of Testing | Current Testing Results |
|---|---|---|
| Settleability | 7/week | N/O |
| Dissolved Oxygen | 7/week | N/O |
| Alkalinity | 7/week | N/O |
| Sludge Blanket | Daily (Visual) | OK |
| pH | Inf 7/week | N/O |
| Alkalinity | 7/week | N/O |
| Temperature | Daily | N/O |

| | | |
|---|---|---|
| | | |
| Other | CO2, VOAs, yr. comp | N/O |

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# SEWAGE COMPLIANCE INSPECTION REPORT

| NPDES / WQM Permit No. | Mo/Day/Year | Entry Time | Exit Time | Inspection Type | eFACTS Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 8/13/2019 | 9:15 | 11:15 | CEI | 2919193 |

Facility Name: **Beaver Falls STP**

Permittee Name: **City of Beaver Falls**

Physical Location/Directions: **100 6th Avenue, Beaver Falls PA 15010**

Permit Expiration Date: **10/31/23**

Municipality: **City of Beaver Falls**

County: **Beaver**

Permit Renewal Application Due: **5/4/23**

Facility Type: ☒ Municipal ☒ Major ☐ Non-Municipal ☐ Minor

Design Flow: **4.8** MGD

Treatment Process: ☐ Ext Aeration ☐ Contact Stabilization ☐ SBR ☐ RBC ☐ MBR ☐ MBBR/IFAS ☒ Trickling Filter ☐ Lagoon ☐ Other:

Responsible Official: **Jim Breznai**

Title: **Manager**

Permittee Address: **715 15th Street Beaver Falls PA 15010**

Business Phone: **724-843-7184**
Cell Phone: **724-624-1821**
Email: **bfwpcp@hotmail.com**

Does the facility have an Operator in Responsible Charge: ☒ Yes ☐ No

Operator Name: **Joseph Durish Jr.**
Circuit Rider: ☐ Yes ☒ No
Client ID: **296046** License Expiration Date: **12/31/2019**
Class-Subclass(es): **A,E-2,4**
Operator properly certified for treatment process type: ☒ Yes ☐ No

Business Phone: **724-843-7184**
Cell Phone: **724-561-6511**
Email: **joedurish88@gmail.com**

24-Hour Emergency Contact Person / Phone / Email: **Joe Durish / 724-561-6511**

**VIOLATIONS*:** ☒ Yes ☐ None Identified During Inspection ☐ Pending Sample Results

**--Violations of effluent limits in Part A of the NPDES Permit [25 Pa. Code 92a.44]**

**Recommendations:**

--Continue to evaluate options to address peak flows, in the interest of reducing effluent exeedances.
--Review Part C.IV.D of the renewed permit & ensure semi-annual stormwater inspections are completed & documented.
--Regarding basement back ups on 9th Ave, Conduct flow monitoring studies & review system design to determine how high flows can be better accomodated.Complete repairs as necessary, noting that certain modifications may require a WQM Part II Permit ammendment.

| Person Interviewed: | Date: | Inspector: | Date: |
|---|---|---|---|
| J. Durish Jr & Others | 8/13/19 | Amanda Schmidt | 9/18/19 |
| Signature: [Report Sent by Email] | Phone No.: 724-843-7184 | Inspector Signature: Amanda J. Schmidt | Phone No.: 724-847-5279 |
| Title: Chief Operator, Maintenance Supervisor | | Title: Water Quality Specialist | |
| Email: joedurish88@gmail.com | | Email: amschmidt@pa.gov | |

This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. * Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.

# SEWAGE COMPLIANCE INSPECTION REPORT

## Comments

This inspection was conducted for routine monitoring. Joe Durish Jr & Joe Durish Sr were present on behalf of the permittee.

**Administrative Review**

- The NPDES permit has been renewed since the last inspection.
- The following exceedances were indicated on eDMRs submitted for July 2018 through June 2019:

September 2018-TSS

*Monthly Average Load*--Reported value 1811.7 mg/L, Permit limit: 1201.7 mg/L
*Weekly Average Load*--Reported value 5656.3 lbs/day, Permit limit: 1802.5 lbs/day
*Monthly Average Concentration*--Reported value: 32 mg/L, Permit limit: 30 mg/L
*Weekly Average Concentration*--Reported value: 77 mg/L, Permit limit: 45 mg/L

These exceedances were attributed to hydraulic overload of the STP. DMR comments indicate that 11.1 inches of rain was received during the month.

May 2019-TSS and Fecal Coliforms

*TSS Weekly Average Load*--Reported value: 3542.1 lbs/day, Permit limit: 1802.5 lbs/day
*Fecals Instantaneous Max Concentration*--Reported value: 1940 per 100 mL, Permit limit: 1000 per 100 mL

These exceedances were attributed to hydraulic overload of the STP. DMR comments indicate that 3.15 inches of rain was received during the sampling period from 5/25-29.

June 2019-TSS and Fecal Coliforms

*Monthly Average Load*--Reported value 1897.5 mg/L, Permit limit: 1201.7 mg/L
*Weekly Average Load*--Reported value 3989.7 lbs/day, Permit limit: 1802.5 lbs/day
*Monthly Average Concentration*--Reported value: 36 mg/L, Permit limit: 30 mg/L
*Weekly Average Concentration*--Reported value: 68 mg/L, Permit limit: 45 mg/L
*Fecals Monthly Average Concentration*--Reported value: 215 per 100 mL, Permit limit: 200 per 100 mL

These exceedances were attributed to hydraulic overload of the STP. DMR comments indicate that 10.32 inches of rain was received during the month.

The above listed exceedances were addressed in a CACP issued by the Department in early September 2019.

**Site Inspection**

- Weather conditions were sunny with temperatures in the high 70s.
- Since the last inspection, several repairs and upgrades have been made to the treatment process. Additional details are included on attached pages.

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping (NPDES Permit Part A / WQM Permit)

On-site laboratory: ☒ Registered ☐ Accredited ☐ Accreditation By Rule ☐ Not Registered/Accredited ☐ N/A

On-site analyses: ☒ pH ☒ DO ☒ TRC ☐ All NPDES parameters ☐ None
☒ Other(s): **Alkalinity, Settleable Solids**

DEP Lab Registration/Accreditation #: **04-01709** Lab Supervisor: **Joe Durish Jr.**

Lab Supervisor Client ID: **296046** License Expiration Date: **12/31/2019**

Comments:

Contract Laboratory Name: **CMA Environmental Laboratory** DEP Lab Accreditation #: **33-00411**

Address & Phone: **265 College Avenue, Beaver PA 15009** **724-728-5539**

Parameters Analyzed: **Influent: TSS & BOD, Effluent: CBOD, Fecals, TSS, Ammonia Nitrogen, Total N, Total P**

Comments:

Sample Collection: Influent sampling prior to any treatment: ☒ Yes ☐ No Location: **Influent Channel prior to bar screen**

Influent sampled prior to all process return piping: ☐ Yes ☐ No ☐ N/A

Influent sampled prior to flow from septage receiving station: ☐ Yes ☐ No ☒ N/A

Effluent sampling after all treatment: ☒ Yes ☐ No Location: **Discharge from Chlorine Contact Tank**

Location(s) adequate for representative samples: ☒ Yes ☐ No ☐ N/O

Parameters analyzed, sample frequencies and sample types meet permit requirements: ☒ Yes ☐ No ☐ N/O

Samples properly preserved during collection, storage and shipping: ☒ Yes ☐ No ☐ N/O

Sampler or sample temperature is recorded using NIST traceable thermometer: ☒ Yes ☐ No ☐ N/O

Comments: **Dalton Service Company discharges sludge press wastewater to Manhole 129. Analysis of this discharge is included in plant's influent composite sampling.**

Influent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☒ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☐ Flow Proportional ☒ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☐ Flow meter ☒ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **0°C**

Comments: **Samples are stored in lab refrigerator; Temperaure is monitored with an NIST traceable thermometer.**

Effluent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☐ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☒ Flow Proportional ☐ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☒ Flow meter ☐ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **4°C**

Comments: **Operator confirmed that Fecal Coliforms are collected by grab sampling.**

Sample records: Available for inspection: ☒ Yes ☐ No Retained for at least three years: ☒ Yes ☐ No

Includes: Collector name: ☒ Yes ☐ No Collection date/time: ☒ Yes ☐ No Collection location: ☒ Yes ☐ No

Analyst name: ☒ Yes ☐ No Analysis date/time: ☒ Yes ☐ No Analysis Results: ☒ Yes ☐ No

Analytical methods & quantitation limits: ☒ Yes ☐ No Chain-of-Custody forms: ☒ Yes ☐ No

Comments:

Bench sheets: Data is consistent with data on the DMR: ☒ Yes ☐ No ☐ N/A Month(s)/year checked: **April 2019**

Comments:

# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping
### (NPDES Permit Part A / WQM Permit)

Field Testing: Completed within required hold time: ☒ Yes ☐ No ☐ N/O
Equipment is calibrated as required: pH: ☒ Yes ☐ No ☐ N/O DO: ☒ Yes ☐ No ☐ N/O ☐ N/A
pH Buffers current: ☒ Yes ☐ No TRC Meter checked against standards: ☒ Yes ☐ No ☐ N/O ☐ N/A
Calibration records maintained: ☒ Yes ☐ No ☐ N/O Calibration records up to date: ☒ Yes ☐ No ☐ N/O
Comments:

DMR Submittal: DMRs are submitted as required: ☒ Yes ☐ No ☐ N/O eDMR User: ☒ Yes ☐ No
All Supplemental Reports are submitted as required: ☒ Yes ☐ No ☐ N/O
DMRs include all sample results collected and analyzed using approved methods: ☐ Yes ☐ No ☒ N/O
Comments:

## Flow Measurement
### (NPDES Permit Part A / WQM Permit)

Primary flow meter and recorder: Operable: ☒ Yes ☐ No Properly maintained: ☒ Yes ☐ No
Measuring device type: ☐ Flume ☒ Weir ☒ Full Pipe ☐ Open Channel ☐ Other:
Meter type: ☒ Ultrasonic ☒ Magnetic Meter ☐ Bubbler ☐ Other:
Flow measurement location(s): ☐ Influent ☒ Effluent
Meter location: **Ultrasonic Meter is located at Internal Outfall 101; Mag Meter Located in Primary treatment works building**
Recorder type: ☒ Totalizer ☐ Daily Chart ☒ 7-Day Chart ☐ SCADA/Electronic ☐ Other: **Web based**
Flow meter capable of recording hydraulic design capacity: ☒ Yes ☐ No Calibration Range: **0-15.92 MGD [effluent]**
Inspection frequency: ☒ Daily ☐ Weekly ☐ Other:
Calibration frequency: **Annually** Date of last calibration: **1/23/19**
Issues noted with measurement and/or recording of flow: ☐ Yes ☒ No ☐ N/A
Influent flow is measured before all return lines: ☒ Yes ☐ No Influent flow is measured after hauled-in wastes: ☐ Yes ☐ No
Effluent flow is measured after all withdraws: ☒ Yes ☐ No ☐ N/A
Comments: **Mag Meter is used for recirculation pump/sludge to digester. The primary & secondary bypass meters are both ultrasonic and located at the influent chanel & secondary wet well. Mechanical valve shuts down secondary wet well at 7.5 MGD.**

Flumes: Flow is uniform across the channel: ☐ Yes ☐ No ☒ N/A Flume is free of debris and deposits: ☐ Yes ☐ No ☒ N/A
Maximum flow capable of measurement with flume: MGD
Comments:

Weirs: Clean with a visible air space below the nappe: ☒ Yes ☐ No ☐ N/A
Maximum flow capable of measurement with weir: **15.415** MGD
Comments: **(Effluent)**

## Treatment Plant (NPDES Permit Part B / WQM Permit)

Treatment plant bypass: Since last inspection: ☐ Yes ☒ No ☐ N/O Reported to DEP: ☐ Yes ☐ No
Location/cause:

Major equipment repair/replacement: Since last inspection: ☐ Yes ☒ No ☐ N/O
Repair List: **Replacement of stack for Digester #2 and several other items--See comments on Page 6**

Stand-by power: ☒ Emergency generator ☐ Dual power feed ☐ None ☐ Other:
System operable: ☒ Yes ☐ No Exercise frequency: **Weekly (Automated)** Maintenance frequency: **Weekly**
Unit exercised under load: ☒ Yes ☐ No ☐ N/A
Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Plant
(NPDES Permit Part B / WQM Permit)

Alarms: Type: ☐ None ☐ SCADA ☐ Auto Dialer ☐ PLC ☒ Other: **Reliance Security dispatches to cell phones**
System operable: ☐ Yes ☐ No ☐ N/A ☒ N/O Test frequency: **Twice Yearly**
Alarm triggers: **Primary/Secondary wet well high level, Chlorine leak, Power failure, Pump faults, Bypass of Primary & Secondary treatment. Chlorine cylinder safety valve is tested each time gas cylinder is changed.**

Staffing schedule: ☐ 24/7 Weekday hours: **7** to **3** Weekend/Holiday hours: **7** to **3**
Comments: **Maintenance 6:30-2:30**

On site Logs: Facility maintains a daily operations log: ☒ Yes ☐ No ☐ N/O Daily log up-to-date: ☒ Yes ☐ No ☐ N/O
Daily Log contains: ☒ Visual observations ☒ Process adjustments ☒ Problems and concerns
Repair log maintained: ☒ Yes ☐ No Routine maintenance log maintained: ☒ Yes ☐ No ☐ N/O
Comments:

Spare parts inventory maintained: ☒ Yes ☐ No ☐ N/O Standby units available: ☒ Yes ☐ No
Comments: **Inventory includes spare pump for primary wet well, several motors for pumps, grit collector motor and booster pump for press, and shoes/wear strips & flights for settling tanks**

Facility Process Control Plan required: ☐ Yes ☒ No ☐ N/A ☐ N/O Is the plan implemented: ☐ Yes ☐ No ☒ N/A ☐ N/O
System specific management plan available: ☐ Yes ☐ No ☒ N/A ☐ N/O
Comments:

## Process Control
(NPDES Permit Part B / WQM Permit)

| Parameter | Frequency of Testing | Current Testing Results |
|---|---|---|
| ☒ Settleability | **3/week** | **Settleable solids read from Imhoff Cone Raw Influent 9 mL/L** |
| ☒ Dissolved Oxygen | **3/week** | **Influent 1.07 mg/L** |
| ☒ Alkalinity | **3/week** | **Influent 1000 mg/L** |
| ☒ Sludge Blanket | | **Visual observation only. 4000 gallons/day wasted to digester from each primary settling tank.** |
| ☐ Mixed Liquor Suspended Solids (MLSS) | | |
| ☐ Mixed Liquor Volatile Suspended Solids (MLVSS) | | |
| ☐ Microscopic exam of mixed liquor | | |
| ☐ Color ☐ Odor | | |

☒ Other: **Influent pH: 7.77; Digester Sludge analysis: pH, TRC, alkalinity, Temperature, Settleable solids, CO2, & Volatile Acids. Yearly composite sample of belt press sludge: Metals, Oil & Grease, Ammonia Nitrogen etc.**

## Operators

Total Number of Available Operators at this facility: **4**
Does a non-certified operator make process control decisions at this facility: ☐ Yes ☒ No ☐ N/O
Does facility have a written SOP to direct non-certified operator activities: ☒ Yes ☐ No ☐ N/A ☐ N/O
Available Operator interviewed has reviewed a copy of facility NPDES permit: ☒ Yes ☐ No ☐ N/O
Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Process Units
(NPDES Permit Part B / WQM Permit)

| Treatment Units | Total | On-Line | Inoperable | Date Inoperable / Expected Date Return to Service / Comments |
|---|---|---|---|---|
| Mechanical Bar Screen | 1 | 1 | 0 | |
| Grit System | 1 | 1 | 0 | Includes Teacup Separator, which collects grit before second manual bar screen and primary settling tanks. |
| Manual Bar Screen | 3 | 3 | 0 | One used for back up only(During grit system maintenance) |
| Primary Wet Well | 1 | 1 | 0 | |
| Primary Settling Tanks | 3 | 3 | 0 | Drained/cleaned annually. New on/off switches were installed. |
| Aeration Tank | 1 | 1 | 0 | Backup only |
| Sludge Decant Tank | 1 | 1 | 0 | |
| Secondary Wet Well | 1 | 1 | 0 | Flow shut off at 7.5 MGD |
| Trickling Filters | 2 | 2 | 0 | |
| Secondary Settling Tanks | 5 | 5 | 0 | Drained/Cleaned annually. New flight & wear shoes were recently installed in #3, 4 and 5, and wear strips in #2. |
| Sludge Return | 1 | 1 | 0 | |
| Recirculation Chamber | 1 | 1 | 0 | |
| Gas Chlorination | 1 | 1 | 0 | Automated disinfection is flow proportional w/ effluent meter. |
| Chlorine Contact Tanks | 2 | 2 | 0 | New mud valves have been installed |
| Anaerobic Digesters | 2 | 2 | 0 | Digester #1-newly returned sludge to be dewatered; Digester #2-staging for sludge to be pressed. |
| Belt Filter Press | 1 | 1 | 0 | Run twice weekly while seasonal sloughing occurs from trickling filters |
| Skimmer/Holding Tank | 1 | 1 | 0 | |
| Grease Separator | 1 | 1 | 0 | Grease decanted from primary settling tanks, water then recycled to head works |
| Sludge Bed | | | | Maintained for backup only |
| | | | | Primary settling tanks served by 4 primary sludge pumps; 5th maintained for backup. |
| | | | | |
| | | | | |

O&M Manuals available for major pieces of equipment: ☒ Yes ☐ No ☐ N/O

Comments: **Rebuilds were recently done for Primary sludge pump, Digester moyno and recirc pumps, Press polymer pump, Secondary raw pump #3, Primary raw pump #3, & Press sludge pump #1. Parts were also rebuilt for all sludge pumps in stock. New upper bearings were installed on Raw pumps #1 (primary) & #4 (secondary). Security system was upgraded. Several safety upgrades were also addressed. This included new grating.**

Chemical Additions: **Polymer added to sludge—Currently using NS4375**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Other Requirements
### (NPDES Permit Part C / WQM Permit)

Special Conditions: Next submission/action: **N/A** Due Date:

☐ None
☒ WETT: **Annual testing required, last performed in late November 2018.**
☒ TRE/TIE: **(No endpoint failures)**
☐ EPA Pretreatment Program
☒ Stormwater requirements: **Latest Annual Inspection performed 12/15/18**
☐ Permit Schedule:
☐ TMDL
☐ Other:
Comments:

PPC Plan: Available on-site: ☒ Yes ☐ No ☐ N/A ☐ N/O Last updated: **July 2019**
Comments:

## Compliance History

Effluent Violation in the last 12 months: ☒ Yes ☐ No ☐ N/O
Recent Compliance Actions: ☐ Yes ☒ No
Comments: **(See comments on Page 2)**

Legal Agreement: Consent Order and Agreement, Consent Decree or Order: ☐ Yes ☒ No ☐ N/O Date executed:
In compliance with legal agreement: ☐ Yes ☐ No ☐ Could not confirm during field inspection
Obligations due next:
Comments:

## Sewage Treatment Plant

Treatment Plant Design Capacity: Hydraulic (MGD): **4.8** Organic (PPD): **9207**

High Flow Management / Maintenance Plan Available: ☒ Yes ☐ No ☐ N/A Plan implemented at: **7.5** MGD

Hauled in wastes: Facility accepts hauled in wastes: ☒ Yes ☐ No Reported to DEP on proper forms: ☒ Yes ☐ No ☐ N/A ☐ N/O
Flow at which facility stops accepting hauled in waste (MGD): ☒ N/A ☐ N/O
Comments: **There is currently no set flow at which the facility stops accepting hauled in wastes; Wastes are only accepted from Dalton Service Co.**

Solids Management: Disposal records available: ☐ Yes ☐ No ☒ N/O Retained for at least five years: ☒ Yes ☐ No
Production for calendar year: **2018--347.68 tons**
Production estimated using EPA Composite Correction Approach: ☒ Yes ☐ No Disposal within 15% of estimate: ☒ Yes ☐ No
Hauler: **Joseph J Brunner**
Disposal location: **Brunner Landfill**
Comments: **91.87% of expected sludge disposal was achieved.**

# SEWAGE COMPLIANCE INSPECTION REPORT

## Collection System

Chapter 94 Report: Submitted: ☐ Yes ☐ No ☐ N/A ☒ N/O Hydraulic or Organic Overload: ☐ Yes ☐ No ☐ N/A ☐ N/O
Comments: **(Chapter 94 was on file at STP and briefly reviewed during the inspection.)**

Permitted facility receives flow from contributing collection systems owned/maintained by others: ☒ Yes ☐ No ☐ N/O
Comments: **Contributing flow received from Boroughs of Big Beaver, Homewood, Eastvale, Patterson Heights, West Mayfield; and Townships of Patterson, White, & North Sewickley.**

Sanitary Sewer Overflows: Since last inspection: ☐ Yes ☒ No Reported to DEP: ☐ Yes ☐ No
Location/cause: **No SSOs were reported, however the Department has received reports of basement backups on 9th Avenue. Please see recommendations on Page 1.**

Collection system: Owned by: ☒ Permittee ☐ Other:
Maintained by: ☒ Permittee ☒ Other: **(Contributing municipalities as listed above)**
Maintenance performed: ☒ Regularly scheduled ☒ As problems occur ☐ None ☐ N/A
Type of maintenance: ☒ Televised:

☒ Jetted/Root Cutting: **4500 feet jetted in 2018**

☒ Smoke Testing:

☒ Other: **156 properties dye tested in 2018. 37 feet of 8 inch line was replaced, eliminating 7 dead taps. Two taps were also repaired. (Location unknown at time of inspection, DEP followed up by email w/ Street Dept on 9/18/19.)**

☒ Sewer Shed metering: **Plant personnel monitor system from 10 meters at various locations**

☐ Sewers repaired/replaced:

Inflow and Infiltration: Facility reports influences of: ☒ Inflow ☒ Infiltration
Detail I&I Detection work performed since last inspection:

Detail I&I Removal work performed since last inspection:

Comments: **Contributing municipalities oversee I&I work within their own collection systems. Beaver Falls Street Dept. handles I&I work within the City of Beaver Falls.**

Pump Stations: Total number: **8** Inspection frequency: **Eastvale--Daily ; Contributing Municipalities--N/O**
Operator Name: **Joseph Durish Sr.** Client ID: **235217** Class-Subclasses: **E** License Exp. Date: **9/30/2022**
Flow measurement: ☒ Metered ☐ Estimated ☐ Other:
Pump stations monitored with alarm systems: ☒ Yes ☐ No ☐ N/A ☐ N/O
Pump stations capable of operation with backup auxiliary power: ☒ Yes ☐ No ☐ N/A ☐ N/O
Comments: **Big Beaver Borough oversees the operation and maintenance for 7 of the 8 pump stations that contribute flow to Beaver Falls STP. Beaver Falls maintains Eastvale pump station only. North Sewickley Twp also contributes flow from 5 pump stations.**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Effluent / Receiving Water Evaluation

**Outfall Number(s): 101** | **Stream Name: Beaver River**

DEP Collector #:
Sample Date/Time: **N/A**
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | **0.16** | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations: **OK**
☐ Not Observed

Outfall Observations: **IMP 101 OK**
☐ Not Observed

Downstream Observations: **OK**
☐ Not Observed

**Outfall Number(s): 004** | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | **1.54** | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations: **OK**
☐ Not Observed

Outfall Observations: **IMP at Manhole-OK**
☐ Not Observed

Downstream Observations: **OK**
☐ Not Observed

**Outfall Number(s): 201** | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations:
☐ Not Observed

Outfall Observations: **OK (Back flow gate observed)**
☐ Not Observed

Downstream Observations:
☐ Not Observed

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Beaver Falls District Office
715 15th Street
Beaver Falls PA 15010

11/27/2018

**NOTICE OF VIOLATION**

City of Beaver Falls
715 15th Street
Beaver Falls PA 15010

Re: Sewage
Beaver Falls STP
NPDES Permit No. PA0026883
City of Beaver Falls, Beaver County

Dear Mr. Breznai,

The Department of Environmental Protection (Department) finds, as a result of a review of your Discharge Monitoring Reports for the months of July 2017 through June 2018, your effluent has exceeded the effluent limitations established in your NPDES Permit, No. PA0026883. Please be advised that failure to comply with the terms and conditions of your permit constitutes a violation of Sections 201 and 202 of The Clean Streams Law.

The violations are listed in the attached inspection report. This Notice of Violation is neither an order nor any other final action of the Department. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions, please call me at 724-847-5279.

Sincerely,
Amanda J Schmidt
Amanda Schmidt
Water Quality Specialist

cc: DEP Southwest Regional Office

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

# SEWAGE COMPLIANCE INSPECTION REPORT

| NPDES / WQM Permit No. | Mo/Day/Year | Entry Time | Exit Time | Inspection Type | eFACTS Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 8/10/2018 | 08:45 | 10:20 | CEI | 2762510 |

Facility Name: **Beaver Falls STP**

Permittee Name: **City of Beaver Falls**

Physical Location/Directions: **100 6th Avenue, Beaver Falls PA 15010**

Permit Expiration Date: **2/28/2018**

Municipality: **City of Beaver Falls**

County: **Beaver**

Permit Renewal Application Due: **8/31/2017**

Facility Type: ☒ Municipal ☒ Major ☐ Non-Municipal ☐ Minor

Design Flow: **4.8** MGD

Treatment Process: ☐ Ext Aeration ☐ Contact Stabilization ☐ SBR ☐ RBC ☐ MBR ☐ MBBR/IFAS ☒ Trickling Filter ☐ Lagoon ☐ Other:

Responsible Official: **Jim Breznai**

Title: **Manager**

Permittee Address: **715 15th Street Beaver Falls PA 15010**

Business Phone: **724-843-7184**
Cell Phone: **724-624-1821**
Email: **bfwpcp@hotmail.com**

Does the facility have an Operator in Responsible Charge: ☒ Yes ☐ No

Operator Name: **Joseph Durish Jr.**
Circuit Rider: ☐ Yes ☒ No
Client ID: **296046** License Expiration Date: **12/31/2019**
Class-Subclass(es): **A,E-2,4**
Operator properly certified for treatment process type: ☒ Yes ☐ No

Business Phone: **724-843-7184**
Cell Phone: **724-561-6511**
Email: **joedurish88@gmail.com**

24-Hour Emergency Contact Person / Phone / Email: **Joe Durish / 724-561-6511**

**VIOLATIONS*:** ☒ Yes ☐ None Identified During Inspection ☐ Pending Sample Results

**--Violations of effluent limits in Part A of the NPDES Permit [25 Pa. Code 92a.44]**

**Recommendations:**

--Ensure PPC plan is updated to reflect recent personnel changes

| Person Interviewed: | Date: | Inspector: | Date: |
|---|---|---|---|
| **Joseph Durish Jr** | **8/10/18** | **Amanda Schmidt** | 11/27/18 |
| Signature: **[Report Sent by Email]** | Phone No.: **724-843-7184** | Inspector Signature: | Phone No.: **724-847-5279** |
| Title: **Chief Operator** | | Title: **Water Quality Specialist** | |
| Email: **joedurish88@gmail.com** | | Email: **amschmidt@pa.gov** | |

This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. * Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.

# SEWAGE COMPLIANCE INSPECTION REPORT

## Comments

An announced Compliance Evaluation Inspection was conducted on short notice for routine monitoring.

**Administrative Review**

- The facility has an expired NPDES Permit. A renewal application has been submitted.
- The following exceedances were indicated on eDMRs submitted for July 2017 through June 2018:

| Parameter | Monitoring Period Exceeded | Reported Value | Permit Limit |
|---|---|---|---|
| TSS<br>*Max Weekly Average Load* | February 2018 | 2278.7 lbs/day | 1802.5 lbs/day |
| TSS<br>*Weekly Average Concentration* | May 2018 | 53 mg/L | 45 mg/L |
| Fecal Coliforms<br>*Average Monthly Concentration* | May 2018 | 247 per 100 mL | 200 per 100 mL |
| Fecal Coliforms<br>*Instantaneous Max Concentration* | May 2018 | 2100 per 100 mL | 1000 per 100 mL |

Exceedances in February were attributed to hydraulic overload of the STP. DMR comments indicate that 6.5 inches of rain was received locally during the month.

Exceedances in May were attributed to fixed film sloughing from the beginning of May through the beginning of June. DMR comments also indicated that the organic load exceeded design capacity. The influent TSS on May 13 was unusually high at 6720 mg/L, causing an unusually high effluent TSS result of 96 mg/L. This event also occurred during sough off. An unusually high chlorine demand was also noted during grab sampling for Fecal Coliforms. Corrective actions were indicated for each exceedance.

**Site Inspection**

- Weather conditions were sunny with temperatures in the high 70s.
- Treatment units appeared to be in working order.
- Additional observations and details are included on attached pages.

The attached Notice of Violation has been issued for the above listed exceedances.

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping (NPDES Permit Part A / WQM Permit)

On-site laboratory: ☒ Registered ☐ Accredited ☐ Accreditation By Rule ☐ Not Registered/Accredited ☐ N/A

On-site analyses: ☒ pH ☒ DO ☒ TRC ☐ All NPDES parameters ☐ None
☒ Other(s): **Alkalinity, Settleable Solids**

DEP Lab Registration/Accreditation #: **04-01709** Lab Supervisor: **Joe Durish Jr.**

Lab Supervisor Client ID: **296046** License Expiration Date: **12/31/2019**

Comments:

Contract Laboratory Name: **CMA Environmental Laboratory** DEP Lab Accreditation #: **33-00411**

Address & Phone: **265 College Avenue, Beaver PA 15009** **724-728-5539**

Parameters Analyzed: **Influent: TSS & BOD, Effluent: CBOD, Fecals, TSS, Ammonia Nitrogen, Total N, Total P**

Comments:

Sample Collection: Influent sampling prior to any treatment: ☒ Yes ☐ No Location: **Influent Channel prior to bar screen**

Influent sampled prior to all process return piping: ☐ Yes ☐ No ☐ N/A

Influent sampled prior to flow from septage receiving station: ☐ Yes ☐ No ☒ N/A

Effluent sampling after all treatment: ☒ Yes ☐ No Location: **Discharge from Chlorine Contact Tank**

Location(s) adequate for representative samples: ☒ Yes ☐ No ☐ N/O

Parameters analyzed, sample frequencies and sample types meet permit requirements: ☒ Yes ☐ No ☐ N/O

Samples properly preserved during collection, storage and shipping: ☒ Yes ☐ No ☐ N/O

Sampler or sample temperature is recorded using NIST traceable thermometer: ☒ Yes ☐ No ☐ N/O

Comments: **Dalton Service Company discharges sludge press wastewater to Manhole 129. Analysis of this discharge is included in plant's influent composite sampling.**

Influent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☒ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☐ Flow Proportional ☒ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☐ Flow meter ☒ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **1°C**

Comments: **Samples are stored in lab refrigerator; Temperaure is monitored with an NIST traceable thermometer.**

Effluent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☐ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☒ Flow Proportional ☐ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☒ Flow meter ☐ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **5.56°C**

Comments: **Operator confirmed that Fecal Coliforms are collected by grab sampling.**

Sample records: Available for inspection: ☒ Yes ☐ No Retained for at least three years: ☒ Yes ☐ No

Includes: Collector name: ☒ Yes ☐ No Collection date/time: ☒ Yes ☐ No Collection location: ☒ Yes ☐ No

Analyst name: ☒ Yes ☐ No Analysis date/time: ☒ Yes ☐ No Analysis Results: ☒ Yes ☐ No

Analytical methods & quantitation limits: ☒ Yes ☐ No Chain-of-Custody forms: ☒ Yes ☐ No

Comments:

Bench sheets: Data is consistent with data on the DMR: ☒ Yes ☐ No ☐ N/A Month(s)/year checked: **June 2018**

Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping
### (NPDES Permit Part A / WQM Permit)

Field Testing: Completed within required hold time: ☒ Yes ☐ No ☐ N/O
Equipment is calibrated as required: pH: ☒ Yes ☐ No ☐ N/O DO: ☒ Yes ☐ No ☐ N/O ☐ N/A
pH Buffers current: ☒ Yes ☐ No TRC Meter checked against standards: ☒ Yes ☐ No ☐ N/O ☐ N/A
Calibration records maintained: ☒ Yes ☐ No ☐ N/O Calibration records up to date: ☒ Yes ☐ No ☐ N/O
Comments:

DMR Submittal: DMRs are submitted as required: ☒ Yes ☐ No ☐ N/O eDMR User: ☒ Yes ☐ No
All Supplemental Reports are submitted as required: ☒ Yes ☐ No ☐ N/O
DMRs include all sample results collected and analyzed using approved methods: ☐ Yes ☐ No ☒ N/O
Comments:

## Flow Measurement
### (NPDES Permit Part A / WQM Permit)

Primary flow meter and recorder: Operable: ☒ Yes ☐ No Properly maintained: ☒ Yes ☐ No
Measuring device type: ☐ Flume ☒ Weir ☒ Full Pipe ☐ Open Channel ☐ Other:
Meter type: ☒ Ultrasonic ☒ Magnetic Meter ☐ Bubbler ☐ Other:
Flow measurement location(s): ☐ Influent ☒ Effluent
Meter location: **Ultrasonic Meter is located at Internal Outfall 101; Mag Meter Located in Primary treatment works building**
Recorder type: ☒ Totalizer ☐ Daily Chart ☒ 7-Day Chart ☐ SCADA/Electronic ☐ Other: **Web based**
Flow meter capable of recording hydraulic design capacity: ☒ Yes ☐ No Calibration Range: **0-15.92 MGD [effluent]**
Inspection frequency: ☒ Daily ☐ Weekly ☐ Other:
Calibration frequency: **Annually** Date of last calibration: **1/11/18**
Issues noted with measurement and/or recording of flow: ☐ Yes ☒ No ☐ N/A
Influent flow is measured before all return lines: ☒ Yes ☐ No Influent flow is measured after hauled-in wastes: ☐ Yes ☐ No
Effluent flow is measured after all withdraws: ☒ Yes ☐ No ☐ N/A
Comments: **Mag Meter is used for recirculation pump/sludge to digester. The primary & secondary bypass meters are both ultrasonic and located at the influent chanel & secondary wet well. Mechanical valve shuts down secondary wet well at 7.5 MGD.**

Flumes: Flow is uniform across the channel: ☐ Yes ☐ No ☒ N/A Flume is free of debris and deposits: ☐ Yes ☐ No ☒ N/A
Maximum flow capable of measurement with flume: MGD
Comments:

Weirs: Clean with a visible air space below the nappe: ☒ Yes ☐ No ☐ N/A
Maximum flow capable of measurement with weir: **15.415** MGD
Comments: **(Effluent)**

## Treatment Plant (NPDES Permit Part B / WQM Permit)

Treatment plant bypass: Since last inspection: ☐ Yes ☒ No ☐ N/O Reported to DEP: ☐ Yes ☐ No
Location/cause:

Major equipment repair/replacement: Since last inspection: ☐ Yes ☒ No ☐ N/O
Repair List: **Replacement of computer system for pump controls**

Stand-by power: ☒ Emergency generator ☐ Dual power feed ☐ None ☐ Other:
System operable: ☒ Yes ☐ No Exercise frequency: **Weekly (Automated)** Maintenance frequency: **Weekly**
Unit exercised under load: ☒ Yes ☐ No ☐ N/A
Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Plant
(NPDES Permit Part B / WQM Permit)

Alarms: Type: ☐ None ☐ SCADA ☐ Auto Dialer ☐ PLC ☒ Other: **Reliance Security dispatches to cell phones**
System operable: ☐ Yes ☐ No ☐ N/A ☒ N/O Test frequency: **Twice Yearly**
Alarm triggers: **Primary/Secondary wet well high level, Chlorine leak, Power failure, Pump faults, Bypass of Primary & Secondary treatment. Chlorine cylinder safety valve is tested each time gas cylinder is changed.**

Staffing schedule: ☐ 24/7 Weekday hours: **7** to **3** Weekend/Holiday hours: **7** to **3**
Comments: **Maintenance 6:30-2:30**

On site Logs: Facility maintains a daily operations log: ☒ Yes ☐ No ☐ N/O Daily log up-to-date: ☒ Yes ☐ No ☐ N/O
Daily Log contains: ☒ Visual observations ☒ Process adjustments ☒ Problems and concerns
Repair log maintained: ☒ Yes ☐ No Routine maintenance log maintained: ☒ Yes ☐ No ☐ N/O
Comments:

Spare parts inventory maintained: ☒ Yes ☐ No ☐ N/O Standby units available: ☒ Yes ☐ No
Comments: **Inventory includes spare pump for primary wet well, several motors for pumps, grit collector motor and booster pump for press.**

Facility Process Control Plan required: ☐ Yes ☒ No ☐ N/A ☐ N/O Is the plan implemented: ☐ Yes ☐ No ☒ N/A ☐ N/O
System specific management plan available: ☐ Yes ☐ No ☒ N/A ☐ N/O
Comments:

## Process Control
(NPDES Permit Part B / WQM Permit)

| Parameter | Frequency of Testing | Current Testing Results |
|---|---|---|
| ☒ Settleability | **3/week** | **Settleable solids read from Imhoff Cone Raw Influent 27 mL/L** |
| ☒ Dissolved Oxygen | **3/week** | **Influent 3.25 mg/L** |
| ☒ Alkalinity | **3/week** | **Influent 250 mg/L** |
| ☒ Sludge Blanket | | **Visual observation only. 4000 gallons/day wasted to digester from each primary settling tank.** |
| ☐ Mixed Liquor Suspended Solids (MLSS) | | |
| ☐ Mixed Liquor Volatile Suspended Solids (MLVSS) | | |
| ☐ Microscopic exam of mixed liquor | | |
| ☐ Color ☐ Odor | | |

☒ Other: **Digester Sludge analysis: pH, TRC, alkalinity, Temperature, Settleable solids, CO2, & Volatile Acids. Yearly composite sample of belt press sludge: Metals, Oil & Grease, Ammonia Nitrogen etc.**

## Operators

Total Number of Available Operators at this facility: **4**
Does a non-certified operator make process control decisions at this facility: ☐ Yes ☒ No ☐ N/O
Does facility have a written SOP to direct non-certified operator activities: ☒ Yes ☐ No ☐ N/A ☐ N/O
Available Operator interviewed has reviewed a copy of facility NPDES permit: ☒ Yes ☐ No ☐ N/O
Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Process Units
(NPDES Permit Part B / WQM Permit)

| Treatment Units | Total | On-Line | Inoperable | Date Inoperable / Expected Date Return to Service / Comments |
|---|---|---|---|---|
| Mechanical Bar Screen | 1 | 1 | 0 | |
| Grit System | 1 | 1 | 0 | Includes Teacup Separator, which collects grit before second manual bar screen and primary settling tanks. |
| Manual Bar Screen | 3 | 3 | 0 | One used for back up only(During grit system maintenance) |
| Primary Wet Well | 1 | 1 | 0 | |
| Primary Settling Tanks | 3 | 2 | 1 | Drained/cleaned annually. One tank down for flight repair |
| Aeration Tank | 1 | 1 | 0 | Backup only |
| Sludge Decant Tank | 1 | 1 | 0 | |
| Secondary Wet Well | 1 | 1 | 0 | Flow shut off at 7.5 MGD |
| Trickling Filters | 2 | 2 | 0 | |
| Secondary Settling Tanks | 5 | 5 | 0 | Drained/Cleaned annually |
| Sludge Return | 1 | 1 | 0 | |
| Recirculation Chamber | 1 | 1 | 0 | |
| Gas Chlorination | 1 | 1 | 0 | Automated disinfection is flow proportional w/ effluent meter. |
| Chlorine Contact Tanks | 2 | 2 | 0 | Removable redwood baffolds were installed to manage accumulation of solids on water surface. |
| Anaerobic Digesters | 2 | 2 | 0 | Digester #1-newly returned sludge to be dewatered; Digester #2-staging for sludge to be pressed |
| Belt Filter Press | 1 | 1 | 0 | Run twice weekly while seasonal sloughing occurs from trickling filters |
| Skimmer/Holding Tank | 1 | 1 | 0 | |
| Grease Separator | 1 | 1 | 0 | Grease decanted from primary settling tanks, water then recycled to head works |
| Sludge Bed | | | | Maintained for backup only |
| | | | | Primary settling tanks served by 4 primary sludge pumps; 5th maintained for backup. |
| | | | | |
| | | | | |

O&M Manuals available for major pieces of equipment: ☒ Yes ☐ No ☐ N/O

Comments:

Chemical Additions: **Polymer added to sludge—Currently using NS4375**

# SEWAGE COMPLIANCE INSPECTION REPORT

## Other Requirements
### (NPDES Permit Part C / WQM Permit)

Special Conditions: Next submission/action: **N/A** Due Date:

☐ None
☒ WETT: **Annual testing required, last performed November 2017**
☒ TRE/TIE: **(No endpoint failures)**
☐ EPA Pretreatment Program
☒ Stormwater requirements: **Latest Annual Inspection performed 12/5/17**
☐ Permit Schedule:
☐ TMDL
☐ Other:
Comments:

PPC Plan: Available on-site: ☒ Yes ☐ No ☐ N/A ☐ N/O Last updated: **August 2017**
Comments: **See recommendation on Page 1**

## Compliance History

Effluent Violation in the last 12 months: ☒ Yes ☐ No ☐ N/O
Recent Compliance Actions: ☐ Yes ☒ No
Comments:

Legal Agreement: Consent Order and Agreement, Consent Decree or Order: ☐ Yes ☒ No ☐ N/O Date executed:
In compliance with legal agreement: ☐ Yes ☐ No ☐ Could not confirm during field inspection
Obligations due next:
Comments:

## Sewage Treatment Plant

Treatment Plant Design Capacity: Hydraulic (MGD): **4.8** Organic (PPD): **9207**

High Flow Management / Maintenance Plan Available: ☒ Yes ☐ No ☐ N/A Plan implemented at: **7.5** MGD

Hauled in wastes: Facility accepts hauled in wastes: ☒ Yes ☐ No Reported to DEP on proper forms: ☒ Yes ☐ No ☐ N/A ☐ N/O
Flow at which facility stops accepting hauled in waste (MGD): ☒ N/A ☐ N/O
Comments: **There is currently no set flow at which the facility stops accepting hauled in wastes; Wastes are only accepted from Dalton Service Co.**

Solids Management: Disposal records available: ☐ Yes ☐ No ☒ N/O Retained for at least five years: ☒ Yes ☐ No
Production for calendar year: **2017--284.18 tons**
Production estimated using EPA Composite Correction Approach: ☒ Yes ☐ No Disposal within 15% of estimate: ☐ Yes ☐ No
Hauler: **Joseph J Brunner**
Disposal location: **Brunner Landfill**
Comments: **84.2% of expected sludge disposal was achieved.**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Collection System

Chapter 94 Report: Submitted: ☐ Yes ☐ No ☐ N/A ☒ N/O Hydraulic or Organic Overload: ☐ Yes ☐ No ☐ N/A ☐ N/O
Comments: **(Chapter 94 was on file at STP and breifly reviewed during the inspection.)**

Permitted facility receives flow from contributing collection systems owned/maintained by others: ☒ Yes ☐ No ☐ N/O
Comments: **Contributing flow received from Boroughs of Big Beaver, Homewood, Eastvale, Patterson Heights, West Mayfield; andTownships of Patterson, White, & North Sewickley.**

Sanitary Sewer Overflows: Since last inspection: ☐ Yes ☒ No Reported to DEP: ☐ Yes ☐ No
Location/cause:

Collection system: Owned by: ☒ Permittee ☐ Other:
Maintained by: ☒ Permittee ☒ Other: **(Contributing municipalities as listed above)**
Maintenance performed: ☒ Regularly scheduled ☒ As problems occur ☐ None ☐ N/A
Type of maintenance: ☒ Televised:

☒ Jetted/Root Cutting: **4700 feet jetted in 2017**

☒ Smoke Testing:

☒ Other: **142 properties dye tested in 2017**

☒ Sewer Shed metering: **Plant personnel monitor system from 10 meters at various locations**

☒ Sewers repaired/replaced: **Line replacements occurred on 11th and West 11th Streets.**

Inflow and Infiltration: Facility reports influences of: ☒ Inflow ☒ Infiltration
Detail I&I Detection work performed since last inspection:

Detail I&I Removal work performed since last inspection:

Comments: **Contributing municipalities oversee I&I work within their own collection systems. Beaver Falls Street Dept. handles I&I work within the City of Beaver Falls.**

Pump Stations: Total number: **8** Inspection frequency: **Eastvale--Daily ; Contributing Municipalities--N/O**
Operator Name: **Joseph Durish Sr.** Client ID: **235217** Class-Subclasses: **E** License Exp. Date: **9/30/2019**
Flow measurement: ☒ Metered ☐ Estimated ☐ Other:
Pump stations monitored with alarm systems: ☒ Yes ☐ No ☐ N/A ☐ N/O
Pump stations capable of operation with backup auxiliary power: ☒ Yes ☐ No ☐ N/A ☐ N/O
Comments: **Big Beaver Borough oversees the operation and maintenance for 7 of the 8 pump stations that contribute flow to Beaver Falls STP. Beaver Falls maintains Eastvale pump station only.**

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

# SEWAGE COMPLIANCE INSPECTION REPORT

## Effluent / Receiving Water Evaluation

**Outfall Number(s): 101** | **Stream Name: Beaver River**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations: **OK**
☐ Not Observed

Outfall Observations: **IMP 101 OK**
☐ Not Observed

Downstream Observations: **OK**
☐ Not Observed

**Outfall Number(s):** | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | 1.54 | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations:
☐ Not Observed

Outfall Observations:
☐ Not Observed

Downstream Observations:
☐ Not Observed

**Outfall Number(s):** | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations:
☐ Not Observed

Outfall Observations:
☐ Not Observed

Downstream Observations:
☐ Not Observed

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Beaver Falls District Office
715 15th Street
Beaver Falls PA 15010

8/3/2017

**NOTICE OF VIOLATION**

City of Beaver Falls
715 15th Street
Beaver Falls PA 15010

Re: Sewage
Beaver Falls STP
NPDES Permit No. PA0026883
City of Beaver Falls, Beaver County

Dear Mr. Breznai,

The Department of Environmental Protection (Department) finds, as a result of a review of your Discharge Monitoring Report(s) for the month(s) of July 2016-June 2017 that your effluent has exceeded the effluent limitations established in your NPDES Permit, No. PA0026883. Please be advised that failure to comply with the terms and conditions of your permit constitutes a violation of Sections 201 and 202 of The Clean Streams Law.

The violations are listed in the attached inspection report. We request that you submit a report to this office within 15 days of the date of this letter, describing the steps being taken to prevent recurrence of the violation, along with a correction schedule.

This Notice of Violation is neither an order nor any other final action of the Department. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions, please call me at 724-847-5279.

Sincerely,

Amanda Schmidt
Water Quality Specialist

cc: DEP Southwest Regional Office

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

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# SEWAGE COMPLIANCE INSPECTION REPORT

| NPDES / WQM Permit No. | Mo/Day/Year | Entry Time | Exit Time | Inspection Type | eFACTS Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 8/1/2017 | 09:00 | 10:50 | CEI | 2621009 |

Facility Name: **Beaver Falls STP**

Permittee Name: **City of Beaver Falls**

Physical Location/Directions: **100 6th Avenue, Beaver Falls PA 15010**

Permit Expiration Date: **2/28/2018**

Municipality: **City of Beaver Falls**

County: **Beaver**

Permit Renewal Application Due: **8/31/2017**

Facility Type: ☒ Municipal ☒ Major ☐ Non-Municipal ☐ Minor

Design Flow: **4.8** MGD

Treatment Process: ☐ Ext Aeration ☐ Contact Stabilization ☐ SBR ☐ RBC ☐ MBR ☐ MBBR/IFAS ☒ Trickling Filter ☐ Lagoon ☐ Other:

Responsible Official: **Jim Breznai**

Title: **Manager**

Permittee Address: **715 15th Street Beaver Falls PA 15010**

Business Phone: **724-843-7184**
Cell Phone:
Email: **bfwpcp@hotmail.com**

Does the facility have an Operator in Responsible Charge: ☒ Yes ☐ No

Operator Name: **Joseph Durish Jr.**
Circuit Rider: ☐ Yes ☒ No
Client ID: **296046** License Expiration Date: **12/31/2019**
Class-Subclass(es): **A,E-2,4**
Operator properly certified for treatment process type: ☒ Yes ☐ No

Business Phone: **724-843-7184**
Cell Phone:
Email: **joedurish88@gmail.com**

24-Hour Emergency Contact Person / Phone / Email: **David Bosworth / 724-624-1825**

**VIOLATIONS*:** ☒ Yes ☐ None Identified During Inspection ☐ Pending Sample Results

**--Violations of effluent limits in Part A of the NPDES Permit [25 Pa. Code 92a.44]**

**Recommendations:**

--Evaluate options to adjust treatment process during high flows to reduce the occurrence of TSS exceedances.
--Submit a request for WQM Part II Amendment regarding the installation of skimmers, to manage accumulation of floatable sluge solids in the chlorine contact tanks.
--Ensure that the effluent composite sampler temperature is kept between 0 and 6° C.

| Person Interviewed: | Date: | Inspector: | Date: |
|---|---|---|---|
| **Joseph Durish Jr & Others** | **8/1/17** | **Amanda Schmidt** | 8/3/17 |
| Signature: **[Report Sent by Email]** | Phone No.: **724-843-7184** | Inspector Signature: Amanda J Schmidt | Phone No.: **724-847-5279** |
| Title: **Operator** | | Title: **Water Quality Specialist** | |
| Email: **joedurish88@gmail.com** | | Email: **amschmidt@pa.gov** | |

This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. * Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

# SEWAGE COMPLIANCE INSPECTION REPORT

## Comments

An announced Compliance Evaluation Inspection was conducted on short notice for routine monitoring. Joseph Durish Jr., David Bosworth, and Joe Durish Sr. were Present on behalf the City of Beaver Falls.

**Administrative Review**

- The facility has a valid NPDES Permit.
- The following exceedances were indicated on eDMRs submitted for the July 2016 through June 2017 monitoring periods.

| Parameter | Monitoring Period Exceeded | Reported Value | Permit Limit |
|---|---|---|---|
| TSS<br>*Maximum Weekly Average Load* | December 2016 | 2346.6 lbs/day | 1802.5 lbs/day |
| TSS<br>*Instantaneous Max Concentration* | January 2017<br>May 2017 | 48 mg/L<br>50 mg/L | 45 mg/L<br>45 mg/L |

Exceedances were attributed to high flows and heavy rainfall.

**Site Inspection**

- Weather conditions were sunny with temperatures in the high 70s.
- Treatment units appeared to be in working order with some repairs and improvements made since the last inspection. Chlorine contact tanks are now drained and cleaned twice monthly; accumulated floatable sludge solids are returned to the primary settling tanks.
- A NIST Traceable thermometer has been installed in the effluent composite sampler. The reading on the thermometer indicated that its position may need to be adjusted based on observed conditions in the refrigeration unit.
- Additional observations and details are included on attached pages.

The attached Notice of Violation has been issued for the above listed exceedances.

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping (NPDES Permit Part A / WQM Permit)

On-site laboratory: ☒ Registered ☐ Accredited ☐ Accreditation By Rule ☐ Not Registered/Accredited ☐ N/A

On-site analyses: ☒ pH ☒ DO ☒ TRC ☐ All NPDES parameters ☐ None
☒ Other(s): **Alkalinity, Settleable Solids**

DEP Lab Registration/Accreditation #: **04-01709** Lab Supervisor: **Joe Durish Jr.**

Lab Supervisor Client ID: **296046** License Expiration Date: **12/31/2019**

Comments:

Contract Laboratory Name: **CMA Environmental Laboratory** DEP Lab Accreditation #: **33-00411**

Address & Phone: **265 College Avenue, Beaver PA 15009 724-728-5539**

Parameters Analyzed: **Influent: TSS & BOD, Effluent: CBOD, Fecals, TSS, Ammonia Nitrogen, Total N, Total P**

Comments:

Sample Collection: Influent sampling prior to any treatment: ☒ Yes ☐ No Location: **Influent Channel**

| | | | |
|---|---|---|---|
| Influent sampled prior to all process return piping: | ☒ Yes | ☐ No | ☐ N/A |
| Influent sampled prior to flow from septage receiving station: | ☐ Yes | ☐ No | ☒ N/A |
| Effluent sampling after all treatment: ☒ Yes ☐ No Location: **Discharge from Chlorine Contact Tank** | | | |
| Location(s) adequate for representative samples: | ☒ Yes | ☐ No | ☐ N/O |
| Parameters analyzed, sample frequencies and sample types meet permit requirements: | ☒ Yes | ☐ No | ☐ N/O |
| Samples properly preserved during collection, storage and shipping: | ☒ Yes | ☐ No | ☐ N/O |
| Sampler or sample temperature is recorded using NIST traceable thermometer: | ☒ Yes | ☐ No | ☐ N/O |

Comments: **Dalton Service Company discharges sludge press wastewater to Manhole 129. Analysis of this discharge is included in plant's influent composite sampling.**

Influent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☒ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☐ Flow Proportional ☒ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☐ Flow meter ☒ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **N/A**

Comments: **Automated composite sampler has been installed however composite grabs are still taken due to occasional foaming of the sample when decanting.**

Effluent Samples: Being collected: ☒ Yes ☐ No ☐ N/O Samples are: ☐ Grab ☒ 8-hour comp ☐ 24-hour comp ☐ Other

Samples are: ☒ Flow Proportional ☐ Time Proportional ☐ Not flow proportional ☐ N/A

Sampler controlled by: ☒ Flow meter ☐ Timed Collection ☐ N/A ☐ Other:

Minimum aliquot volume at least 100 ml: ☒ Yes ☐ No ☐ N/A Composite sampler temperature during inspection: **32°F**

Comments: **Operator confirmed that Fecal Coliforms are collected by grab sampling.**

Sample records: Available for inspection: ☒ Yes ☐ No Retained for at least three years: ☒ Yes ☐ No

Includes: Collector name: ☒ Yes ☐ No Collection date/time: ☒ Yes ☐ No Collection location: ☒ Yes ☐ No
Analyst name: ☒ Yes ☐ No Analysis date/time: ☒ Yes ☐ No Analysis Results: ☒ Yes ☐ No
Analytical methods & quantitation limits: ☒ Yes ☐ No Chain-of-Custody forms: ☒ Yes ☐ No

Comments:

Bench sheets: Data is consistent with data on the DMR: ☒ Yes ☐ No ☐ N/A Month(s)/year checked: **June 2017**

Comments:

# SEWAGE COMPLIANCE INSPECTION REPORT

## Monitoring, Reporting and Recordkeeping
### (NPDES Permit Part A / WQM Permit)

Field Testing: Completed within required hold time: ☒ Yes ☐ No ☐ N/O
Equipment is calibrated as required: pH: ☒ Yes ☐ No ☐ N/O DO: ☒ Yes ☐ No ☐ N/O ☐ N/A
pH Buffers current: ☒ Yes ☐ No TRC Meter checked against standards: ☒ Yes ☐ No ☐ N/O ☐ N/A
Calibration records maintained: ☒ Yes ☐ No ☐ N/O Calibration records up to date: ☒ Yes ☐ No ☐ N/O
Comments:

DMR Submittal: DMRs are submitted as required: ☒ Yes ☐ No ☐ N/O eDMR User: ☒ Yes ☐ No
All Supplemental Reports are submitted as required: ☒ Yes ☐ No ☐ N/O
DMRs include all sample results collected and analyzed using approved methods: ☐ Yes ☐ No ☒ N/O
Comments:

## Flow Measurement
### (NPDES Permit Part A / WQM Permit)

Primary flow meter and recorder: Operable: ☒ Yes ☐ No Properly maintained: ☒ Yes ☐ No
Measuring device type: ☐ Flume ☒ Weir ☒ Full Pipe ☐ Open Channel ☐ Other:
Meter type: ☒ Ultrasonic ☒ Magnetic Meter ☐ Bubbler ☐ Other:
Flow measurement location(s): ☐ Influent ☒ Effluent
Meter location: **Ultrasonic Meter is located at Internal Outfall 101; Mag Meter Located in Primary treatment works building**
Recorder type: ☒ Totalizer ☐ Daily Chart ☒ 7-Day Chart ☐ SCADA/Electronic ☒ Other: **Web based**
Flow meter capable of recording hydraulic design capacity: ☒ Yes ☐ No Calibration Range: **0-15.92 MGD [effluent]**
Inspection frequency: ☒ Daily ☐ Weekly ☐ Other:
Calibration frequency: **Annually** Date of last calibration: **1/10/17**
Issues noted with measurement and/or recording of flow: ☐ Yes ☒ No ☐ N/A
Influent flow is measured before all return lines: ☒ Yes ☐ No Influent flow is measured after hauled-in wastes: ☐ Yes ☐ No
Effluent flow is measured after all withdraws: ☒ Yes ☐ No ☐ N/A
Comments: **Mag Meter is used for recirculation pump/sludge to digester. The primary & secondary bypass meters are both ultrasonic and located at the influent chanel & secondary wet well. Mechanical valve shuts down secondary wet well at 7.5 MGD.**

Flumes: Flow is uniform across the channel: ☐ Yes ☐ No ☒ N/A Flume is free of debris and deposits: ☐ Yes ☐ No ☒ N/A
Maximum flow capable of measurement with flume: MGD
Comments:

Weirs: Clean with a visible air space below the nappe: ☒ Yes ☐ No ☐ N/A
Maximum flow capable of measurement with weir: **15.415** MGD
Comments: **(Effluent)**

## Treatment Plant (NPDES Permit Part B / WQM Permit)

Treatment plant bypass: Since last inspection: ☐ Yes ☒ No ☐ N/O Reported to DEP: ☐ Yes ☐ No
Location/cause:

Major equipment repair/replacement: Since last inspection: ☐ Yes ☒ No ☐ N/O
Repair List: **Replacement of one manual bar screen, Repairs to belt filter press.**

Stand-by power: ☒ Emergency generator ☐ Dual power feed ☐ None ☐ Other:
System operable: ☒ Yes ☐ No Exercise frequency: **Weekly (Automated)** Maintenance frequency: **Weekly**
Unit exercised under load: ☒ Yes ☐ No ☐ N/A
Comments:

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Plant
### (NPDES Permit Part B / WQM Permit)

Alarms: Type: ☐ None ☐ SCADA ☐ Auto Dialer ☐ PLC ☒ Other: **Reliance Security dispatches to cell phones**
System operable: ☐ Yes ☐ No ☐ N/A ☒ N/O Test frequency: **Twice Yearly**
Alarm triggers: **Primary/Secondary wet well high level, Chlorine leak, Power failure, Pump faults, Bypass of Primary & Secondary treatment. Chlorine cylinder safety valve is tested each time gas cylinder is changed.**

Staffing schedule: ☐ 24/7 Weekday hours: **7** to **3** Weekend/Holiday hours: **7** to **3**
Comments: **Maintenance 6:30-2:30**

On site Logs: Facility maintains a daily operations log: ☒ Yes ☐ No ☐ N/O Daily log up-to-date: ☒ Yes ☐ No ☐ N/O
Daily Log contains: ☒ Visual observations ☒ Process adjustments ☒ Problems and concerns
Repair log maintained: ☒ Yes ☐ No Routine maintenance log maintained: ☒ Yes ☐ No ☐ N/O
Comments:

Spare parts inventory maintained: ☒ Yes ☐ No ☐ N/O Standby units available: ☒ Yes ☐ No
Comments: **Inventory includes spare pump for primary wet well, several motors for pumps, grit collector motor and booster pump for press.**

Facility Process Control Plan required: ☐ Yes ☒ No ☐ N/A ☐ N/O Is the plan implemented: ☐ Yes ☐ No ☒ N/A ☐ N/O
System specific management plan available: ☐ Yes ☐ No ☒ N/A ☐ N/O
Comments:

## Process Control
### (NPDES Permit Part B / WQM Permit)

| Parameter | Frequency of Testing | Current Testing Results |
|---|---|---|
| ☒ Settleability | **Daily** | **Settleable solids read from Imhoff Cone Raw Influent 11 mL/L; Effluent 0.1 mL/L** |
| ☒ Dissolved Oxygen | **Daily** | **Influent 2.46 mg/L; Effluent 7.39 mg/L** |
| ☒ Alkalinity | **Daily** | **Influent 152 mg/L; Effluent 65 mg/L** |
| ☒ Sludge Blanket | | **Visual observation only. 3000 gallons/day wasted to digester from each primary settling tank.** |
| ☐ Mixed Liquor Suspended Solids (MLSS) | | |
| ☐ Mixed Liquor Volatile Suspended Solids (MLVSS) | | |
| ☐ Microscopic exam of mixed liquor | | |
| ☐ Color ☐ Odor | | |

☒ Other: **Digester Sludge analysis: pH, TRC, alkalinity, Temperature, Settleable solids, CO2, & Volatile Acids. Yearly composite sample of belt press sludge: Metals, Oil & Grease, Ammonia Nitrogen etc.**

## Operators

Total Number of Available Operators at this facility: **4**
Does a non-certified operator make process control decisions at this facility: ☐ Yes ☒ No ☐ N/O
Does facility have a written SOP to direct non-certified operator activities: ☒ Yes ☐ No ☐ N/A ☐ N/O
Available Operator interviewed has reviewed a copy of facility NPDES permit: ☒ Yes ☐ No ☐ N/O
Comments:

# SEWAGE COMPLIANCE INSPECTION REPORT

## Treatment Process Units
(NPDES Permit Part B / WQM Permit)

| Treatment Units | Total | On-Line | Inoperable | Date Inoperable / Expected Date Return to Service / Comments |
|---|---|---|---|---|
| Mechanical Bar Screen | 1 | 1 | | |
| Grit System | 1 | 1 | | Includes Teacup Separator, which collects grit before second manual bar screen and primary settling tanks. |
| Manual Bar Screen | 3 | 3 | | One used for back up only(During grit system maintenance) |
| Primary Wet Well | 1 | 1 | | |
| Primary Settling Tanks | 3 | 3 | | Served by 4 primary sludge pumps; 5th maintained for backup. Drained/cleaned annually |
| Aeration Tank | 1 | 1 | | Backup only |
| Sludge Decant Tank | 1 | 1 | | |
| Secondary Wet Well | 1 | 1 | | Flow shut off at 7.5 MGD |
| Trickling Filters | 2 | 2 | | |
| Secondary Settling Tanks | 5 | 5 | | Drained/Cleaned annually |
| Sludge Return | 1 | 1 | | |
| Recirculation Chamber | 1 | 1 | | |
| Gas Chlorination | 1 | 1 | | Automated disinfection is flow proportional w/ effluent meter. |
| Chlorine Contact Tanks | 2 | 2 | | Removable redwood baffolds were installed to manage accumulation of solids on water surface. |
| Anaerobic Digesters | 2 | 2 | | Digester #1-newly returned sludge to be dewatered; Digester #2-staging for sludge to be pressed |
| Belt Filter Press | 1 | 1 | | Run twice weekly while seasonal sloughing occurs from trickling filters |
| Skimmer/Holding Tank | 1 | 1 | | |
| Grease Separator | 1 | 1 | | Grease decanted from primary settling tanks, water then recycled to head works |
| Sludge Bed | | | | Maintained for backup only |
| | | | | |
| | | | | |
| | | | | |

O&M Manuals available for major pieces of equipment: ☒ Yes ☐ No ☐ N/O

Comments:

Chemical Additions: **Polymer added to sludge—Currently using NS4375**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Other Requirements
### (NPDES Permit Part C / WQM Permit)

Special Conditions: Next submission/action: **N/A** Due Date:

☐ None
☒ WETT: **Annual testing required, last performed Sept 13-20 2016**
☒ TRE/TIE: **(No endpoint failures)**
☐ EPA Pretreatment Program
☒ Stormwater requirements: **Latest Annual Inspection performed 11/29/16**
☐ Permit Schedule:
☐ TMDL
☐ Other:
Comments:

PPC Plan: Available on-site: ☒ Yes ☐ No ☐ N/A ☐ N/O Last updated: **2016**
Comments:

## Compliance History

Effluent Violation in the last 12 months: ☒ Yes ☐ No ☐ N/O
Recent Compliance Actions: ☐ Yes ☒ No
Comments:

Legal Agreement: Consent Order and Agreement, Consent Decree or Order: ☐ Yes ☒ No ☐ N/O Date executed:
In compliance with legal agreement: ☐ Yes ☐ No ☐ Could not confirm during field inspection
Obligations due next:
Comments:

## Sewage Treatment Plant

Treatment Plant Design Capacity: Hydraulic (MGD): **4.8** Organic (PPD): **9207**

High Flow Management / Maintenance Plan Available: ☒ Yes ☐ No ☐ N/A Plan implemented at: **7.5** MGD

Hauled in wastes: Facility accepts hauled in wastes: ☒ Yes ☐ No Reported to DEP on proper forms: ☒ Yes ☐ No ☐ N/A ☐ N/O
Flow at which facility stops accepting hauled in waste (MGD): ☒ N/A ☐ N/O
Comments: **There is currently no set flow at which the facility stops accepting hauled in wastes; Wastes are only accepted from Dalton Service Co.**

Solids Management: Disposal records available: ☐ Yes ☐ No ☒ N/O Retained for at least five years: ☒ Yes ☐ No
Production for calendar year: **2016--212.5 tons**
Production estimated using EPA Composite Correction Approach: ☒ Yes ☐ No Disposal within 15% of estimate: ☐ Yes ☐ No
Hauler: **Joseph J Brunner**
Disposal location: **Brunner Landfill**
Comments: **84.2% of expected sludge disposal was achieved.**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Collection System

Chapter 94 Report: Submitted: ☐ Yes ☐ No ☐ N/A ☒ N/O Hydraulic or Organic Overload: ☐ Yes ☐ No ☐ N/A ☐ N/O
Comments: **(Chapter 94 was on file at STP and breifly reviewed during the inspection.)**

Permitted facility receives flow from contributing collection systems owned/maintained by others: ☒ Yes ☐ No ☐ N/O
Comments: **Contributing flow received from Boroughs of Big Beaver, Homewood, Eastvale, Patterson Heights, West Mayfield; andTownships of Patterson, White, & North Sewickley**

Sanitary Sewer Overflows: Since last inspection: ☐ Yes ☒ No Reported to DEP: ☐ Yes ☐ No
Location/cause:

Collection system: Owned by: ☒ Permittee ☐ Other:
Maintained by: ☒ Permittee ☒ Other: **(Contributing municipalities as listed above)**
Maintenance performed: ☒ Regularly scheduled ☐ As problems occur ☐ None ☐ N/A
Type of maintenance: ☒ Televised: **3600 linear feet in 2016**

☒ Jetted/Root Cutting: **3600 linear feet in 2016**

☒ Smoke Testing:

☒ Other: **148 properties were dye tested in 2016 to check connections from garage drains, etc.**

☐ Sewer Shed metering:

☒ Sewers repaired/replaced: **300 feet of damaged sanitary line was replaced @ 4th Ave & 28th St; 280 feet was replaced @ Locust Street.**

Inflow and Infiltration: Facility reports influences of: ☒ Inflow ☒ Infiltration
Detail I&I Detection work performed since last inspection:

Detail I&I Removal work performed since last inspection:

Comments: **Contributing municipalities oversee I&I work within their own collection systems. Beaver Falls Street Dept. handles I&I work within the City of Beaver Falls.**

Pump Stations: Total number: **8** Inspection frequency: **Eastvale--Daily ; Contributing Municipalities--N/O**
Operator Name: **Joseph Durish Sr.** Client ID: **235217** Class-Subclasses: **E** License Exp. Date: **9/30/2019**
Flow measurement: ☒ Metered ☐ Estimated ☐ Other:
Pump stations monitored with alarm systems: ☒ Yes ☐ No ☐ N/A ☐ N/O
Pump stations capable of operation with backup auxiliary power: ☒ Yes ☐ No ☐ N/A ☐ N/O
Comments: **Big Beaver Borough oversees the operation and maintenance for 7 of the 8 pump stations that contribute flow to Beaver Falls STP. Beaver Falls maintains Eastvale pump station only.**

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# SEWAGE COMPLIANCE INSPECTION REPORT

## Effluent / Receiving Water Evaluation

**Outfall Number(s): 101** | **Stream Name: Beaver River**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations: **OK; Muddy from recent high flows**
☐ Not Observed

Outfall Observations: **IMP 101 OK, slightly cloudy but conditions have improved since last inspection. Location of Outfall 001 discharge is not safely accessible.**
☐ Not Observed

Downstream Observations: **OK; Muddy from recent high flows**
☐ Not Observed

**Outfall Number(s): 002** | **Stream Name: Beaver River**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | 1.54 | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations: **102: No flow**
☐ Not Observed

Outfall Observations: **Steady flow noted at downstream (combined) manhole.**
☐ Not Observed

Downstream Observations: **OK; Muddy from recent high flows**
☐ Not Observed

**Outfall Number(s):** | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

| Field Measurements: | Upstream | Outfall | Downstream | Units |
|---|---|---|---|---|
| Flow | | | | MGD |
| pH | | | | S.U. |
| Conductivity | | | | µmhos/cm |
| Dissolved Oxygen | | | | mg/L |
| Total/Free Chlorine Residual | | | | mg/L |
| Temperature | | | | ° |

Upstream Observations:
☐ Not Observed

Outfall Observations:
☐ Not Observed

Downstream Observations:
☐ Not Observed

City of Beaver Falls
WATER POLLUTION CONTROL PLANT
715 Fifteenth Street
BEAVER FALLS, PA 15010

Phone: 724-843-7184
Fax: 724-843-6787

8/10/2017

Pennsylvania DEP
Beaver Falls District Office
715 15th Street
Beaver Falls, PA 15010

Re: Violation of Sections 201 and 202 of The Clean Streams Law

Dear Mrs. Schmidt

The Beaver Falls STP exceeded the effluent limitations of Total Suspended Solids (TSS) on three separate occasions. All three exceedances occurred during higher than normal flows.

The first exceedance occurred during the week of December 18, 2016 after a rain event that produced 1.74 inches of rain within 48 hours. On December 18, 2016 our 8 hour composite sample of TSS was 55 mg/l and was based off of 8.85 MGD, which put us over the Max Weekly Average Loading.

The second exceedance occurred during the week of January 15, 2017. The plant received 2.07 inches of rain a few days prior to the exceedance. On January 15, 2017 our 8 hour composite sample of TSS was 77 mg/l and on January 18, 2017 our 8 hour composite sample of TSS was 19 mg/l which put us over the Max Weekly Average Concentration.

The third exceedance occurred during the week of May 5, 2017. The plant received 1.44 inches of rain 48 hours prior to our 8 hour composite sample on May 5, 2017. Also, during our sampling, we had one primary settling tank offline for an annual inspection. The TSS results were 58 mg/l. During our 8 hour composite sample on May 10, 2017, we had two secondary settling tanks offline for an annual inspection and a contact tank was offline for cleaning. The TSS results were 42 mg/l, which put us over the Max Weekly Average Concentration.

After reviewing our data, and back logs during all three exceedances, we came up with a plan to prevent recurrences of the violation. During higher than normal flows the operators will keep flights running in all settling tanks, remove sludge from secondary settling tanks at a higher rate, skim off secondary scum and any floatable solids at a continuous rate. Also, we will not plan settling tank inspections and general maintenance of any other operation during high flows.

If you have any questions, please feel free to call me at 724-843-7184 ext. 305, or email me at joedurish88@gmail.com.

Thanks,

Joseph M. Durish Jr.
Beaver Falls STP
Chief Operator

James J. Breznai
Plant Manager

From: Schmidt, Amanda amschmidt@pa.gov
Subject: RE: Secondary Bypass
Date: Sep 17, 2018 at 11:17:35 AM
To: Joe Durish joedurish88@gmail.com

Received, thank you.
Please let me know if you have any more problems with these next expected heavy rains.
Also, did you ever hear anything back from White Township on their overdue Chapter 94 questionnaire?

-----Original Message-----
From: Joe Durish [mailto:joedurish88@gmail.com]
Sent: Tuesday, September 11, 2018 3:26 PM
To: Schmidt, Amanda <amschmidt@pa.gov>
Subject: Secondary Bypass

Amanda,

The Beaver Falls STP experienced a secondary bypass of 1,035,000 gallons on 9/9/18 and into 9/10/18. During the secondary bypass, the wastewater bypassed secondary treatment, but it was still chlorinated before discharge. This bypass was caused by the large amount of rain that fell on those days. Our rain gauge calculated 6.05 inches of rain altogether. The samples that were collected during the bypass are being analyzed by CMA Lab. Let me know if there's anything else you need from me.

Thanks,

Joe Durish Jr.
Beaver Falls STP

P.S. I finally got the Chapter 94 questionnaire from White TWP!

# EXHIBIT O2

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST REGIONAL OFFICE

October 16, 2019

**CERTIFIED MAIL NO. 7018 1830 0000 1335 9186**

City of Beaver Falls Supervisors
Beaver Falls STP
715 15th Street
Beaver Falls, PA 15010

Re: Unauthorized Discharges
NPDES PA0026883
Beaver Falls STP
Beaver Falls City
Beaver County

Dear Supervisors:

Enclosed is your signed and executed copy of the Consent Assessment of Civil Penalty. If you have any questions regarding this matter, please call me at 412-442-4040 or email me at jkohut@pa.gov

Sincerely,

Jeffrey T. Kohut
Compliance Specialist

Enclosure

Bc:
File

**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the Matter of:

| | | |
|---|---|---|
| City of Beaver Falls Supervisors<br>Beaver Falls Sewage Treatment Plant<br>Beaver Falls City<br>Beaver County | : | Violations of The Clean Streams Law |

## CONSENT ASSESSMENT OF CIVIL PENALTY

This Consent Assessment of Civil Penalty ("CACP") is entered into this 16th day of September, 2019, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department"), and the City of Beaver Falls Supervisors ("Beaver Falls").

The Department has found and determined the following:

A. The Department is the agency of the Commonwealth with the duty and authority to administer and enforce The Clean Streams Law, the Act of June 22, 1937, P.L. 1987, No. 394, *as amended*, 35 P.S. §§ 691.1-691.1001 ("the Clean Streams Law"); and the regulations promulgated thereunder ("Regulations"). Pursuant to a delegation from the United States Environmental Protection Agency, the Department also administers the National Pollutant Discharge Elimination System ("NPDES") program of the Federal Water Pollution Control Act, 33 U.S.C. § 1342.

B. Beaver Falls is a" municipality" as that term is defined by Section 1 of The Clean Streams Law, 35 P.S. § 691.1. Beaver Falls maintains a business mailing address at Beaver Falls Sewage Treatment Plant, 715 15th Street, Beaver Falls, Pennsylvania 15010.

C. Beaver Falls owns and operates a sewage treatment plant known as the Beaver Falls Sewage Treatment Plant ("Facility") located in City of Beaver Falls, Beaver County, Pennsylvania.

D. All dischargers of sewage must first obtain a permit from the Department to discharge sewage in any manner, directly or indirectly, into waters of the Commonwealth pursuant to Sections 201 and 202 of the Clean Streams Law, 35 P.S. §§ 691.201 and 691.202.

E. Pursuant to Section 92a.1(b) of the Regulations, 25 Pa. Code § 92a.1(b), a person may not discharge pollutants from a point source into surface waters except as authorized under an NPDES permit.

F. Pursuant to Section 92a.9 of the Regulations, 25 Pa. Code § 92a.9, an NPDES permit is the discharge permit for purposes of Section 202 of the Clean Streams Law, 35 P.S. § 691.202.

G. On November 1, 2018, the Department renewed NPDES permit PA0026883 ("NPDES Permit") authorizing Beaver Falls to discharge treated sewage from the Facility to the Beaver River. The Beaver River is a "water of the Commonwealth.," as that phrase is defined by Section 1 of The Clean Streams Law, 35 P.S. § 691.1.

**Violations of Effluent Limitations**

H. Part A, Condition I of the NPDES Permit establishes effluent limitations on Beaver Falls's discharge, from Outfall 101 at the Facility to the Beaver River for, *inter alia*, fecal coliform and total suspended solids.

I. Part A, Condition III of the NPDES Permit requires Beaver Falls to sample its discharges for compliance with the effluent limitations in the NPDES Permit and to submit the results monthly to the Department in the form of Discharge Monitoring Reports ("DMRs").

J. As evidenced by its DMRs, Beaver Falls failed to comply with effluent limitations in the NPDES Permit on multiple occasions during the period of December 2016, through and including, June 2019. The specific violations of the effluent limitations in the NPDES Permit are listed in Exhibit A, which is attached hereto and fully incorporated by reference.

K. Beaver Falls' failures to comply with the effluent limitations, as described in Paragraph J, above, constitute violations of the NPDES Permit, Section 92a.1(b) of the Regulations, 25 Pa. Code § 92a.1(b), and Sections 201 and 202 of The Clean Streams Law, 35 P.S. §§ 691.201 and 691.202; constitute statutory nuisances under Sections 3 and 202, of The Clean Streams Law, 35 P.S. §§ 691.3 and 691.202; constitute unlawful conduct under Section 611 of The Clean Streams Law, 35 P.S. § 691.611; and subject Beaver Falls to civil penalty liability under Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

After full and complete negotiation of all matters set forth in this CACP and upon mutual exchange of the covenants herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ASSESSED by the Department and AGREED to by Beaver Falls as follows:

**1. Assessment.** In resolution of the Department's claim for civil penalties, which the Department is authorized to pursue under Section 605 of The Clean Streams Law, 35 P.S. § 691.605, the Department hereby assesses a civil penalty of EIGHT THOUSAND FIVE HUNDRED DOLLARS ($8,500.00), which Beaver Falls hereby agrees to pay.

**2. Civil Penalty Settlement.** Upon signing this CACP, Beaver Falls shall pay the civil penalty assessed in Paragraph 1. This payment is in settlement of the Department's claim for civil penalties for the violations set forth in Paragraphs J and K, above. The payment shall be made payable to the "Commonwealth of Pennsylvania" and sent to the attention of Compliance Specialist, Clean Water Program, Department of Environmental Protection, 400 Waterfront Drive, Pittsburgh, PA 15222-4745.

**3. Findings.**

a. Beaver Falls agrees that the findings in Paragraphs A through L, above, are true and correct and, in any matter or proceeding involving Beaver Falls and the Department, Beaver Falls shall not challenge the accuracy or validity of these findings.

b. The parties do not authorize any other persons to use the findings in this CACP in any matter or proceeding.

**4. Reservation of Rights.** The Department reserves all other rights with respect to any matter addressed by this CACP, including the right to require abatement of any conditions resulting from the events described in the Findings. Beaver Falls reserves the right to challenge any action which the Department may take, but waives the right to challenge the content or validity of this CACP.

**5. Resolution.** Attached hereto as Exhibit B is a resolution of (Beaver Falls) authorizing its signatories below to enter into this CACP on its behalf.

IN WITNESS WHEREOF, the parties hereto have caused this CACP to be executed by their duly authorized representatives. The undersigned representatives of Beaver Falls certify, under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this CACP on behalf of Beaver Falls; that Beaver Falls consents to the entry of this CACP as an ASSESSMENT of the Department; that Beaver Falls hereby knowingly waives any right to a hearing under the statutes referenced in this CACP; and that Beaver Falls knowingly waives its right to appeal this CACP, which rights may be available under Section 4 of the Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; or any other provision of law. Signature by Beaver Falls attorney certifies only that the agreement has been signed after consulting with counsel.

**FOR CITY OF BEAVER FALLS**

Name:
Title:

Name: George S. Quay III
Title: MAYOR

Shannon L. Steel
Attorney for City of Beaver Falls

**FOR THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Southwest Region

As to form and legality

Charney Regenstein
Assistant Counsel

# EXHIBIT A

## Beaver Falls Sewage Treatment Plant
## Outfall 101 Effluent Limitation Violations

| MONITORING END DATE | OUTFALL | PARAMETER | VIOLATION TYPE | PERMIT LIMIT | SAMPLE VALUE | UNIT OF MEASURE |
|---|---|---|---|---|---|---|
| 12/31/2016 | 101 | Total Suspended Solids | Weekly Average | 1802.5 | 2346.6 | lbs/day |
| 01/31/2017 | 101 | Total Suspended Solids | Weekly Average | 45 | 48 | mg/L |
| 05/31/2017 | 101 | Total Suspended Solids | Weekly Average | 45 | 50 | mg/L |
| 02/28/2018 | 101 | Total Suspended Solids | Weekly Average | 1802.5 | 2278.7 | lbs/day |
| 05/31/2018 | 101 | Total Suspended Solids | Weekly Average | 45 | 53 | mg/L |
| 05/31/2018 | 101 | Fecal Coliform | Instantaneous Maximum | 1000 | 2100 | CFU/100 ml |
| 05/31/2018 | 101 | Fecal Coliform | Geometric Mean | 200 | 247 | CFU/100 ml |
| 09/30/2018 | 101 | Total Suspended Solids | Weekly Average | 1802.5 | 5656.3 | lbs/day |
| 09/30/2018 | 101 | Total Suspended Solids | Average Monthly | 30 | 32 | mg/L |
| 09/30/2018 | 101 | Total Suspended Solids | Weekly Average | 45 | 77 | mg/L |
| 09/30/2018 | 101 | Total Suspended Solids | Average Monthly | 1201.7 | 1811.7 | lbs/day |
| 05/31/2019 | 101 | Total Suspended Solids | Weekly Average | 1802.5 | 3542.1 | lbs/day |
| 05/31/2019 | 101 | Fecal Coliform | Instantaneous Maximum | 1000 | 1940 | No./100 ml |
| 06/30/2019 | 101 | Total Suspended Solids | Weekly Average | 45.0 | 68.0 | mg/L |
| 06/30/2019 | 101 | Fecal Coliform | Geometric Mean | 200 | 215 | No./100 ml |
| 06/30/2019 | 101 | Total Suspended Solids | Weekly Average | 1802.5 | 3989.7 | lbs/day |
| 06/30/2019 | 101 | Total Suspended Solids | Average Monthly | 1201.7 | 1897.5 | lbs/day |
| 06/30/2019 | 101 | Total Suspended Solids | Average Monthly | 30.0 | 36.0 | mg/L |

**EXHIBIT B**
**RESOLUTION**

**City of Beaver Falls**

Beaver County, Pennsylvania, 15010

RESOLUTION NUMBER (____##____)

The undersigned and authorized representatives of City of Beaver Falls, hereby certify that at a meeting held on the 24th day of September, 2019, after due notice, at which a quorum was present, City of Beaver Falls adopted the following Resolution:

**NOW, THEREFORE, BE AND IT HEREBY IS RESOLVED**, as follows:

George S. Quarry III, Mayor and
(name) (title)

Paula J. Durish, City Clerk of
(name) (title)

City of Beaver Falls are hereby authorized to execute the signing of the Consent Assessment of Civil Penalty from the Department of Environmental Protection and to forward the signed Consent Assessment of Civil Penalty to the Department of Environmental Protection in a timely manner.

It is certified that the above Resolution is in full force in effect as of this 24th day of September, 2019.

City of Beaver Falls (SEAL)

George S. Quarry III
(Signature)

(Title) George S. Quarry III
Mayor

Paula J. Durish
(Signature)

(Title) Paula J. Durish
City Clerk

# EXHIBIT O3

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

October 29, 2020

Patrick Burdine, Superintendent
Dept. of Public Works
City of Beaver Falls
715 Fifteenth Street
Beaver Falls, PA 15010

Re: Corrective Action Plan
City of Beaver Falls
Beaver County

Dear Mr. Burdine:

We hereby approve the Corrective Action Plan (CAP) submitted by the City of Beaver Falls on September 10, 2020. Progress reports (two copies) should be submitted to the Department every six months, and reports are due by July 31 and January 31 of each year. The first Progress Report is due July 31, 2020.

The City should take all necessary actions to prevent unpermitted discharges, basement flooding, and the associated public health hazards. At all times, including while the CAP is in effect, the City remains responsible for all violations of the Clean Streams Law and is liable for the civil penalties provided for such violations. Bypassing and basement flooding are illegal discharges. Enforcement action may be warranted if the approved schedule is not followed, or if conditions indicate that such action is necessary to protect the environment or public health.

The City is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding. Also, the City's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

Please be aware that requests for CAP revisions will be expected by this Department if the examination of the system shows that additional remedial work is needed, that is not known now. Please notify us immediately when this becomes evident, so we may approve CAP extensions.

The City shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

If you have any questions regarding this letter, please contact David Roote of my staff at droote@pa.gov or 412-442-4045.

Sincerely,

*Christopher J Kriley*

Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Southwest Region

Enclosure

CITY OF BEAVER FALLS
DEPARTMENT OF PUBLIC WORKS

715 FIFTEENTH STREET ◆ BEAVER FALLS, PA 15010
(724) 843-7191 ◆ FAX (724) 843-7191
WWW.BEAVERFALLSPA.ORG

August 18, 2020

Mr. David J. Roote
PA Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Re: City of Beaver Falls, Beaver County
Corrective Action Plan

Dear Mr. Roote:

The following correspondence is in response to the letter dated June 22, 2020 sent by you and the PA Department of Environmental Protection. The City of Beaver Falls was aware of (2) two incidents in (2) two different areas of the City causing hydraulic overloads due to excessive wastewater flow. The first one took place in 2019. At that time, the Beaver Falls Public Works Department received a complaint from (2) two residents in the 2400 block of 6th Avenue in the City. Both residents complained of basement flooding during heavy rain events. After investigation, the Beaver Falls Public Works Department concluded that the basement flooding was being caused by excessive wastewater flows coming from neighboring communities during heavy rain events. The City contracted a certified plumber to install back flow preventers in the basements of the (2) two residences that were affected. Since the back flow preventers have been in place, there have been numerous heavy rain events and neither residence have had any basement flooding issues even though there is still hydraulic overloads due to excessive wastewater flows coming from the neighboring communities. The second incident occurred in 2020. Once again the Public Works Department received a complaint about basement flooding during a heavy rain event. This time it was in the 2200 block of 9th Avenue. The Public Works Department determined that the basement flooding was caused by excessive wastewater flow from another neighboring community during a heavy rain event. The City again contracted a certified plumber to install a back flow preventer in the residence. Since the installation, there have been many heavy rain events, but the residents basement remains dry. The City cannot control the excessive wastewater flow during heavy rain events coming from neighboring communities. With that being said, the City of Beaver Falls is not granting any new taps on any City lines that experience hydraulic overload due to excessive wastewater flow coming from neighboring communities. Furthermore, effective September 1, 2020, the City of Beaver Falls Public Works Department, as part of the City's Corrective Action Plan, will begin a scheduled cleaning and inspection program of the City's sanitary system. The goals of the plan are simple, eliminate excessive infiltration and inflow, minimize sewer overflows, disruption of service, unnecessary damage to private and public property, provide adequate capacity at peak flow with reliable service and protect

the environment during the whole process. As far as a timeline for completion of this plan, there is none due to the fact that it will be ongoing and develop into a preventive maintenance plan. I am confident that the plan that I have presented will meet with you and your departments approval.

Sincerely,

Patrick M. Burdine
Superintendent, City of Beaver Falls Department of Public Works

CITY OF BEAVER FALLS
DEPARTMENT OF PUBLIC WORKS

715 FIFTEENTH STREET ♦ BEAVER FALLS, PA 15010
(724) 843-7191 ♦ FAX (724) 843-7191
WWW.BEAVERFALLSPA.ORG

The City of Beaver Falls' Corrective Action Plan

1. System Jetting and Inspecting

The BFDPW will jet the City's sanitary lines using their jet/vac truck. The jetting schedule will be broken up into the (5) five areas that make up the City of Beaver Falls. Beginning in the spring of 2021, presumably after the winter weather season has ended, the BFDPW will begin this line jetting schedule, the BFDPW will also deploy their cctv system when needed in the inspection process. Semi annual progress reports will be sent to PA DEP.

2. Eliminating of Roof Drain Connection to the System

The BFDPW will begin in the spring 2021, a visual, dye or smoke test inspection schedule of City residences and commercial properties roof drain systems to ensure that they are not connected to the City's sanitary system. Semi annual progress reports will be sent to PA DEP.

3. Updating the City of Beaver Falls Sanitary Sewer System Mapping

The BFDPW will begin in the late fall of 2020 to confirm that its maps of the City's sanitary sewer system are up to date and correct. This will include manhole numbering, flow direction, pipe size and outside communities connections to the City's sanitary system.

CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality City of Beaver Falls
County Beaver

REPORTING PERIOD
FROM Jan 2021 TO Jun 2021

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. System Jetting and Inspecting | Ongoing | Jun 2021 | Mar 2026 | | | |
| 2. Eliminating Roof Drain Connections | Ongoing | Jun 2021 | Mar 2026 | | | |
| 3. Updating of Sanitary Mapping | Ongoing | Jan 2021 | Fall 2021 | | | |

TAP ALLOCATION FOR THIS YEAR 0

TAPS UTILIZED THIS REPORTING PERIOD 0

Based on the above information, are you in compliance with the approved schedule? Yes X No ____ If no, attach explanation.

Engineer TJ 6/16/2021
(Signature/Date)

Municipal Official BFDPW Superintendent 6-16-2021
(Signature/Title/Date)

CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality City of Beaver Falls
County Beaver

REPORTING PERIOD
FROM Jun 2021 TO Dec 2021

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. System Jetting and Inspecting | Ongoing | Jun 2021 | Mar 2026 | | | |
| 2. Eliminating Roof Drain Connections | Ongoing | Jun 2021 | Mar 2021 | | | |
| 3. Updating of Sanitary Mapping | | | | Oct 2021 | | |

TAP ALLOCATION FOR THIS YEAR 0

TAPS UTILIZED THIS REPORTING PERIOD 0

Based on the above information, are you in compliance with the approved schedule? Yes X No ____ If no, attach explanation.

Engineer _____ 12-17-2021
(Signature/Date)

Municipal Official _____ BFDPW Superintendent 12-17-2021
(Signature/Title/Date)

CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality: City of Beaver Falls

County: Beaver

REPORTING PERIOD

FROM Jan 2022 TO Jun 2022

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. System Jetting and Inspecting | Ongoing | Jun 2021 | Mar 2026 | | 20% | |
| 2. Eliminating Roof Drain Connections | Ongoing | Jun 2021 | Mar 2026 | | 20% | |
| 3. Updating of Sanitary Mapping | | | | | 100% | |

TAP ALLOCATION FOR THIS YEAR 0

TAPS UTILIZED THIS REPORTING PERIOD 0

Based on the above information, are you in compliance with the approved schedule? Yes x No If no, attach explanation,

6.1.2022
(Signature/Date)
Engineer

BFDPW Superintendent 6-1-2022
(Signature/Title/Date)
Municipal Official

WQA-38B (Rev. 9/26/03)

Municipality: City of Beaver Falls

# CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

County: Beaver

REPORTING PERIOD

FROM Jun 2022 TO Dec 2022

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. System Jetting and Inspecting | Ongoing | Jun 2021 | Mar 2026 | | 25% | |
| 2. Eliminating Roof Drain Connections | Ongoing | Jun 2021 | Mar 2026 | | 25% | |
| 3. Updating of Sanitary Mapping | | | | | 100% | |

TAP ALLOCATION FOR THIS YEAR 0

TAPS UTILIZED THIS REPORTING PERIOD 0

Based on the above information, are you in compliance with the approved schedule? Yes x No If no, attach explanation,

(Signature/Date) 12.5.2022

BFDPW Superintendent 12.5.2022
(Signature/Title/Date)

# EXHIBIT O4

Michael Baker
INTERNATIONAL

*We Make a Difference*

# Corrective Action Plan Narrative

## Big Beaver Borough/Big Beaver Borough Municipal Authority

Borough of Big Beaver
Beaver County, PA

*Prepared for:*
Pennsylvania Department of Environmental Protection

*Prepared by:*
Michael Baker International, Inc.
100 Airside Drive
Moon Township, Pennsylvania 15108

September 2020

# TABLE OF CONTENTS

A. BACKGROUND ..... 1
B. CORRECTIVE ACTION PLAN SCHEDULE ..... 1
C. CORRECTIVE ACTION TASKS ..... 1
D. ANTICIPATED FLOW REDUCTION ..... 3
E. TAP CONTROL PLAN ..... 4
F. BOROUGH RESPONSIBLITIES ..... 4

## APPENDICES

APPENDIX A – Corrective Action Plan (CAP) Schedule

# CORRECTIVE ACTION PLAN

## A. BACKGROUND

The Big Beaver Municipal Authority (BBMA) owns and operates a sanitary sewer system that conveys sanitary sewer from the Borough of Homewood and a portion Big Beaver Borough in Beaver County. BBMA is in the process of being dissolved and ownership of the sanitary sewer facilities transferred to the Borough of Big Beaver (Borough). Sewage is conveyed through the sanitary sewer facilities which discharges into the City of Beaver Falls (City) wastewater collection & conveyance system and is ultimately transported to the City of Beaver Falls Waste Water Treatment Plant (WWTP) for processing. The Beaver Falls sanitary sewer facilities also accepts and provides treatment of sewage to several other surrounding municipalities.

Through correspondence dated June 22, 2020 the Borough was notified by the Pennsylvania Department of Environmental Protection (DEP) that the City of Beaver Falls system was receiving excessive amounts of flow during precipitation events which are causing hydraulic overloads to the conveyance system prior to reaching the WWTP. The Borough was identified as a contributor to these extreme wet weather flows through a flow monitoring program implanted by the City and the Borough has therefore been requested to provide a Corrective Action Plan (CAP) to the DEP to mitigate the potential sources of inflow & infiltration (I&I) from the Borough.

## B. CORRECTIVE ACTION PLAN SCHEDULE

As part of the CAP a timetable with associated tasks, which utilized the Schedule and Progress Reporting Table provide by the DEP in the aforementioned correspondence, has been provided in Appendix A. The tasks provided in the Table are the measures that will be undertaken by the Borough to identify and rehabilitate sources of I&I within the sanitary sewer system to reduce the hydraulic overload condition to the City.

## C. CORRECTIVE ACTION TASKS

The following Corrective Action Tasks will be undertaken as part of the CAP:

1. Install flow meters at all pump stations: The BBMA collection & conveyance system currently make use of eight (8) pump station to convey the wastewater throughout the system. The pump stations are equipped with a Mission Communications SACDA system with only one (1) of the stations having a flow meter and the remaining seven (7) the that can view pump run times to determine pump flows. Under this Task, which is currently progressing, all of the pump stations will have flow meters installed and connected to the SCADA system to accurately monitor the flows from each station.

The following table presents the existing pump stations with the design flows and metering:

| | Design Capacity | | |
|---|---|---|---|
| Pump Station Name | GPM | GPD | Current Flow Metering |
| (1) Wallace Run Pump Station | 220 | 316,800 | Flow Meter |
| (2) College Pump Station | 220 | 316,800 | Run Time |
| (3) Homewood Pump Station | 44 | 63,360 | Run Time |
| (4) Stockman Run Pump Station | 250 | 360,000 | Run Time |
| (5) Eagle Rock Pump Station | 30 | 43,200 | Run Time |
| (6) Westgate Business Park PS#1 | 80 | 115,200 | Run Time |
| (7) Westgate Business Park PS#2 | 80 | 115,200 | Run Time |
| (8) Turnpike Pump Station | 75 | 108,000 | Run Time |

During the summer of 2020 and the dry weather the pump station flow data from the Wallace Run Pump Station and the College Pump Stations were reviewed. Since all other flow from the system flows through these stations, they were chosen for review and they are the final stations before the interconnect with the City sanitary system. There are very few tap connections between the stations with College pumping to Wallace Run and then Wallace Run to the City. When the data was tabulated and reviewed, it was found that the current dry weather flow for these two stations was fluctuates between 35,000 GPD and 50,000 GPD.

2. Evaluation/Analysis of pump station flow data: The data from the existing flow meter and pump run times is currently under review to determine how the flows react during dry weather and periods of rain. Once all of the pump stations are outfitted with flow meters this data for the entire system can be more accurately evaluated and potential areas of I&I can identified and prioritized for future CAP Tasks. If necessary, portable flow monitors will be installed to further identify and narrow the worst I&I prone sections of the system.

3. Rehabilitation/Replacement of existing deficient manholes: There are series of manholes in the system that have recently been found to be either structurally deficient or potential sources of I&I that will be rehabilitated or replaced as necessary after further assessment. Existing manholes in low lying or flood prone areas will have manhole inserts and/or chimney seals installed as necessary.
4. Smoke Testing, Dye Testing and/or CCTV assessment: Areas of potential I&I will be prioritized after reviewing the flow data from the pumps stations. Smoke testing, dye testing and CCTV inspections will be performed to determine illicit connections, deficiencies in the collection system and service laterals and manholes inspected while carrying out other aspects of this Task. In anticipation this Task needing to be performed, the Borough recently purchased a CCTV system to enable the work to be performed by Borough personnel to the extent possible and when not possible, the work will be performed through contracted services.
5. Identify deficiencies and sources of I&I: Evaluation of the smoke and dye testing will be assessed and findings tabulated. All CCTV work will be reviewed for broken pipes, cracks, sags, direct connection and other sources of I&I. Deficiencies from all work under this Task will be assessed and ranked based upon severity of I&I and further corrective action.
6. Perform necessary repairs to the system: Through the previous Tasks performed, areas and sources of I&I will be identified and repairs will be performed and/or enforcement actions undertaken to rectify these problems within the system. Repairs required due to sources associated with the public system will be performed through contract services or Borough personnel when possible. When illicit connections and deficiencies are found on private property or service laterals, the property owners will notified and provided the opportunity to make rectify the identified condition prior to enforcement action by the Borough.
7. Monitor system and provide remediation measures: After all identified sources of I/I have been repaired, the Borough will continue to monitor the system to determine the effectiveness of the remediation efforts. Any additional, remediation measures will be immediately undertaken when the effectiveness is determined ineffective or inadequate.

## D. ANTICIPATED FLOW REDUCTION

The Borough is committed to reducing I&I within the sanitary sewer system through the work provide in the TAP schedule and Tasks. It is anticipated that after completion of these Tasks including identifying and rehabilitation, remediation and/or replacing system infrastructure components will reveal a significant decrease in the total monthly flows and would foresee a minimum reduction of 25 percent. Regardless of the flow reduction the Borough is obligated to eliminating it's contribution to the hydraulic overload within the City of Beaver Falls wastewater collection & conveyance system and will remain diligent to the I&I reduction efforts until full compliance is achieved.

## E. TAP CONTROL PLAN

The Borough does not have and does not anticipate a large increase of residential development or individual homes being constructed within the areas of the Borough with sanitary sewers. The Borough has two (2) major intersections that are attractive and direct gateways into the commercial sector of the community. The first intersection being the Pennsylvania Turnpike Exit 13 at Big Beaver Boulevard, State Route 18 and the second is Exit 26 off of Interstate 376 to Fairlane Boulevard, State Route 351. These access points to commercial areas of the Borough and also the areas where the sanitary sewer infrastructure exists. These areas are key to any development in the Borough as the commercial development is currently the primary foundation of expansion of the Borough's tax base.

The most recent Act 537 Plan Update dated May of 2002, identified the current flows to the College and Wallace Run Pump Stations as being 89,500 GPD using 350 GPD for residential flows and the water usage data from 1999 and 2000 for the business flow. As indicated previously, current 2020 flow dry weather flow at these stations is approximately 35,000 GPD and 50,000 GPD. This reduction in the flow can partially be attributed to a general decline in population and the loss of businesses in the past few years. Therefore, it is the desire of the Borough to continue to allow for potential development of the community which requires the ability to connect to its sanitary sewer facilities, it is proposing to implement and maintain a Tap Control Plan allowing for additional taps to the system with an additional flow of 45,000 GPD for the first year of the CAP.

## F. BOROUGH RESPONSIBLITIES

The Borough fully recognizes the fiduciary responsibility and duty to the DEP to abide by the Rules and Regulations of the Pennsylvania Code and Sewage Facilities Act. This Borough also extents this same duty and obligation to the paying customers of the sanitary sewer facilities and to maintain and properly operate the system in an efficient and cost effective manner.

The Borough is determined to administer the Tap Control Plan, as approved by the DEP, in accordance with the requirements of Chapter 94. In addition, the Borough will provide semi-annual progress reports in January and June of each year while implementing the CAP and every year under the CAP restrictions.

APPENDIX A

Corrective Action Plan (CAP) Schedule

# BIG BEAVER BOROUGH CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality Big Beaver Borough
County Beaver

REPORTING PERIOD
FROM _____ TO _____

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. Install flow meters at all pump stations | Ongoing | | March 2021 | | | |
| 2. Evaluation/Analysis of pump station flow data to determine areas of potential I&I | Ongoing | | March 2021 | | | |
| 3. Rehabilitation/Replacement of existing manholes with known deficiencies | March 2021 | | June 2021 | | | |
| 4. Perform smoke testing, dye testing and/or CCTV work in areas of potential I&I | June 2021 | | October 2021 | | | |
| 5. Identify deficiencies and sources of I&I | November 2021 | | March 2022 | | | |
| 6. Perform necessary repair to system | April 2022 | | January 2023 | | | |
| 7. Monitor system for additional sources of I&I and provide remediation measures | February 2023 | | August 2023 | | | |

TAP ALLOCATION FOR THIS YEAR _____ TAPS UTILIZED THIS REPORTING PERIOD _____

Based on the above information, are you in compliance with the approved schedule? Yes X No ____ If no, attach explanation.

Engineer _____ 9-21-2020
(Signature/Date)

Municipal Official _____ Council President 9/21/2020
(Signature/Title/Date)

WQA-38B (Rev. 9/26/03)

BIG BEAVER BOROUGH CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality Big Beaver Borough
County Beaver

REPORTING PERIOD
FROM _____ TO _____

| Task Description | Proposed Start Date | Actual Start Date | Required Completion Date | Actual Completion Date | Percent of Project Complete | Other Comments |
|---|---|---|---|---|---|---|
| 1. Install flow meters at all pump stations | Ongoing | | March 2021 | | | |
| 2. Evaluation/Analysis of pump station flow data to determine areas of potential I&I | Ongoing | | March 2021 | | | |
| 3. Rehabilitation/Replacement of existing manholes with known deficiencies | March 2021 | | June 2021 | | | |
| 4. Perform smoke testing, dye testing and/or CCTV work in areas of potential I&I | June 2021 | | October 2021 | | | |
| 5. Identify deficiencies and sources of I&I | November 2021 | | March 2022 | | | |
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| 7. Monitor system for additional sources of I&I and provide remediation measures | February 2023 | | August 2023 | | | |

TAP ALLOCATION FOR THIS YEAR _____ TAPS UTILIZED THIS REPORTING PERIOD _____

Based on the above information, are you in compliance with the approved schedule? Yes X No ____ If no, attach explanation.

Engineer _____ 9-21-2020
(Signature/Date)

Municipal Official _____ Council President 9/21/2020
(Signature/Title/Date)

WQA-38B (Rev. 9/26/03)

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 22, 2020

Jason Landsbach, Borough Council President
Big Beaver Borough
114 Forest Drive
Darlington PA 16115

Re: Sewer System Overload Condition
Big Beaver Borough
Beaver County

Dear Mr. Landsbach:

Recently this Department received information concerning excessive wastewater flows to the City of Beaver Falls system during precipitation events. These high flows create hydraulic overloads in the conveyance system there prior to reaching the treatment plant. Beaver Falls has implemented a flow monitoring program to determine the source(s) pf these high flows by placing meters in locations that isolate the flow contributions of each connected community, with certain exceptions. Because of this, as Big Beaver Borough is one of these communities, we are requesting the following from Big Beaver Borough:

1. Submit a written Corrective Action Plan (CAP) setting forth the actions to be taken to reduce the overload and provide the needed capacity to achieve compliance to the Department within 90 days of receipt of this letter. The plan must also include a program for a limitation on and control of new connections to the overloaded sewerage facilities and a schedule showing the dates each step toward compliance will be completed.

2. Restrict new connections to the sewer system tributary to the overloaded sewerage facilities to those connections fitting the exceptions described in 25 Pa. Code §§ 94.55, 94.56 and 94.57 until the requested plan and schedule is approved by DEP.

Section 7 of the Sewage Facilities Act, as amended by Act 149, does not provide for planning exemptions when sewage facilities have an existing hydraulic or organic overload or projected five-year overload.

Enclosed you will find a table form of the semiannual progress reports required for submission in January and June of each year of the plan implementation. Please use this as a template for noting completion percentages and include it with your reports.

The Borough is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding and any other

unpermitted discharges. Also, the Borough's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

The Borough shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

When you have developed a plan and schedule or if you have any questions about this notice, please call me at 412-442-4045 or email me at Droote@pa.gov.

Sincerely,

***David J. Roote***

David J. Roote
Water Quality Specialist Supervisor
Clean Water Program

Enclosures

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

December 14, 2020

Michelle Joy, Borough Council President
Big Beaver Borough
114 Forest Drive
Darlington PA 16115

Re: Corrective Action Plan
Big Beaver Borough
Beaver County

Dear Ms. Joy:

We hereby approve the Corrective Action Plan (CAP) submitted by Michael Baker International on behalf of Big Beaver Borough on September 24, 2020. Progress reports (two copies) should be submitted to the Department every six months using the enclosed reporting form. Reports are due by July 31 and January 31 of each year. The first Progress Report is due July 31, 2020.

This letter includes approval for twenty (20) taps requested for the remainder of 2020, and also for 2021. Please remember that the Big Beaver Borough must affirm that adequate capacity in their system is available for each tap request submitted to this Department for approval.

The Borough should take all necessary actions to prevent unpermitted discharges, basement flooding, and the associated public health hazards. At all times, including while the CAP is in effect, the Borough remains responsible for all violations of the Clean Streams Law and is liable for the civil penalties provided for such violations. Bypassing and basement flooding are illegal discharges. Enforcement action may be warranted if the approved schedule is not followed, or if conditions indicate that such action is necessary to protect the environment or public health.

The Borough is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding. Also, the Borough's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

Please be aware that requests for CAP revisions will be expected by this Department if the examination of the system shows that additional remedial work is needed, that is not known now. Please notify us immediately when this becomes evident, so we may approve CAP extensions.

The Borough shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

If you have any questions regarding this letter, please contact David Roote of my staff at droote@pa.gov or 412-442-4045.

Sincerely,

Christopher J Kriley

Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Southwest Region

Enclosure

# EXHIBIT O5

Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

Managing Principals:
Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

September 10, 2020

S. O. No. 0291-21

**VIA EMAIL ONLY**
**(droote@pa.gov)**

Mr. David J. Roote, Water Quality Specialist Supervisor
Clean Water Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745

**Subject: North Sewickley Township Sewer Authority**
**Beaver Falls Service Area Corrective Action Plan (CAP)**

Dear Mr. Roote:

Please accept this letter and the attached Corrective Action Plan (CAP) as a response to the Pennsylvania Department of Environmental Protection's (PADEP) letter dated June 22, 2020 and received by the Authority on July 9, 2020.

The North Sewickley Township Sewer Authority (NSTSA) has engaged Lennon, Smith, Souleret Engineering, Inc. (LSSE) to assist in quantifying the magnitude of the "excessive wastewater flows" in the NSTSA sewer system tributary to the City of Beaver Falls conveyance system as reported in your referenced letter. Please see the following discussion, sewer system general arrangement drawing, and attached schedule briefly outlining the proposed corrective action plan.

The referenced letter indicates that Beaver Falls has conducted a flow monitoring program in their system to isolate flow contributions. NSTSA was not advised that there was an overload in the Beaver Falls conveyance system, the location of said overload, that a flow monitoring program was to be conducted or underway, and has not received the results of the program identifying the NSTSA flow contribution.

Please be advised that the NSTSA system tributary to Beaver Falls was constructed primarily from 2006-2008 with several extensions added in 2015 for an additional 100 customers (of which Beaver

Falls approved, advised capacity was available in a planning module approved by the PADEP, and accepted the tap fees paid by NSTSA). The sewers are constructed of PVC, ductile iron, or HDPE. Flows in the NSTSA system are tributary to the Bennetts Run Lift Station which is restricted by agreement with Beaver Falls.

Despite the lack of information and problem statement from the Department and Beaver Falls, NSTSA nonetheless proposes the following:

1. **Flow Monitoring Program:**

   This program will consist of one strategically placed flow monitor upstream of the Bennetts Run Lift Station to initiate an understanding of system response during precipitation. The monitoring program is planned for 9 months beginning in Fall 2020 and concluding in the Spring of 2021.

2. **Night-Time Flow Isolation (NFI) Measurements:**

   Flow isolation studies screening/monitoring in the NSTSA sewer system, consisting of approximately 15 key manholes in the sanitary sewer system tributary to the Beaver Falls system are planned for Spring 2021 and performed between the hours of 12:00 a.m. and 5:00 a.m., during which time it is presumed that the domestic sewage component of the wastewater is minimal, and therefore the measured flow essentially represents system groundwater infiltration. Flow isolation studies typically are performed during periods of high groundwater when sustained infiltration rates are elevated. Typically, in western Pennsylvania, the predominant months for these elevated groundwater conditions are February through April. The measurements are not planned to be done during or immediately after precipitation events so as not to include any potential direct inflow sources. Two rounds of measurements are proposed.

   These measurements would be performed contingent on data analysis associated with Task No. 1 suggesting that NFI Measurements are warranted. Should the data suggest that the NSTSA system tributary to Beaver Falls is responding in accordance with industry standards, NSTSA would request PaDEP's consideration to defer the measurements.

3. **System Evaluation**

   After the conclusion of the Flow Monitoring Program and Night-Time Flow Isolation (NFI) Measurements, the results shall be evaluated to determine which areas of NSTSA's sewer system require additional investigation, if necessary. This additional programming may include additional nighttime flow isolation measurements, CCTV, smoke testing, dye testing, and/or sewer line repairs identified during the additional evaluations. A schedule for this additional evaluation, if necessary, will be provided with the January 2022 progress report and tap request. Any additional evaluations will likely be split into approximately five separate areas and work completed over a period of several years.

4. **Tap Control Plan:**

   As directed, it is our understanding that North Sewickley Township has restricted new connections to the system. In consideration of NSTSA's commitment to this Corrective Action Plan, NSTSA is hereby requesting a tap allocation of 30 taps for the balance of 2020 and 2021. Subsequent tap allocations will be requested annually.

   For planning purposes, NSTSA was approached within the last month by a developer about a potential 100 lot residential subdivision. The development is in the early planning phases.

During the term of this Corrective Action Plan, NSTSA or its designee will report to PADEP on a semi-annual basis. This report will be formatted very similar to the schedule presented herein with progress being reported at the end of January and the end of July for each year under the CAP.

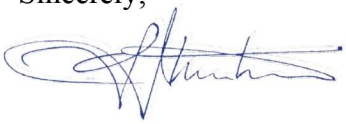
In summary, we trust that this Corrective Action Plan addresses the Department's requirements identified in the June 22, 2020 letter and request your approval of the plan.

With submittal of this CAP, NSTSA would also like to request that PADEP and/or the City of Beaver Falls hold a joint sewer users group meeting such that the municipalities tributary to the City's system could be briefed as to the conditions which exist in the Beaver Falls system that are necessitating the CAP. This venue (Joint Sewer User's Group) was once routinely held and administered by the City of Beaver Falls.

This meeting would be a benefit to all parties to understand the issue more fully as well as justify to the tributary municipalities /authorities that CAP efforts should be included in 2021 budgets accordingly.

Should you have any questions, please contact Emily A. Palmer, P.E.

Sincerely,



Jason E. Stanton, P.E.

JES/nlk

Enclosures

cc/enc: North Sewickley Township (nst@zoominternet.net)
North Sewickley Township Sewer Authority (lisacrespo@zoominternet.net)

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**
**SANITARY SEWER SYSTEM CORRECTIVE ACTION PLAN**
**BEAVER FALLS SERVICE AREA**

**Prepared August 2020**

| Item No. | Task Description | Target Start Date | Target Completion Date | Notes |
|---|---|---|---|---|
| 1 | Review and Evaluate the Township's Dye Test Ordinance and Program. Make recommendations for revision, if necessary | September 2020 | December 2020 | A summary of the number of dye test performed and any corrective measures will be provided for each reporting period. |
| 2 | System Mapping | NA | NA | Task Complete. GIS Base Map prepared in 2017. |
| 3 | Flow Monitoring Program | Fall 2020 | Summer 2021 | |
| 4 | Semi-annual Progress Report to DEP | January 1, 2021 | January 31, 2021 | |
| 5 | Night-Time Flow Isolation (NFI) Measurements | Spring 2021 | Spring 2021 | If required based on flow monitoring findings. |
| 6 | Semi-annual Progress Report to DEP | July 1, 2021 | July 31, 2021 | |
| 7 | System Evaluation | Spring 2021 | December 31, 2021 | If required based on flow monitoring findings. |
| 8 | Semi-annual Progress Report to DEP | January 1, 2022 | January 31, 2022 | |
| 9 | Additional Ssytem Evaluations, if necessary, which may include: Additional NTFI measurements, Smoke and Dye Testing, CCTV, and/or defect repair. | TBD | TBD | If required based on flow monitoring findings. |

Collins Road Pump Station

Poplar Lane Pump Station

Stone Quarry Pump Station

Concord Church Pump Station

Bennetts Run Pump Station

Eastvale Lift Station
(Point of Connection to Beaver Falls System)

North Sewickley Township

Daugherty Township

Beaver Falls

Eastvale Borough

Big Beaver Borough

Beaver River

BELTON RD
BRIGHTON RD
CLEARVUE DR
RIVER RD
BENNETT DR
ADAMS ST
SUMNER ST
WALKER ST
THOMPSON RUN RD
COLLINS RD
CZAR RD
TERRACE DR
JACKSON DR
JAMES DR
CHAPEL DR
COUNTRY CLUB DR
HOWARD DR
POPLAR LN
ABELS DR
YOUNG LN
HARPERS FERRY RD
THISTLE RIDGE DR
BAKER RD
STONE QUARRY RD
BONZO LN
DOUGLAS RD
MEIER DR
EAST/WEST TURNPIKE
LITTLE LEAGUE DR
LANDMAN LN
ORCHARD CREST DR
GILLEN RD
LAUREL ROCK DR
MERCER RD
PLEASANTVIEW ST
TURNPIKE ST
CONCORD CHURCH RD
FLEETWOOD RD
BRUCE DR
NORTHVIEW DR
FOX LN
RED FOX DR
EDGEWOOD RD
VALLEY VIEW LN
GLENDA DR
ALLAN LN
JOSEPH DR
BRANDT DR
MARSHALL AVE
SHADY DR
ROSEMARY DR
KEYLINE DR
DEER LN
CONCORD CIRCLE RD
DALE ACRES RD
RIVER RD
BENNETT RUN RD
SANGER DR
BOLOGNE VALLEY RD
SYLVIA DR
MAXINE DR
OVERLOOK DR
BUTTERCUP LN
CRABAPPLE LN
GLENDALE RD
OLD CONCORD CIRCLE RD
SECOND AV
4TH ST
SUNSET DR
HICKORY DR
HIGHLAND AVE
FOSTER RD
LEXINGTON DR
WISES GROVE RD
STUBER RD
NELSON AVE
BLOCK HOUSE RUN RD

North Sewickley Township
Main View

PS Beaver Falls Pump Station
PS Lift Station
Gravity Sewer
Force Main
Low Pressure Force Main
Municipal Boundary

N.T.S.

Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue
Coraopolis, PA 15108
(412) 264-4400
(412) 264-1200 Fax
info@lsse.com
www.lsse.com

Path: N:\PROJ\2912\291-21 CAP\NSTSA CAP Map 11x17.mxd (8/12/2020)

# North Sewickley Township Sewer Authority (NSTSA) Beaver Falls Service Area

North Sewickley Township, PA

**NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY**
**SANITARY SEWER SYSTEM CORRECTIVE ACTION PLAN**
**BEAVER FALLS SERVICE AREA**

**Prepared August 2020**

| Item No. | Task Description | Target Start Date | Target Completion Date | Notes |
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| 5 | Night-Time Flow Isolation (NFI) Measurements | Spring 2021 | Spring 2021 | If required based on flow monitoring findings. |
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pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

October 29, 2020

Lisa Crespo, Office & Operations Manager
North Sewickley Township Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010

Re: Corrective Action Plan
North Sewickley Township
Beaver County

Dear Ms. Crespo:

We hereby approve the Corrective Action Plan (CAP) submitted by Lennon, Smith, Souleret Engineering, Inc. on behalf of North Sewickley Township Sewer Authority on September 10, 2020. Progress reports (two copies) should be submitted to the Department every six months using the enclosed reporting form. Please add the columns for "Required Completion Date" and "Percent Complete" to this form. Reports are due by July 31 and January 31 of each year. The first Progress Report is due July 31, 2020.

This letter includes approval for thirty (30) taps requested for the remainder of 2020, and also for 2021. Please remember that the City of Beaver Falls must affirm that adequate capacity in their system is available for each tap request submitted to this Department for approval.

The Authority should take all necessary actions to prevent unpermitted discharges, basement flooding, and the associated public health hazards. At all times, including while the CAP is in effect, the Authority remains responsible for all violations of the Clean Streams Law and is liable for the civil penalties provided for such violations. Bypassing and basement flooding are illegal discharges. Enforcement action may be warranted if the approved schedule is not followed, or if conditions indicate that such action is necessary to protect the environment or public health.

The Authority is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding. Also, the Authority's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

Please be aware that requests for CAP revisions will be expected by this Department if the examination of the system shows that additional remedial work is needed, that is not known now. Please notify us immediately when this becomes evident, so we may approve CAP extensions.

The Authority shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

If you have any questions regarding this letter, please contact David Roote of my staff at droote@pa.gov or 412-442-4045.

Sincerely,

Christopher J Kriley

Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Southwest Region

Enclosure

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 22, 2020

Lisa Crespo, Office & Operations Manager
North Sewickley Township Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010

Re: Sewer System Overload Condition
North Sewickley Township Sewer Authority
North Sewickley Township
Beaver County

Dear Ms. Crespo:

Recently this Department received information concerning excessive wastewater flows to the City of Beaver Falls system during precipitation events. These high flows create hydraulic overloads in the conveyance system there prior to reaching the treatment plant. Beaver Falls has implemented a flow monitoring program to determine the source(s) pf these high flows by placing meters in locations that isolate the flow contributions of each connected community, with certain exceptions. Because of this, as North Sewickley Township is one of these communities, we are requesting the following from the North Sewickley Township Sewer Authority:

1. Submit a written Corrective Action Plan (CAP) setting forth the actions to be taken to reduce the overload and provide the needed capacity to achieve compliance to the Department within 90 days of receipt of this letter. The plan must also include a program for a limitation on and control of new connections to the overloaded sewerage facilities and a schedule showing the dates each step toward compliance will be completed.

2. Restrict new connections to the sewer system tributary to the overloaded sewerage facilities to those connections fitting the exceptions described in 25 Pa. Code §§ 94.55, 94.56 and 94.57 until the requested plan and schedule is approved by DEP.

Section 7 of the Sewage Facilities Act, as amended by Act 149, does not provide for planning exemptions when sewage facilities have an existing hydraulic or organic overload or projected five-year overload.

Enclosed you will find a table form of the semiannual progress reports required for submission in January and June of each year of the plan implementation. Please use this as a template for noting completion percentages and include it with your reports.

The Authority is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that

additional flows are not permitted to areas with unresolved basement flooding and any other unpermitted discharges. Also, the Authority's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

The Authority shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

When you have developed a plan and schedule or if you have any questions about this notice, please call me at 412-442-4045 or email me at Droote@pa.gov.

Sincerely,

***David J. Roote***

David J. Roote
Water Quality Specialist Supervisor
Clean Water Program

Enclosures

# EXHIBIT O6

Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

Managing Principals:
Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

September 22, 2020

S. O. No. 434-010

**VIA EMAIL ONLY**
**(droote@pa.gov)**

Mr. David J. Roote
Water Quality Specialist Supervisor
Clean Water Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745

**Subject: Patterson Township Municipal Authority**
**Corrective Action Plan (CAP)**

Dear Mr. Roote:

Please accept this letter and the attached Corrective Action Plan (CAP) as a response to the Pennsylvania Department of Environmental Protection's (PADEP) letter dated June 22, 2020.

The Patterson Township Municipal Authority (PTMA) has engaged Lennon, Smith Souleret Engineering, Inc. (LSSE) to assist in quantifying the magnitude of the "excessive wastewater flows" in the PTMA sewer system tributary to the City of Beaver Falls conveyance system as reported in your referenced letter. Please see the following discussion, sewer system general arrangement drawing, and attached schedule briefly outlining the proposed corrective action plan.

The referenced letter indicates that Beaver Falls has conducted a flow monitoring program in their system to isolate flow contributions. PTMA was not advised that there was an overload in the Beaver Falls conveyance system, the location of said overload, that a flow monitoring program was to be conducted or was underway, and has not received the results of the program identifying the PTMA flow contribution.

With submittal of this CAP, PTMA would also like to request that PADEP and/or the City of Beaver Falls hold a joint sewer users group meeting such that the municipalities tributary to the City's system could be briefed as to the conditions which exist in the Beaver Falls system that are necessitating the CAP. This venue (Joint Sewer User's Group) was once routinely held and administered by the City of

Beaver Falls. This meeting would be a benefit to all parties to understand the issue more fully as well as justify to the tributary municipalities / authorities that CAP efforts should be included in 2021 budgets accordingly. The Authority requests this meeting also be conducted before any work is started and reserves the right to adjust or change the plan pending the outcome of the meeting.

It is important to note that Patterson Township Municipal Authority and Patterson Township have made several sanitary sewer system improvements. Below is a brief summary of the projects completed in just the last ten years:

- 2000 – Fox Avenue Sanitary Sewer Extension – Approximately 225 linear feet of sanitary sewer was extended along Fox Avenue.
- 2001 - South Lift Station Pump Replacement – The pumps at the South Lift Station were replaced.
- 2002 – Ross Hill Road Sewer Rehabilitation – Approximately 2,000 linear feet of sanitary sewer was replaced along Ross Hill Road.
- 2003 - South Lift Station – Due to the failure of two starters, the auto dialer and the float controls in the Fall of 2002, lighting and surge protection on the electrical service was installed.
- 2003 - 19th Avenue Sanitary Sewer Replacement – Approximately 200 linear feet of sanitary sewer along 19th Avenue were replaced in 2003. The sewer was in poor condition and exposed at a stream crossing.
- 2004 – Sanitary Sewer Base Mapping – Base mapping prepared utilizing aerial mapping has been prepared for the sanitary sewer system.
- 2004/2005 – Steffin Hill Sanitary Sewer Project – Phase II – The project proposes approximately 2,500 linear feet of sanitary sewer replacement along Steffin Hill Road, adjacent to an unnamed tributary of Walnut Bottom Run. Construction is anticipated to begin soon.
- 2010 – South End Sanitary Sewer Replacement – Replacement of approximately 5000 linear feet of sanitary sewers.
- 2011 – Lateral Replacement – Replacement of approximately 40 private laterals in North Oak, South Oak, Davidson Drive, Windy Lane, and Windycrest Drive vicinity.
- 2012 – Davidson Drive Lift Station Improvements – Replacement of the existing brick wet well and valve pit.
- 2014 – Steffin Hill Sanitary Sewer Replacement - Replacement of approximately 2600 linear feet of sewer.
- 2016 – Darlington Road Lining Project – Approximately 450 linear feet of sewer lining.
- 2019 – 20th Avenue Sanitary Sewer Replacement – Replacement of approximately 600 linear feet of sanitary sewer.
- 2020 – Ross Hill Manhole Replacement

Despite the lack of information and problem statement from the Department or Beaver Falls, PTMA nonetheless proposes the following:

**1. Mapping Update**

PTMA will initiate a mapping update of their existing GIS base map. Scope of Work includes approximately one day of field work to confirm connectivity with adjacent sewer systems, identify points of connection, and confirm basic sewer geometry.

**2. Flow Monitoring Program:**

This program will consist of at least one strategically placed flow monitor at the Patterson Heights system connection point on Fern Avenue. Meter data from three permanent meter sites, owned by Beaver Falls has been made available for Authority use and will be utilized for the analysis. Approximately three other meter sites may be necessary pending results of mapping field work to be conducted at meter during meter installation. Although a Beaver Falls meter site exists at the bottom of Steffin Hill Road, a meter may be necessary to isolate Patterson flow from Beaver Falls flow. There may be additional Patterson connections to the Patterson Heights System The purpose of the flow monitoring program is to initiate an understanding of system response during precipitation events. The monitoring program is planned for 6 months beginning in January 2021 and concluding in the Spring of 2021.

**3. Night-Time Flow Isolation (NFI) Measurements:**

Flow isolation studies screening/monitoring on the PTMA sanitary sewer system, consisting of approximately 15 key manholes in the sanitary sewer system tributary to the Beaver Falls system, are planned for Spring 2021 and performed between the hours of 12:00 a.m. and 5:00 a.m., during which time it is presumed that the domestic sewage component of the wastewater is minimal, and therefore the measured flow essentially represents system groundwater infiltration. Flow isolation studies typically are performed during periods of high groundwater when sustained infiltration rates are elevated. Typically, in western Pennsylvania, the predominant months for these elevated groundwater conditions are February through April. Also, the measurements are not planned to be done during or immediately after precipitation events so as not to include any potential direct inflow sources. Two rounds of measurements are proposed.

**4. System Evaluation:**

After the conclusion of the Flow Monitoring Program and Night-Time Flow Isolation (NFI) Measurement, the results will be evaluated to determine which areas of PTMA's sewer system require additional investigation, if necessary. This additional programming may include additional nighttime flow isolation measurements, CCTV, smoke testing, dye testing, and/or sewer line repairs identified during the additional evaluations. A schedule for this additional evaluation, if necessary, will be provided with the January 2022 progress report and tap request. Any additional evaluations will likely be split into approximately four separate areas and work completed over a period of several years.

**5. Tap Control Plan:**

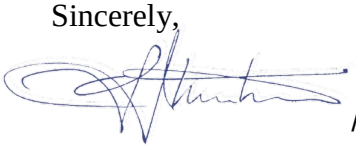
As directed, it is our understanding that Patterson Township has restricted new connections to the system. In consideration of PTMA's commitment to this Corrective Action Plan, PTMA is hereby requesting a tap allocation of 10 taps for the balance of 2020 and 2021. Subsequent tap allocations will be requested annually.

During the term of this Corrective Action Plan, PTMA or its designee will report to PADEP on a semiannual basis. This report will be formatted very similar to the schedule presented herein with progress being reported at the end of January and the end of July for each year under the CAP.

In summary, we trust that this Corrective Action Plan addresses the Department's requirements identified in the June 22, 2020 letter and request your approval of the plan.

Should you have any questions, please call.

Sincerely,



/for
Emily A. Palmer, P.E.

EAP/vcl

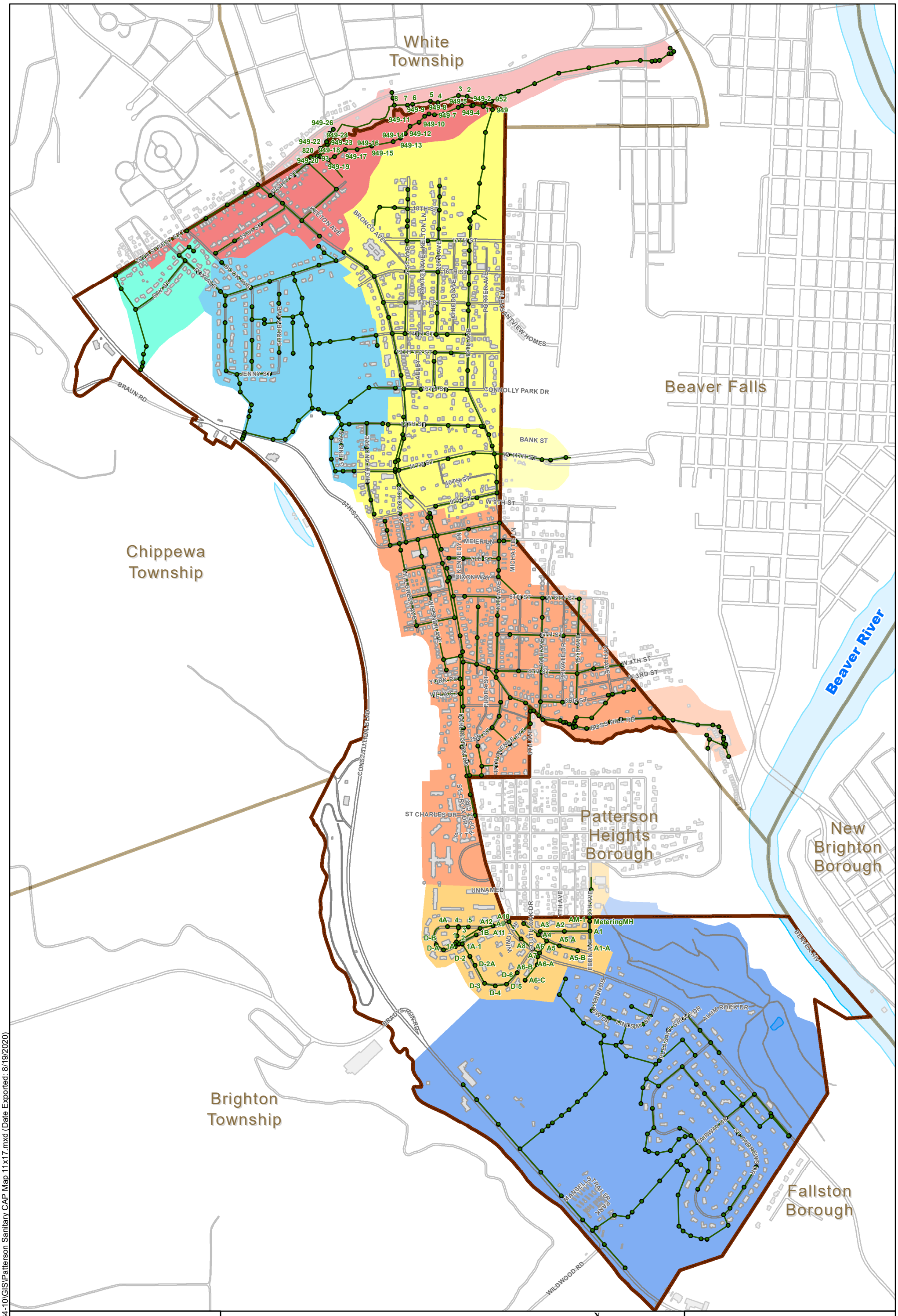
Attachments

cc/att: Patterson Township Municipal Authority (p.wagoner@pattersontwp.com)
Patterson Township (c.milnes@pattersontwp.com)
Joe Durish, Jr., Chief Operator, City of Beaver Falls (bfstp@outlook.com)

**PATTERSON TOWNSHIP MUNICIPAL AUTHORITY**
**SANITARY SEWER SYSTEM CORRECTIVE ACTION PLAN**
**BEAVER FALLS SERVICE AREA**

**Prepared August 2020**

| Item No. | Task Description | Target Start Date | Target Completion Date | Notes |
|---|---|---|---|---|
| 1 | Review and Evaluate the Township's Dye Test Ordinance and Program. Make recommendations for revision, if necessary | September 2020 | February 1, 2021 | A summary of the number of dye test performed and any corrective measures will be provided for each reporting period. |
| 2 | System Mapping | Fall 2020 | March 2021 | One day of field work to confirm connectivity with adjacent sewer systems, identify points of connection, and confirm basic sewer geometry. |
| 3 | Flow Monitoring Program | January 2021 | June 2021 | |
| 4 | Semi-annual Progress Report to DEP | January 1, 2021 | January 31, 2021 | |
| 5 | Night-Time Flow Isolation (NFI) Measurements | Spring 2021 | Spring 2021 | Two Rounds of Measurements - 1 night each |
| 6 | Semi-annual Progress Report to DEP | July 1, 2021 | July 31, 2021 | |
| 7 | System Evaluation | Spring 2021 | December 31, 2021 | |
| 8 | Semi-annual Progress Report to DEP | January 1, 2022 | January 31, 2022 | |
| 9 | Additional System Evaluations, if necessary, which may include: Additional NFI measurements, Smoke and Dye Testing, CCTV, and/or defect repair. | TBD | TBD | |


White Township
Chippewa Township
Beaver Falls
Patterson Heights Borough
New Brighton Borough
Brighton Township
Fallston Borough
Beaver River
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# EXHIBIT O7

Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors
846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

Managing Principals:
Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

September 22, 2020

S. O. No. 503-005

**VIA EMAIL ONLY**
**(droote@pa.gov)**

Mr. David J. Roote
Water Quality Specialist Supervisor
Clean Water Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745

**Subject: White Township**
**Corrective Action Plan (CAP)**

Dear Mr. Roote:

Please accept this letter and the attached Corrective Action Plan (CAP) as a response to the Pennsylvania Department of Environmental Protection's (PADEP's) letter dated June 22, 2020.

White Township has engaged Lennon, Smith Souleret Engineering, Inc. (LSSE) to assist in quantifying the magnitude of the "excessive wastewater flows" in the White Township sewer system tributary to the City of Beaver Falls conveyance system as reported in your referenced letter. Please see the following discussion and attached schedule briefly outlining the proposed corrective action plan.

The referenced letter indicates that Beaver Falls has conducted a flow monitoring program in their system to isolate flow contributions. White Township was not advised that there was an overload in the Beaver Falls conveyance system, the location of said overload, that a flow monitoring program was to be conducted or was underway, and has not received the results of the program identifying the White Township flow contribution.

Despite the lack of information and problem statement from Beaver Falls or the Department, White Township nonetheless proposes the following:

**1. Mapping Update**

White Township will initiate a mapping update of their existing base map. Scope of Work includes two days of field work to confirm connectivity with adjacent sewer systems, identify points of connection, and confirm basic sewer geometry. The existing map will be input into a GIS database, however, surveyed locations of manhole structures is not proposed at this time.

**2. Dye Testing Ordinance**

White Township will prepare and consider adoption of a Dye Testing Ordinance.

**3. Flow Monitoring Program:**

This program will consist of approximately four strategically placed flow monitors at the points of connection to the Beaver Falls system and to the Patterson Township system. These connections will be verified by System Mapping and are generally located along Steffin Hill Road. Data from the existing Beaver Falls permanent meter site generally at the end of 30th Street is anticipated to be utilized for this point of connection to the Beaver Falls system. The purpose of the flow monitoring program is to initiate an understanding of system response during precipitation events. The monitoring program is planned for 6 months beginning in January 2021 and concluding in the June 2021.

**4. Night-Time Flow Isolation (NFI) Measurements:**

Flow isolation studies screening/monitoring on the White Township sanitary sewer system, consisting of approximately 15 key manholes in the sanitary sewer system tributary to the Beaver Falls system, are planned for Spring 2021 and performed between the hours of 12:00 a.m. and 5:00 a.m., during which time it is presumed that the domestic sewage component of the wastewater is minimal, and therefore the measured flow essentially represents system groundwater infiltration. Flow isolation studies typically are performed during periods of high groundwater when sustained infiltration rates are elevated. Typically, in western Pennsylvania, the predominant months for these elevated groundwater conditions are February through April. Also, the measurements are not planned to be done during or immediately after precipitation events so as not to include any potential direct inflow sources. Two rounds of measurements are proposed.

**5. System Evaluation:**

After the conclusion of the Flow Monitoring Program and Night-Time Flow Isolation (NFI) Measurement, the results will be evaluated to determine which areas of White Township's sewer system require additional investigation, if necessary. This additional programming may include

additional nighttime flow isolation measurements, CCTV, smoke testing, dye testing, and/or sewer line repairs identified during the additional evaluations. A schedule for this additional evaluation, if necessary, will be provided with the January 2022 progress report and tap request. Any additional evaluations will likely be split into approximately four separate areas and work completed over a period of several years.

**6. Tap Control Plan:**

As directed, it is our understanding that White Township has restricted new connections to the system. In consideration of White Township's commitment to this Corrective Action Plan, White Township is hereby requesting a tap allocation of 10 taps for the balance of 2020 and 2021. Subsequent tap allocations will be requested annually.

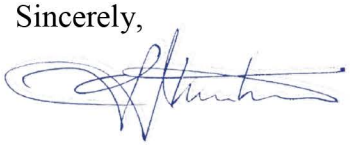
During the term of this Corrective Action Plan, White Township or its designee will report to PADEP on a semiannual basis. This report will be formatted very similar to the schedule presented herein with progress being reported at the end of January and the end of July for each year under the CAP.

In summary, we trust that this Corrective Action Plan addresses the Department's requirements identified in the June 22, 2020 letter and request your approval of the plan.

With submittal of this CAP, White Township would also like to request that PADEP and/or the City of Beaver Falls hold a joint sewer users group meeting such that the municipalities tributary to the City's system could be briefed as to the conditions which exist in the Beaver Falls system that are necessitating the CAP. This venue (Joint Sewer User's Group) was once routinely held and administered by the City of Beaver Falls. This meeting would be a benefit to all parties to understand the issue more fully as well as justify to the tributary municipalities / authorities that CAP efforts should be included in 2021 budgets accordingly.

Should you have any questions, please contact Emily Palmer, P.E or the undersigned.

Sincerely,



/for
Lawrence J. Lennon, Jr., P.E.

LJLJr/vcl

Attachments

cc/att: White Township (whitetwp@comcast.net)

**WHITE TOWNSHIP**
**SANITARY SEWER SYSTEM CORRECTIVE ACTION PLAN**
**BEAVER FALLS SERVICE AREA**

**Prepared August 2020**

| Item No. | Task Description | Target Start Date | Target Completion Date | Notes |
|---|---|---|---|---|
| 1 | Consideration of a Township Dye Test Ordinance | October 2020 | June 1, 2021 | |
| 2 | System Mapping | Fall 2020 | January 2021 | Two days of field work to confirm connectivity with adjacent sewer systems, identify points of connection, |
| 3 | Flow Monitoring Program | January 2021 | June 2021 | |
| 4 | Semi-annual Progress Report to DEP | January 1, 2021 | January 31, 2021 | |
| 5 | Night-Time Flow Isolation (NFI) Measurements | Spring 2021 | Spring 2021 | Two Rounds of Measurements, Groundwater Conditions Dependent |
| 6 | Semi-annual Progress Report to DEP | July 1, 2021 | July 31, 2021 | |
| 7 | System Evaluation | Spring 2021 | December 31, 2021 | |
| 9 | Semi-annual Progress Report to DEP | January 1, 2022 | January 31, 2022 | |
| 10 | Additional System Evaluations, if necessary, which may include: Additional NFI measurements, Smoke and Dye Testing, CCTV, and/or defect repair. | TBD | TBD | |

**WHITE TOWNSHIP**
**SANITARY SEWER SYSTEM CORRECTIVE ACTION PLAN**
**BEAVER FALLS SERVICE AREA**

**Prepared August 2020**

| Item No. | Task Description | Target Start Date | Target Completion Date | Notes |
|---|---|---|---|---|
| 1 | Consideration of a Township Dye Test Ordinance | October 2020 | June 1, 2021 | |
| 2 | System Mapping | Fall 2020 | January 2021 | Two days of field work to confirm connectivity with adjacent sewer systems, identify points of connection, |
| 3 | Flow Monitoring Program | January 2021 | June 2021 | |
| 4 | Semi-annual Progress Report to DEP | January 1, 2021 | January 31, 2021 | |
| 5 | Night-Time Flow Isolation (NFI) Measurements | Spring 2021 | Spring 2021 | Two Rounds of Measurements, Groundwater Conditions Dependent |
| 6 | Semi-annual Progress Report to DEP | July 1, 2021 | July 31, 2021 | |
| 7 | System Evaluation | Spring 2021 | December 31, 2021 | |
| 9 | Semi-annual Progress Report to DEP | January 1, 2022 | January 31, 2022 | |
| 10 | Additional System Evaluations, if necessary, which may include: Additional NFI measurements, Smoke and Dye Testing, CCTV, and/or defect repair. | TBD | TBD | |

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 22, 2020

Susan DeMeio, Township Supervisor Chairperson
White Township
2511 13th Ave
Beaver Falls PA 15010

Re: Sewer System Overload Condition
White Township
Beaver County

Dear Ms. DeMeio:

Recently this Department received information concerning excessive wastewater flows to the City of Beaver Falls system during precipitation events. These high flows create hydraulic overloads in the conveyance system there prior to reaching the treatment plant. Beaver Falls has implemented a flow monitoring program to determine the source(s) pf these high flows by placing meters in locations that isolate the flow contributions of each connected community, with certain exceptions. Because of this, as White Township is one of these communities, we are requesting the following from White Township:

1. Submit a written Corrective Action Plan (CAP) setting forth the actions to be taken to reduce the overload and provide the needed capacity to achieve compliance to the Department within 90 days of receipt of this letter. The plan must also include a program for a limitation on and control of new connections to the overloaded sewerage facilities and a schedule showing the dates each step toward compliance will be completed.

2. Restrict new connections to the sewer system tributary to the overloaded sewerage facilities to those connections fitting the exceptions described in 25 Pa. Code §§ 94.55, 94.56 and 94.57 until the requested plan and schedule is approved by DEP.

Section 7 of the Sewage Facilities Act, as amended by Act 149, does not provide for planning exemptions when sewage facilities have an existing hydraulic or organic overload or projected five-year overload.

Enclosed you will find a table form of the semiannual progress reports required for submission in January and June of each year of the plan implementation. Please use this as a template for noting completion percentages and include it with your reports.

The Township is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding

and any other unpermitted discharges. Also, the Township's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

The Township shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

When you have developed a plan and schedule or if you have any questions about this notice, please call me at 412-442-4045 or email me at Droote@pa.gov.

Sincerely,

***David J. Roote***

David J. Roote
Water Quality Specialist Supervisor
Clean Water Program

Enclosures

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

October 29, 2020

Susan DeMeio, Township Supervisor Chairperson
White Township
2511 13th Ave
Beaver Falls PA 15010

Re: Corrective Action Plan
White Township
Beaver County

Dear Ms. DeMeio:

We hereby approve the Corrective Action Plan (CAP) submitted by Lennon, Smith, Souleret Engineering, Inc. on behalf of White Township on September 22, 2020. Progress reports (two copies) should be submitted to the Department every six months using the enclosed reporting form. Please add the columns for "Required Completion Date" and "Percent Complete" to this form. Reports are due by July 31 and January 31 of each year. The first Progress Report is due July 31, 2020.

This letter includes approval for ten (10) taps requested for the remainder of 2020, and also for 2021. Please remember that the City of Beaver Falls must affirm that adequate capacity in their system is available for each tap request submitted to this Department for approval.

The Township should take all necessary actions to prevent unpermitted discharges, basement flooding, and the associated public health hazards. At all times, including while the CAP is in effect, the Township remains responsible for all violations of the Clean Streams Law and is liable for the civil penalties provided for such violations. Bypassing and basement flooding are illegal discharges. Enforcement action may be warranted if the approved schedule is not followed, or if conditions indicate that such action is necessary to protect the environment or public health.

The Township is responsible for administering the tap control plan, approved as part of this CAP, in accordance with the requirements of Chapter 94 of the Rules and Regulations. Remember that additional flows are not permitted to areas with unresolved basement flooding. Also, the Township's ability to allocate approved annual connections is contingent on adhering to the schedule in the approved CAP. If the schedule is not being met, the Department may rescind the approval to grant new connections.

Please be aware that requests for CAP revisions will be expected by this Department if the examination of the system shows that additional remedial work is needed, that is not known now. Please notify us immediately when this becomes evident, so we may approve CAP extensions.

The Township shall submit an Annual Tap Control Plan to the Department by January 31 each year until such time as the CAP is terminated. If unused during the calendar year in which they were awarded, taps expire at the end of the calendar year.

If you have any questions regarding this letter, please contact David Roote of my staff at droote@pa.gov or 412-442-4045.

Sincerely,

Christopher J Kriley

Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Southwest Region

Enclosure

# EXHIBIT O11

Technical Memorandum

**TO:** John Rae, Project Manager

**FROM:** Peter J. Falnes
Senior Environmental Scientist

**COPY:** 068417

**DATE:** June 11, 2021

**RE:** **Beaver Falls Wastewater Treatment Plant-Main Equipment Building Hazardous Materials Assessment-Asbestos**

## Site Investigation

On May 19, 2021, Gannett Fleming, Inc. (GF) conducted a limited hazardous materials assessment at the Beaver Falls Wastewater Treatment Plant (WWTP) in the City of Beaver Falls, Beaver County, Pennsylvania at the behest of the City of Beaver Falls. The WWTP is located east of 7th Avenue along the right (west) bank of Beaver River at the southern end of Beaver Falls. A Site Location Map (Figure 1) and Site Plan (Figure 2) are presented in Attachment 1.

The hazardous materials assessment was performed specifically on the thermal pipe insulation located in the Main Equipment Building due to concerns about the thermal pipe insulation could contain asbestos. Sample Location Plans (Figures 3A and 3B) are presented in Attachment 1.

## Main Equipment Building

### *Asbestos Containing Material*

A visual assessment of the thermal pipe insulation in the Main Equipment Building identified certain pipe insulations as building materials that were suspect asbestos containing material (ACM). A Pennsylvania certified asbestos inspector collected representative bulk samples from these materials and submitted them to a certified laboratory for analysis. Certification documents are presented in Attachment 2.

## Analytical Results

### *Asbestos*

Suspect ACM samples collected were analyzed by Polarized Light Microscopy (PLM) via United States Department of Environmental Protection Agency (EPA) Method 600/R-93/116. ACM is defined by the EPA as a material composed of any type of asbestos greater than 1% either alone or mixed with other fibrous or non-fibrous materials.

Laboratory analyses for samples collected are presented in Table 1 below.

| TABLE 1<br>PLM ASBESTOS RESULTS | | | |
|---|---|---|---|
| **Sample ID** | **Sample Location** | **Material Description** | **% Asbestos** |
| BFAB-1-Insulation | Main Equip. Building | Yellow Duct Insulation | None Detected |
| BFAB-1-Backing | Main Equip. Building | Brown/Black/Yellow Backing | None Detected |
| BFAB-1-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-2-Insulation | Main Equip. Building | Yellow Duct Insulation | None Detected |
| BFAB-2-Backing | Main Equip. Building | Brown/Black/Yellow Backing | None Detected |
| BFAB-2-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-3-Insulation | Main Equip. Building | Yellow Duct Insulation | None Detected |
| BFAB-3-Backing | Main Equip. Building | Brown /Yellow Backing | None Detected |
| BFAB-3-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-4-Insulation | Main Equip. Building | Black 4” Black Pipe Insulation | None Detected |
| BFAB-4-Wrap | Main Equip. Building | White/Silver Wrap | None Detected |
| **BFAB-5-Insulation** | **Main Equip. Building** | **White 3” Block Pipe Insulation** | **20% Amosite** |
| BFAB-5-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-6-Insulation | Main Equip. Building | Black 6” Black Pipe Insulation | None Detected |
| BFAB-6-Wrap | Main Equip. Building | White/Silver Wrap | None Detected |
| **BFAB-7-Insulation** | **Main Equip. Building** | **White 3” Block Pipe Insulation** | **30% Amosite** |
| BFAB-7-Wrap | Main Equip. Building | White Wrap | None Detected |
| **BFAB-8-Insulation** | **Main Equip. Building** | **White 3” Block Pipe Insulation** | **20% Amosite** |
| BFAB-8-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-9-Insulation | Main Equip. Building | White Fitting associated with 6” Block Pipe Insulation | None Detected |
| BFAB-9-Wrap | Main Equip. Building | White Wrap | None Detected |
| **BFAB-10-Insulation** | **Main Equip. Building** | **White 6” Block Pipe Insulation** | **25% Amosite** |
| BFAB-10-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-11-Insulation | Main Equip. Building | Gray/White Fitting associated with 6” Block Pipe Insulation | None Detected |
| BFAB-11-Wrap | Main Equip. Building | White Wrap | None Detected |
| **BFAB-12-Insulation** | **Main Equip. Building** | **White 6” Block Pipe Insulation** | **20% Amosite** |
| BFAB-12-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-13-Insulation | Main Equip. Building | White Fitting associated with 4” Block Pipe Insulation | None Detected |
| BFAB-13-Wrap | Main Equip. Building | White Wrap | None Detected |
| **BFAB-14-Insulation** | **Main Equip. Building** | **White 4” Block Pipe Insulation** | **20% Amosite** |
| BFAB-14-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-15-Insulation | Main Equip. Building | Gray Fitting associated with 4” Block Pipe Insulation | None Detected |
| BFAB-15-Wrap | Main Equip. Building | White Wrap | None Detected |

| TABLE 1<br>PLM ASBESTOS RESULTS | | | |
|---|---|---|---|
| **Sample ID** | **Sample Location** | **Material Description** | **% Asbestos** |
| **BFAB-16-Insulation** | **Main Equip. Building** | **Gray 4" Block Pipe Insulation** | **25% Amosite** |
| BFAB-16-Wrap | Main Equip. Building | White Wrap | None Detected |
| **BFAB-17-Insulation** | **Main Equip. Building** | **White Fitting associated with 6" Black Pipe Insulation** | **20% Chrysotile 5% Crocidolite** |
| BFAB-17-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-18-Insulation | Main Equip. Building | Black 6" Black Pipe Insulation | None Detected |
| BFAB-18-Wrap | Main Equip. Building | White/Silver Wrap | None Detected |
| BFAB-19-Insulation | Main Equip. Building Lower Level | Gray Fitting associated with 4" Block Pipe Insulation | None Detected |
| BFAB-19-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| **BFAB-20-Insulation** | **Main Equip. Building Lower Level** | **White Fitting associated with 6" Black Pipe Insulation** | **20% Chrysotile 5% Crocidolite** |
| BFAB-20-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| BFAB-21-Insulation | Main Equip. Building Lower Level | Black 3" Block Pipe Insulation | None Detected |
| BFAB-21-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| **BFAB-22-Insulation** | **Main Equip. Building Lower Level** | **White Fitting associated with 3" Block Pipe Insulation** | **20% Chrysotile 5% Crocidolite** |
| BFAB-22-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| BFAB-23-Insulation | Main Equip. Building Lower Level | Black/Silver 6" Black Pipe Insulation | None Detected |
| BFAB-23-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| **BFAB-24-Insulation** | **Main Equip. Building Lower Level** | **White Fitting associated with 6" Black Pipe Insulation** | **20% Chrysotile 5% Crocidolite** |
| BFAB-24-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| **BFAB-25-Insulation** | **Main Equip. Building Lower Level** | **Gray 3" Block Pipe Insulation** | **20% Amosite** |
| BFAB-25-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| BFAB-26-Insulation | Main Equip. Building Lower Level | Gray Fitting associated with 3" Block Pipe Insulation | None Detected |
| BFAB-26-Wrap | Main Equip. Building Lower Level | White Wrap | None Detected |
| BFAB-27-Insulation | Main Equip. Building | Yellow Duct Insulation | None Detected |
| BFAB-27-Backing | Main Equip. Building | Brown/Black/Yellow Backing | None Detected |
| BFAB-27-Wrap | Main Equip. Building | White Wrap | None Detected |
| BFAB-28-Insulation | Main Equip. Building | Yellow Duct Insulation | None Detected |
| BFAB-28-Backing | Main Equip. Building | Brown/Black/Yellow Backing | None Detected |
| BFAB-28-Wrap | Main Equip. Building | White Wrap | None Detected |

**Bold** samples denote ACM

**Findings**

Analytical results reported the presence of asbestos on the ground floor of the Main Equipment Building in samples BFAB-5-Insulation, BFAB-7-Insulation, and BFAB-8-Insulation (ranging from 20% to 30% amosite) collected from the white 3-inch block pipe insulation; in samples BFAB-10-Insulation and BFAB-12-Insulation (25% and 20% amosite, respectively) collected from white 6-inch block pipe insulation; in sample BFAB-14-Insulation (20% amosite) collected from white 4-inch block pipe insulation; in sample BFAB-16-Insulation (25% amosite) collected from gray 4-inch block pipe insulation; and in sample BFAB-17-Insulation (20% chrysotile and 5% crocidolite) collected from a white fitting associated with 6-inch black pipe insulation.

On the lower level of the Main Equipment Building, analytical results reported the presence of asbestos in samples BFAB-20-Insulation and BFAB-24-Insulation (both 20% chrysotile and 5% crocidolite) collected from white pipe fittings associated with 6-inch black pipe insulation; in sample BFAB-22-Insulation (20% chrysotile and 5% crocidolite) collected from a white fitting associated with 3-inch block pipe insulation; and in sample BFAB-25-Insulation (20% amosite) collected from gray 3-inch block pipe insulation.

Laboratory analysis and chain of custodies are presented in Attachment 3. A Photo Log of selected sample locations is presented in Attachment 4.

The amount of the asbestos block pipe insulation ranging in size from 3" outer diameter (OD) to 6" OD is approximately 200 linear feet on the first floor and 60 linear feet on the lower level. The amount of hard fittings associated with the black pipe insulation is approximately 20 fittings on the first floor and 60 fittings on the lower level.

The cost of removing the asbestos from the subject site's Main Equipment Building is estimated at approximately $14,000.00.

**Recommendations**

All renovation and demolition activities associated with ACM must be conducted in accordance with Federal, Commonwealth of Pennsylvania, and local rules and regulations. The contractor must provide appropriate health and safety protocols to address work associated with ACM as per, but not limited to, the following regulations:

- OSHA 29 CFR 1926.1101-Asbestos
- EPA 40 CFR 61 Subpart M-NESHAP Asbestos
- Pennsylvania Department of Environmental Protection (PADEP) rules and regulations

If you should have any questions or require additional information, please feel free to contact me at 609-847-2637.

Very truly yours,
GANNETT FLEMING, INC.



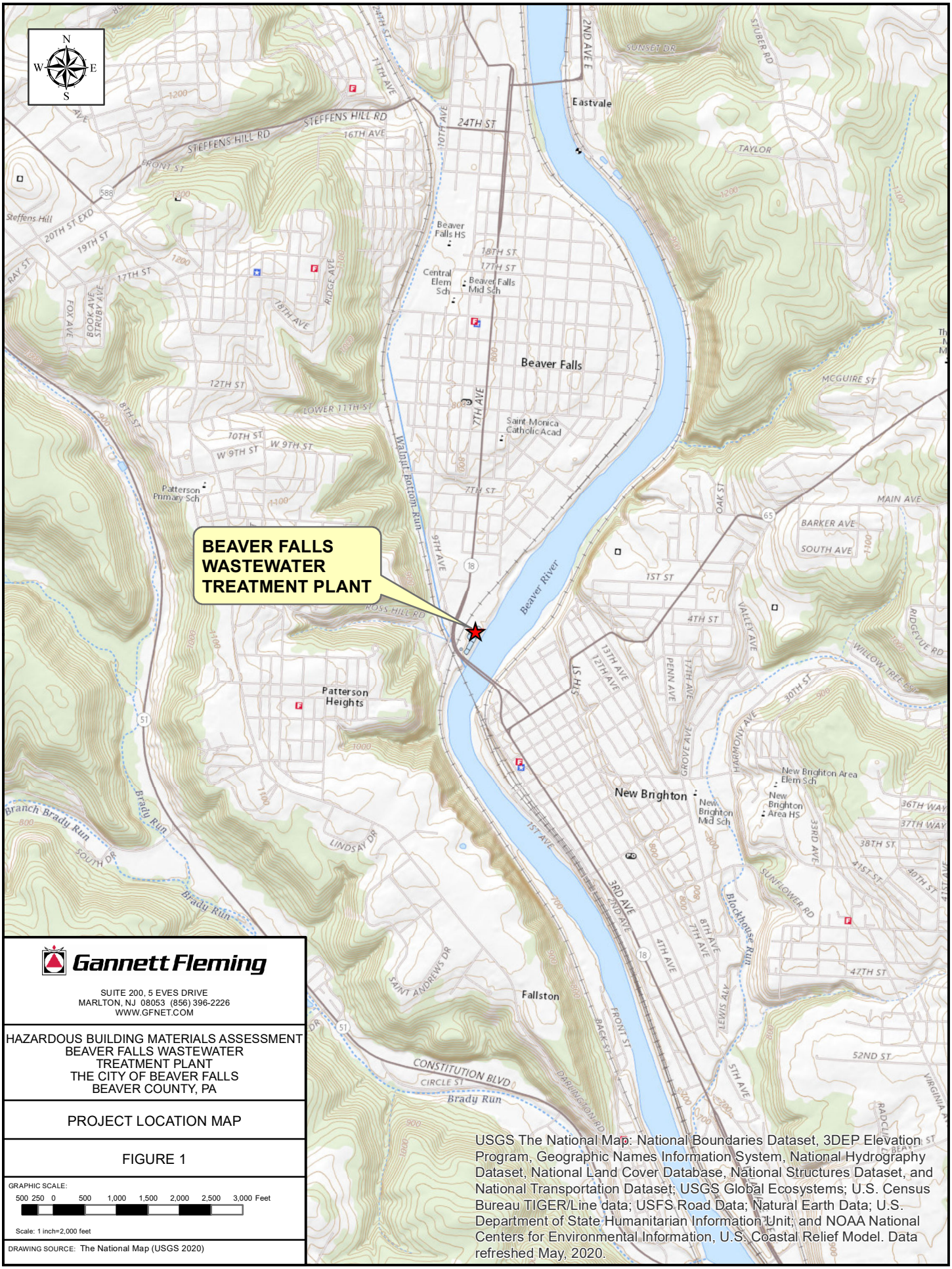
PETER J. FALNES
Senior Environmental Scientist

| | | |
|---|---|---|
| Enclosures: | Attachment 1: | Figure 1 – Site Location Map |
| | | Figure 2 – Site Plan |
| | | Figures 3A and 3B – Sample Location Plans |
| | Attachment 2: | Certification Documents |
| | Attachment 3: | Laboratory Analysis |
| | Attachment 4: | Photo Log |

cc: File 068417

**ATTACHMENT 1**

**FIGURES**




Gannett Fleming

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HAZARDOUS BUILDING MATERIALS ASSESSMENT
BEAVER FALLS WASTEWATER
TREATMENT PLANT
THE CITY OF BEAVER FALLS
BEAVER COUNTY, PA

PROJECT LOCATION MAP

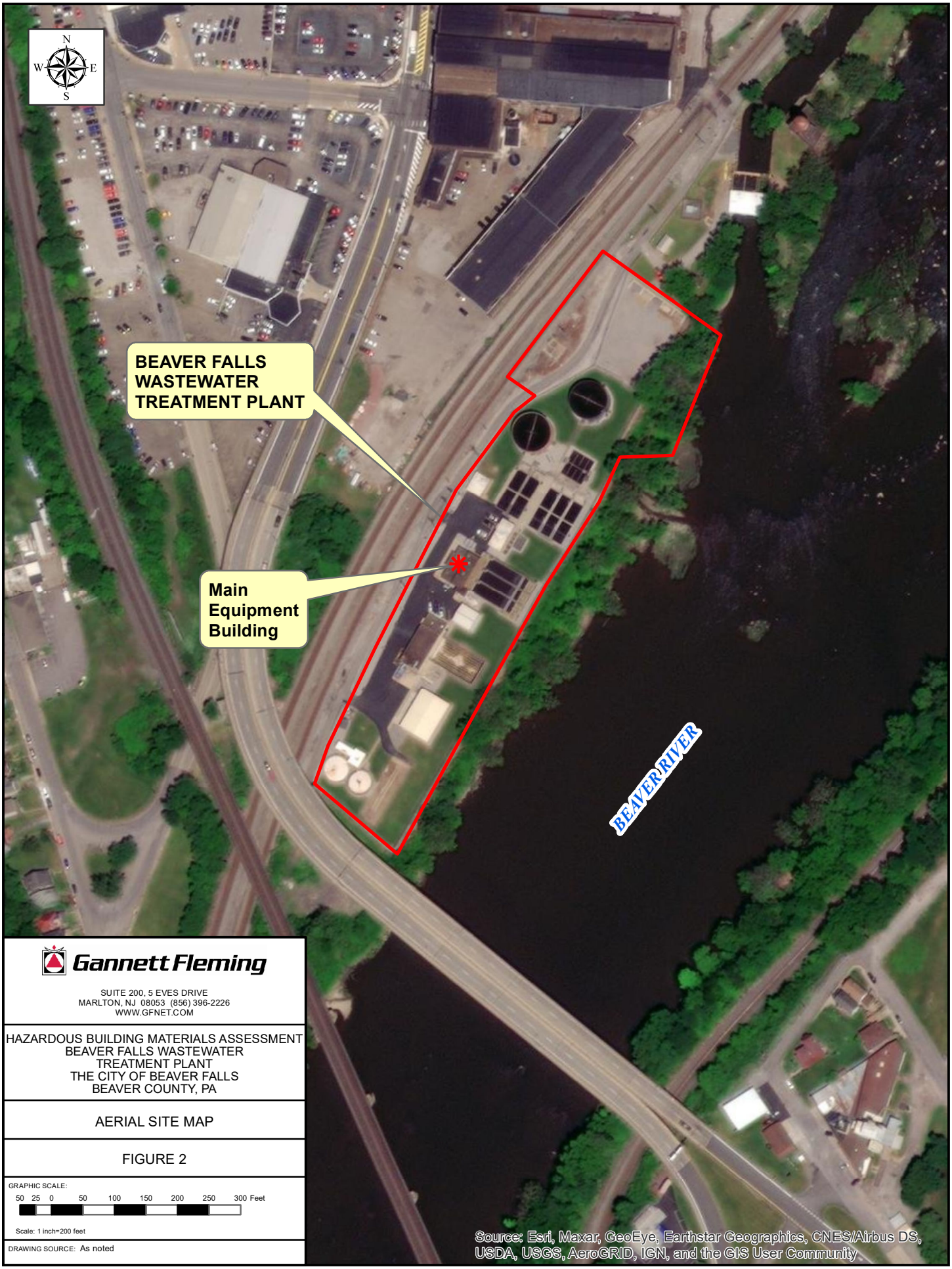
FIGURE 1

GRAPHIC SCALE:
500 250 0 500 1,000 1,500 2,000 2,500 3,000 Feet

Scale: 1 inch=2,000 feet

DRAWING SOURCE: The National Map (USGS 2020)

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed May, 2020.

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AERIAL SITE MAP

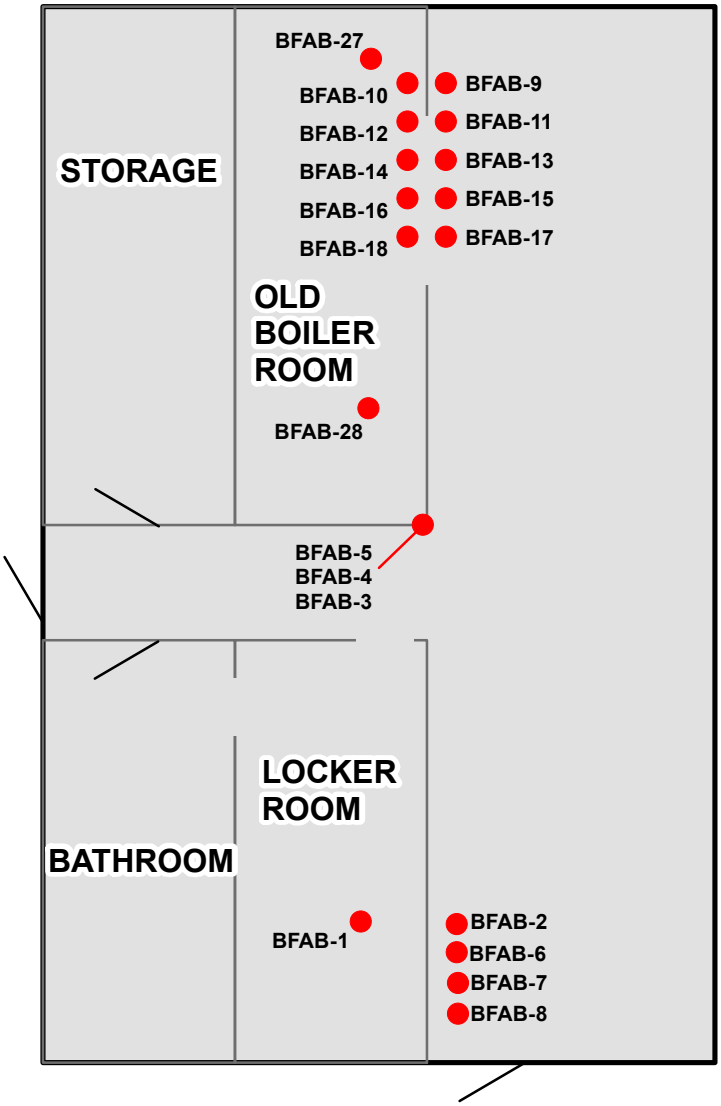
FIGURE 2

GRAPHIC SCALE:
50 25 0 50 100 150 200 250 300 Feet

Scale: 1 inch=200 feet

DRAWING SOURCE: As noted

## MAIN EQUIPMENT BUILDING




**LEGEND**

BFAB-1 ● Asbestos sample location

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SAMPLE LOCATION PLAN:
GROUND FLOOR

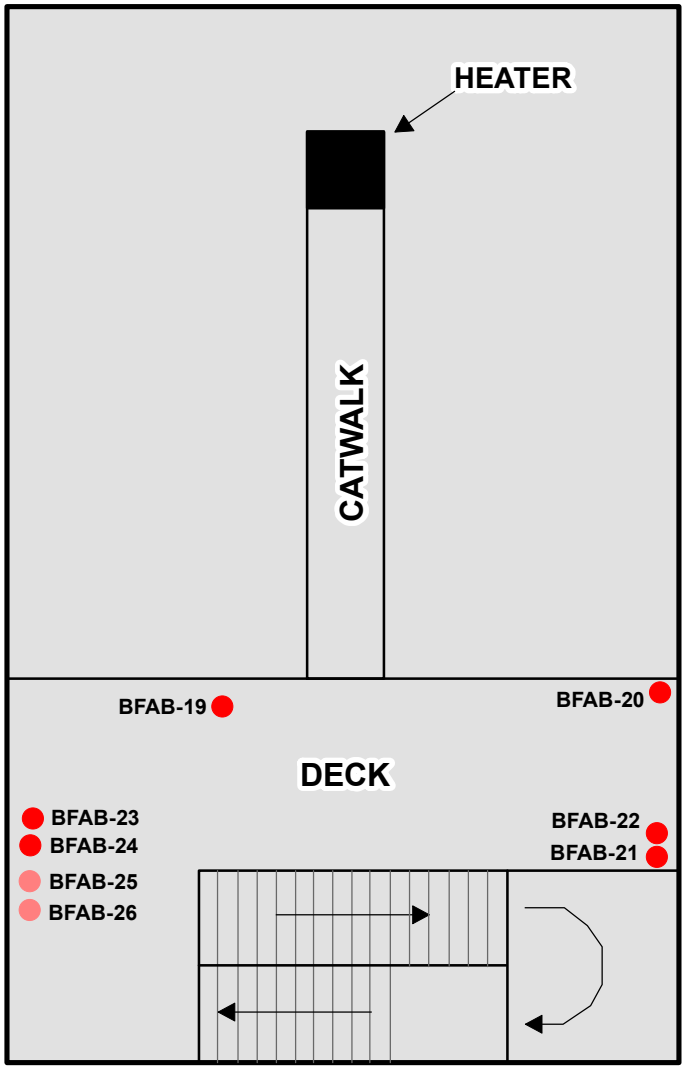
FIGURE 3A

GRAPHIC SCALE:
6 3 0 6 12 Feet

Scale: 1 inch=10 feet

DRAWING SOURCE: Gannett Fleming 2021

## MAIN EQUIPMENT BUILDING




**LEGEND**

**BFAB-1** Asbestos sample location

**BFAB-1** Asbestos sample location - Sub-level

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SAMPLE LOCATION PLAN:
LOWER LEVEL

FIGURE 3B

GRAPHIC SCALE:
6 3 0 6 12 Feet

Scale: 1 inch=10 feet

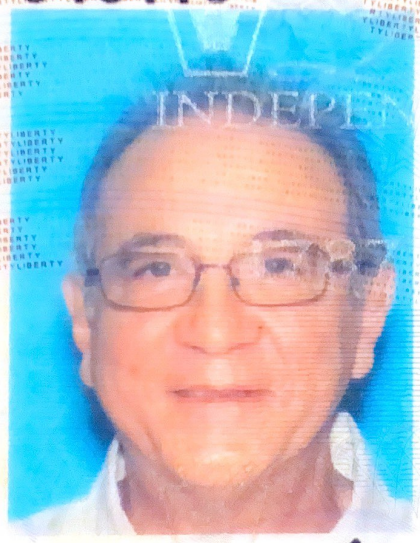
DRAWING SOURCE: Gannett Fleming 2021

**ATTACHMENT 2**

**CERTIFICATION DOCUMENTS**

# PENNSYLVANIA ASBESTOS CERTIFICATION

046110



| Sex | Height | Eyes | Birth Date |
|---|---|---|---|
| M | 5'10" | BRO | 09/08/1959 |

| Expires | Issue Date |
|---|---|
| 04/05/2022 | 04/30/2021 |

Class
INSPECTOR

PETER J FALNES
40 WICKLOW DR
TABERNACLE NJ 08088

# ATTACHMENT 3
## LABORATORY ANALYSIS

# EMSL Analytical, Inc.

**200 Route 130 North Cinnaminson, NJ 08077**
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http://www.EMSL.com / cinnasblab@EMSL.com


| | |
|---|---|
| **EMSL Order:** | 042112288 |
| **Customer ID:** | GANN52 |
| **Customer PO:** | |
| **Project ID:** | |

| | | | |
|---|---|---|---|
| **Attention:** | Peter Falnes | **Phone:** | (856) 802-9930 |
| | Gannett Fleming Engineers & Planners | **Fax:** | (609) 561-5812 |
| | 5 Eves Drive | **Received Date:** | 05/24/2021 6:10 PM |
| | Suite 200 | **Analysis Date:** | 05/28/2021 - 05/29/2021 |
| | Marlton, NJ 08054-3905 | **Collected Date:** | 05/19/2021 |
| **Project:** | 068417.008 / City of Beaver Falls, Beaver Falls, PA / Beaver Falls Sewage Treatment Plant | | |

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| BFAB-1-Insulation<br>*042112288-0001* | Main Equipment Building - Duct Insulation | Yellow Fibrous Homogeneous | 80% Glass | 20% Non-fibrous (Other) | None Detected |
| BFAB-1-Backing<br>*042112288-0001A* | Main Equipment Building - Backing | Brown/Black/Yellow Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| BFAB-1-Wrap<br>*042112288-0001B* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-2-Insulation<br>*042112288-0002* | Main Equipment Building - Duct Insulation | Yellow Fibrous Homogeneous | 80% Glass | 20% Non-fibrous (Other) | None Detected |
| BFAB-2-Backing<br>*042112288-0002A* | Main Equipment Building - Backing | Brown/Black/Yellow Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| BFAB-2-Wrap<br>*042112288-0002B* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-3-Insulation<br>*042112288-0003* | Main Equipment Building - Duct Insulation | Yellow Fibrous Homogeneous | 80% Glass | 20% Non-fibrous (Other) | None Detected |
| BFAB-3-Backing<br>*042112288-0003A* | Main Equipment Building - Backing | Brown/Yellow Fibrous Homogeneous | 20% Cellulose | 80% Non-fibrous (Other) | None Detected |
| BFAB-3-Wrap<br>*042112288-0003B* | Main Equipment Building - Wrap | White Non-Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-4-Insulation<br>*042112288-0004* | Main Equipment Building - 4" Black Pipe Insulation | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-4-Wrap<br>*042112288-0004A* | Main Equipment Building - Wrap | White/Silver Fibrous Homogeneous | 30% Cellulose<br>20% Glass | 50% Non-fibrous (Other) | None Detected |
| BFAB-5-Insulation<br>*042112288-0005* | Main Equipment Building - 3" Block Pipe Insulation | White Fibrous Homogeneous | | 80% Non-fibrous (Other) | 20% Amosite |
| BFAB-5-Wrap<br>*042112288-0005A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-6-Insulation<br>*042112288-0006* | Main Equipment Building - 6" Black Pipe Insulation | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-6-Wrap<br>*042112288-0006A* | Main Equipment Building - Wrap | White/Silver Fibrous Homogeneous | 30% Cellulose<br>20% Glass | 50% Non-fibrous (Other) | None Detected |
| BFAB-7-Insulation<br>*042112288-0007* | Main Equipment Building - 3" Block Pipe Insulation | White Fibrous Homogeneous | | 70% Non-fibrous (Other) | 30% Amosite |

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| | |
|---|---|
| **EMSL Order:** | 042112288 |
| **Customer ID:** | GANN52 |
| **Customer PO:** | |
| **Project ID:** | |

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| BFAB-7-Wrap<br>*042112288-0007A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-8-Insulation<br>*042112288-0008* | Main Equipment Building - 3" Block Pipe Insulation | White Fibrous Homogeneous | | 80% Non-fibrous (Other) | 20% Amosite |
| BFAB-8-Wrap<br>*042112288-0008A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (Other) | None Detected |
| BFAB-9-Insulation<br>*042112288-0009* | Main Equipment Building - Fitting associated with 6" Block Pipe Insulation | White Fibrous Homogeneous | 40% Glass | 60% Non-fibrous (Other) | None Detected |
| BFAB-9-Wrap<br>*042112288-0009A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-10-Insulation<br>*042112288-0010* | Main Equipment Building - 6" Block Pipe Insulation | White Fibrous Homogeneous | | 75% Non-fibrous (Other) | 25% Amosite |
| BFAB-10-Wrap<br>*042112288-0010A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (Other) | None Detected |
| BFAB-11-Insulation<br>*042112288-0011* | Main Equipment Building - Fitting associated with 6" Block Pipe Insulation | Gray/White Fibrous Homogeneous | 40% Min. Wool | 60% Non-fibrous (Other) | None Detected |
| BFAB-11-Wrap<br>*042112288-0011A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-12-Insulation<br>*042112288-0012* | Main Equipment Building - 6" Block Pipe Insulation | White Fibrous Homogeneous | | 80% Non-fibrous (Other) | 20% Amosite |
| BFAB-12-Wrap<br>*042112288-0012A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-13-Insulation<br>*042112288-0013* | Main Equipment Building - Fitting associated with 4" Block Pipe Insulation | White Fibrous Homogeneous | 35% Glass | 65% Non-fibrous (Other) | None Detected |
| BFAB-13-Wrap<br>*042112288-0013A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-14-Insulation<br>*042112288-0014* | Main Equipment Building - 4" Block Pipe Insulation | White Fibrous Homogeneous | | 80% Non-fibrous (Other) | 20% Amosite |
| BFAB-14-Wrap<br>*042112288-0014A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (Other) | None Detected |
| BFAB-15-Insulation<br>*042112288-0015* | Main Equipment Building - Fitting associated with 4" Block Pipe Insulation | Gray Fibrous Homogeneous | 40% Min. Wool | 60% Non-fibrous (Other) | None Detected |
| BFAB-15-Wrap<br>*042112288-0015A* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-16-Insulation<br>*042112288-0016* | Main Equipment Building - 4" Block Pipe Insulation | Gray Fibrous Homogeneous | | 75% Non-fibrous (Other) | 25% Amosite |

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|---|---|
| **EMSL Order:** | 042112288 |
| **Customer ID:** | GANN52 |
| **Customer PO:** | |
| **Project ID:** | |

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| BFAB-16-Wrap<br>*042112288-0016A* | Main Equipment Building - Wrap | White<br>Fibrous<br>Homogeneous | 80% Cellulose | 20% Non-fibrous (Other) | None Detected |
| BFAB-17-Insulation<br>*042112288-0017* | Main Equipment Building - Fitting associated with 6" Black Pipe Insulation | White<br>Fibrous<br>Homogeneous | | 75% Non-fibrous (Other) | 20% Chrysotile<br>5% Crocidolite |
| BFAB-17-Wrap<br>*042112288-0017A* | Main Equipment Building - Wrap | White<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| BFAB-18-Insulation<br>*042112288-0018* | Main Equipment Building - 6" Black Pipe Insulation | Black<br>Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-18-Wrap<br>*042112288-0018A* | Main Equipment Building - Wrap | White/Silver<br>Fibrous<br>Homogeneous | 35% Cellulose<br>2% Glass | 63% Non-fibrous (Other) | None Detected |
| BFAB-19-Insulation<br>*042112288-0019* | Main Equipment Building Lower Level - 6" Black Pipe Insulation | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-19-Wrap<br>*042112288-0019A* | Main Equipment Building Lower Level - Wrap | White<br>Fibrous<br>Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-20-Insulation<br>*042112288-0020* | Main Equipment Building Lower Level - Fitting associated with 6" Black Pipe Insulation | White<br>Fibrous<br>Homogeneous | | 75% Non-fibrous (Other) | 20% Chrysotile<br>5% Crocidolite |
| BFAB-20-Wrap<br>*042112288-0020A* | Main Equipment Building Lower Level - Wrap | White<br>Fibrous<br>Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-21-Insulation<br>*042112288-0021* | Main Equipment Building Lower Level - 3" Block Pipe Insulation | Black<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-21-Wrap<br>*042112288-0021A* | Main Equipment Building Lower Level - Wrap | White<br>Fibrous<br>Homogeneous | 40% Cellulose<br>10% Glass | 50% Non-fibrous (Other) | None Detected |
| BFAB-22-Insulation<br>*042112288-0022* | Main Equipment Building Lower Level - Fitting associated with 3" Block Pipe Insulation | White<br>Fibrous<br>Homogeneous | | 75% Non-fibrous (Other) | 20% Chrysotile<br>5% Crocidolite |
| BFAB-22-Wrap<br>*042112288-0022A* | Main Equipment Building Lower Level - Wrap | White<br>Fibrous<br>Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-23-Insulation<br>*042112288-0023* | Main Equipment Building Lower Level - 6" Black Pipe Insulation | Black/Silver<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-23-Wrap<br>*042112288-0023A* | Main Equipment Building Lower Level - Wrap | White<br>Fibrous<br>Homogeneous | 45% Cellulose<br>15% Glass | 40% Non-fibrous (Other) | None Detected |
| BFAB-24-Insulation<br>*042112288-0024* | Main Equipment Building Lower Level - Fitting associated with 6" Black Pipe Insulation | White<br>Fibrous<br>Homogeneous | | 75% Non-fibrous (Other) | 20% Chrysotile<br>5% Crocidolite |

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**EMSL Order:** 042112288
**Customer ID:** GANN52
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| BFAB-24-Wrap<br>*042112288-0024A* | Main Equipment Building Lower Level - Wrap | White Fibrous Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-25-Insulation<br>*042112288-0025* | Main Equipment Building Lower Level - 3" Block Pipe Insulation | Gray Fibrous Homogeneous | | 80% Non-fibrous (Other) | 20% Amosite |
| BFAB-25-Wrap<br>*042112288-0025A* | Main Equipment Building Lower Level - Wrap | White Fibrous Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-26-Insulation<br>*042112288-0026* | Main Equipment Building Lower Level - Fitting associated with 3" Block Pipe Insulation | Gray Fibrous Homogeneous | 60% Min. Wool | 40% Non-fibrous (Other) | None Detected |
| BFAB-26-Wrap<br>*042112288-0026A* | Main Equipment Building Lower Level - Wrap | White Fibrous Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| BFAB-27-Insulation<br>*042112288-0027* | Main Equipment Building - Duct Insulation | Yellow Fibrous Homogeneous | 80% Glass | 20% Non-fibrous (Other) | None Detected |
| BFAB-27-Backing<br>*042112288-0027A* | Main Equipment Building - Backing | Brown/Black/Yellow Fibrous Heterogeneous | | 100% Non-fibrous (Other) | None Detected |
| BFAB-27-Wrap<br>*042112288-0027B* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (Other) | None Detected |
| BFAB-28-Insulation<br>*042112288-0028* | Main Equipment Building - Duct Insulation | Yellow Fibrous Homogeneous | 80% Glass | 20% Non-fibrous (Other) | None Detected |
| BFAB-28-Backing<br>*042112288-0028A* | Main Equipment Building - Backing | Brown/Black/Yellow Fibrous Homogeneous | 40% Cellulose | 60% Non-fibrous (Other) | None Detected |
| BFAB-28-Wrap<br>*042112288-0028B* | Main Equipment Building - Wrap | White Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (Other) | None Detected |

Analyst(s)
*Nancy Stalter (30)*
*Shannon Mccormick (31)*

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 05/29/2021 07:29:56

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042112288

# SAMPLING DATA & CHAIN OF CUSTODY RECORD

## ASBESTOS BULK SAMPLING FOR ANALYSIS BY POLARIZED LIGHT MICROSCOPY (PLM)

| PROJECT #: | CLIENT: | CONTACT: |
|---|---|---|
| 068417.008 | City of Beaver Falls<br>Beaver Falls, PA | Peter Falnes |

| SAMPLER: | PM: | FACILITY: | SAMPLING DATE: |
|---|---|---|---|
| Peter Falnes | John Rae | Beaver Falls Sewage Treatment Plant | 5-19 & 20-2021 |

| SAMPLE # | SAMPLE LOCATION | MATERIAL DESCRIPTION | COMMENTS |
|---|---|---|---|
| BFAB-1 | Main Equipment Building | Duct Insulation | |
| BFAB-2 | Main Equipment Building | Duct Insulation | |
| BFAB-3 | Main Equipment Building | Duct Insulation | |
| BFAB-4 | Main Equipment Building | 4" Black Pipe Insulation | |
| BFAB-5 | Main Equipment Building | 3" Black Pipe Insulation | |
| BFAB-6 | Main Equipment Building | 6" Black Pipe Insulation | |
| BFAB-7 | Main Equipment Building | 3" Black Pipe Insulation | |
| BFAB-8 | Main Equipment Building | 3" Black Pipe Insulation | |
| BFAB-9 | Main Equipment Building | Fitting A/W 6" Black Pipe Insulation | |
| BFAB-10 | Main Equipment Building | 6" Black Pipe Insulation | |
| BFAB-11 | Main Equipment Building | Fitting A/W 6" Black Pipe Insulation | |
| BFAB-12 | Main Equipment Building | 6" Black Pipe Insulation | |

| RELINQUISHED BY: | DATE: | TIME: | RECEIVED BY: | DATE: | TIME: |
|---|---|---|---|---|---|
| | 5-24-21 | 1808 | DR | 5/24/21 | 610pm |
| RELINQUISHED BY: | DATE: | TIME: | RECEIVED BY: | DATE: | TIME: |
| | | | | | |

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# SAMPLING DATA & CHAIN OF CUSTODY RECORD

## ASBESTOS BULK SAMPLING FOR ANALYSIS BY POLARIZED LIGHT MICROSCOPY (PLM)

| PROJECT #: 068417.008 | CLIENT: CITY OF BEAVER FALLS BEAVER FALLS, PA | CONTACT: PETEL FALNES |
|---|---|---|
| SAMPLER: PETEL FALNES | PM: JOHN RAE | FACILITY: BEAVER FALLS SEWAGE TREATMENT PLANT | SAMPLING DATE: 5-19, 20-2021 |

| SAMPLE # | SAMPLE LOCATION | MATERIAL DESCRIPTION | COMMENTS |
|---|---|---|---|
| BFAB - 13 | MAIN EQUIPMENT BUILDING | FITTING A/W 4" BLOCK PIPE | INSULATION |
| BFAB - 14 | MAIN EQUIPMENT BUILDING | 4" BLOCK PIPE INSULATION | |
| BFAB - 15 | MAIN EQUIPMENT BUILDING | FITTING A/W 4" BLOCK PIPE | INSULATION |
| BFAB - 16 | MAIN EQUIPMENT BUILDING | 4" BLOCK PIPE INSULATION | |
| BFAB - 17 | MAIN EQUIPMENT BUILDING | FITTING A/W 6" BLACK PIPE | INSULATION |
| BFAB - 18 | MAIN EQUIPMENT BUILDING | 6" BLACK PIPE INSULATION | |
| BFAB - 19 | MAIN EQUIPMENT BUILDING LOWER LEVEL | 6" BLACK PIPE INSULATION | |
| BFAB - 20 | MAIN EQUIPMENT BUILDING LOWER LEVEL | FITTING A/W 6" BLACK PIPE | INSULATION |
| BFAB - 21 | MAIN EQUIPMENT BUILDING LOWER LEVEL | 3" BLOCK PIPE INSULATION | |
| BFAB - 22 | MAIN EQUIPMENT BUILDING LOWER LEVEL | FITTING A/W 3" BLOCK PIPE | INSULATION |
| BFAB - 23 | MAIN EQUIPMENT BUILDING LOWER LEVEL | 6" BLACK PIPE INSULATION | |
| BFAB - 24 | MAIN EQUIPMENT BUILDING LOWER LEVEL | FITTING A/W 6" BLACK PIPE | INSULATION |

| RELINQUISHED BY: | DATE: | TIME: | RECEIVED BY: | DATE: | TIME: |
|---|---|---|---|---|---|
| | 5-24-21 | 1808 | | | |
| RELINQUISHED BY: | DATE: | TIME: | RECEIVED BY: | DATE: | TIME: |
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# SAMPLING DATA & CHAIN OF CUSTODY RECORD

## ASBESTOS BULK SAMPLING FOR ANALYSIS BY POLARIZED LIGHT MICROSCOPY (PLM)

| PROJECT #: | CLIENT: | CONTACT: |
|---|---|---|
| 068417.008 | CITY OF BEAVER FALLS<br>BEAVER FALLS, PA | PETER FALNES |

| SAMPLER: | PM: | FACILITY: | SAMPLING DATE: |
|---|---|---|---|
| PETER FALNES | JOHN RAE | BEAVER FALLS SEWAGE TREATMENT PLANT | 5-19,20-2021 |

| SAMPLE # | SAMPLE LOCATION | MATERIAL DESCRIPTION | COMMENTS |
|---|---|---|---|
| BFAB-25 | MAIN EQUIPMENT BUILDING -LOWER LEVEL | 3" BLOCK PIPE INSULATION | |
| BFAB-26 | MAIN EQUIPMENT BUILDING LOWER LEVEL | FITTING A/W 3" BLOCK PIPE INSULATION | |
| BFAB-27 | MAIN EQUIPMENT BUILDING | DUCT INSULATION | |
| BFAB-28 | MAIN EQUIPMENT BUILDING | DUCT INSULATION | |
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| | 5/24/21 | 1808 | | | |
| RELINQUISHED BY: | DATE: | TIME: | RECEIVED BY: | DATE: | TIME: |
| | | | | | |

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Page 3 of 3



OrderID: 042112288

# ATTACHMENT 4

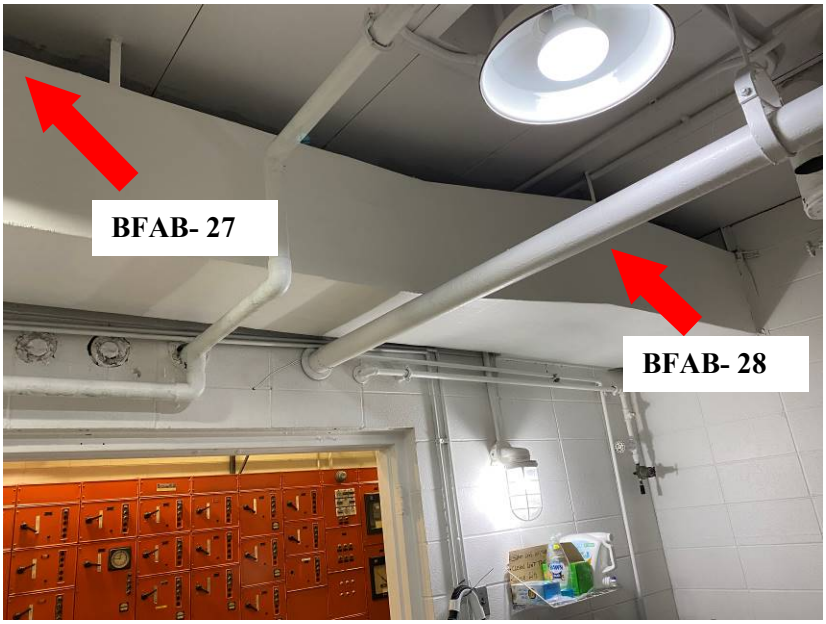
## PHOTO LOG

ASBESTOS ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS
BEAVER COUNTY, PENNSYLVANIA

**Photo 1**
**Main Equipment Building**



**Photo 2**
**Former Boiler Room**
**Duct Insulation Sample Locations**



ASBESTOS ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS
BEAVER COUNTY, PENNSYLVANIA

**Photo 3**
**Asbestos Bulk Sample Locations**
**Pipes coming out of Former Boiler Room**

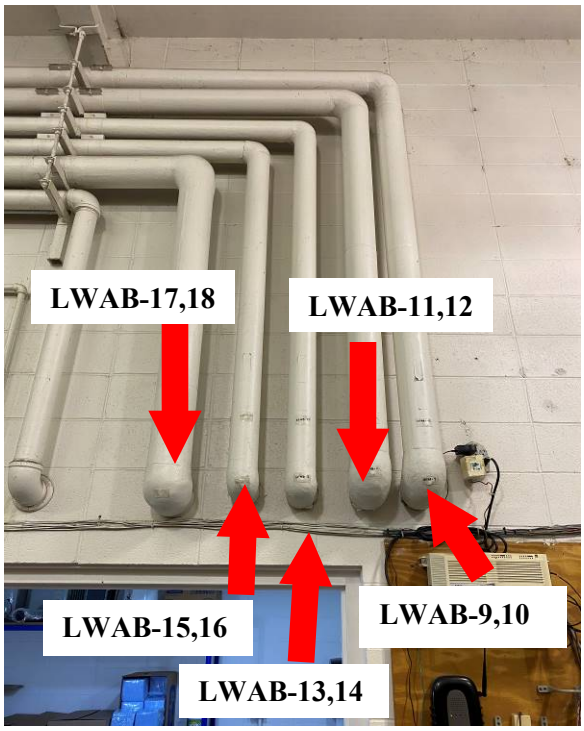
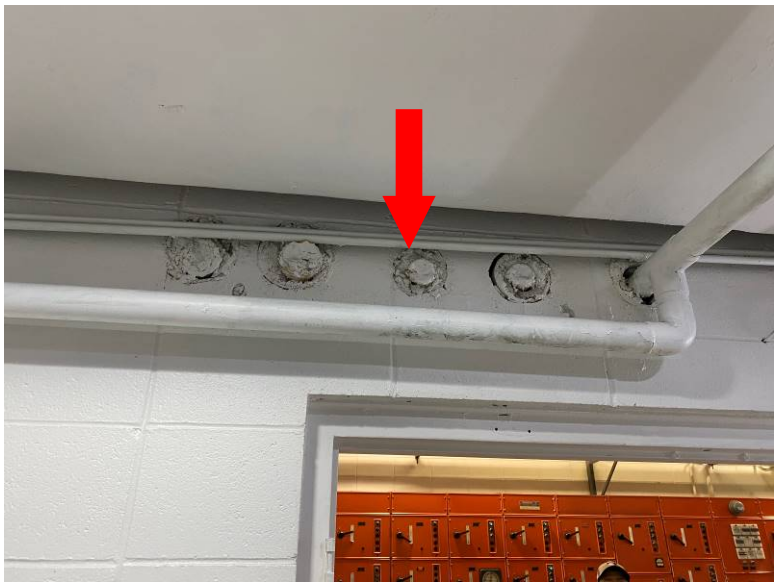



**Photo 4**
**Inside of Former Boiler Room Note Sample Locations**
**LWAB-9 through 16 are dead pipes**



ASBESTOS ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS
BEAVER COUNTY, PENNSYLVANIA

**Photo 5**
**Locker Room**
**Asbestos Sample Location**




**Photo 6**
**First Floor Main Equipment Building**
**Asbestos Sample Locations**

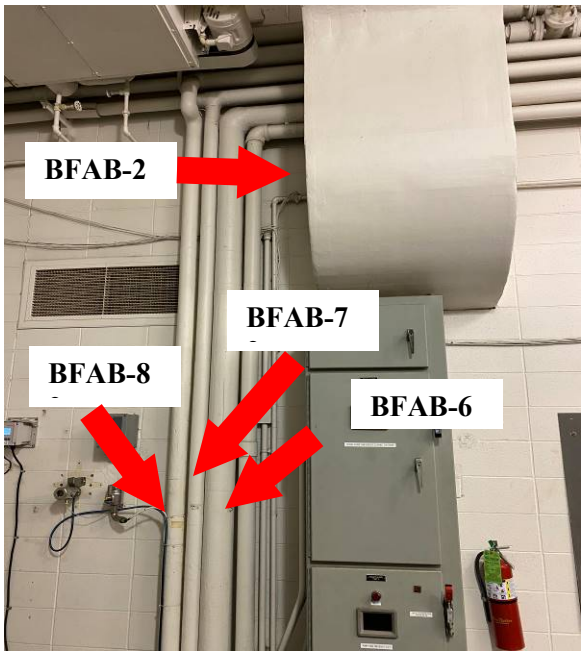
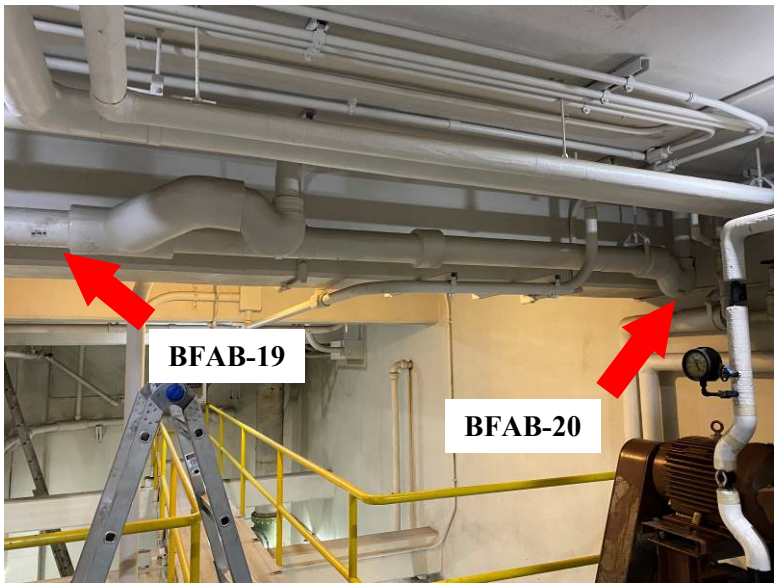


**Photo 7**
**First Floor Locker Hallway**
**Asbestos Sample Locations**




**Photo 8**
**Mezzanine Level**
**Asbestos Sample Location**



ASBESTOS ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS
BEAVER COUNTY, PENNSYLVANIA

**Photo 9**
**Mezzanine Level**
**Asbestos Sample Location**

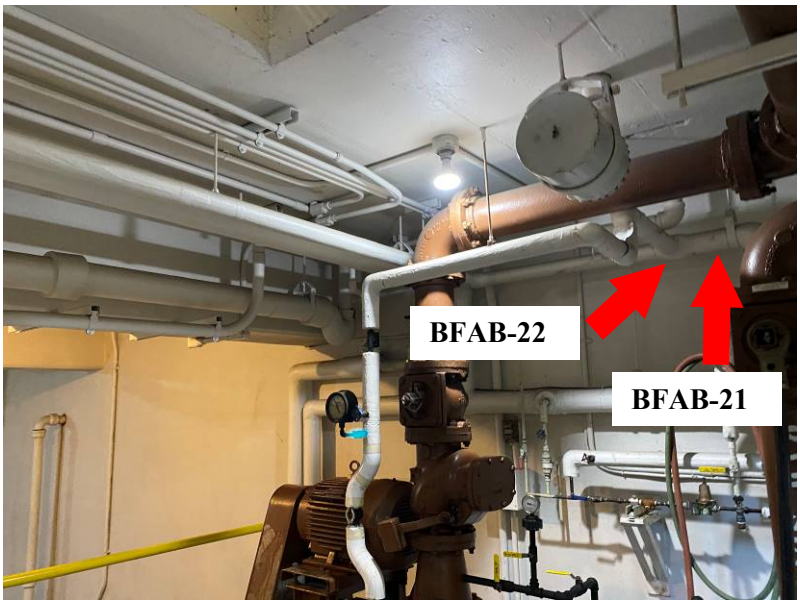
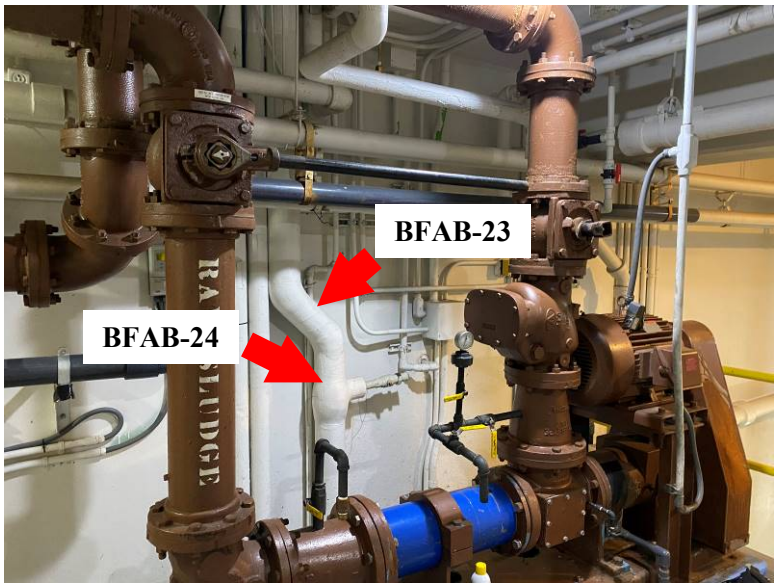
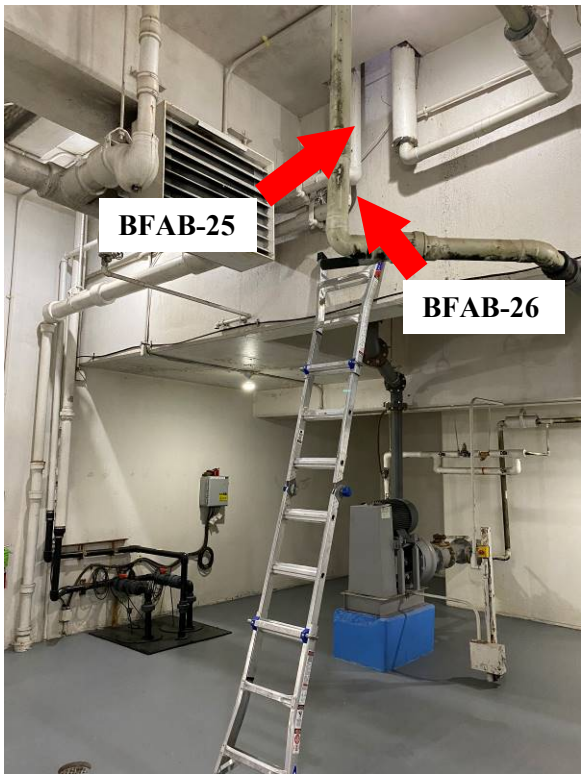



**Photo 10**
**Mezzanine Level**
**Asbestos Sample Location**



ASBESTOS ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS
BEAVER COUNTY, PENNSYLVANIA

**Photo 11**
**Basement Level**
**Asbestos Sample Locations**





# PHASE I ENVIRONMENTAL SITE ASSESSMENT
# BEAVER FALLS WASTEWATER TREATMENT PLANT
# CITY OF BEAVER FALLS, BEAVER COUNTY
# PENNSYLVANIA



Prepared for:

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Prepared by:

Gannett Fleming

*Excellence Delivered **As Promised***

Office Location:

5 Eves Drive, Suite 200
Marlton, NJ 08053

**July 2021**

GF Project Number 068417

# Table of Contents


1.0 SUMMARY ..... 1
1.1 Findings ..... 1
1.2 Opinions and Conclusions ..... 3
2.0 INTRODUCTION ..... 4
2.1 Property Description and Purpose ..... 4
2.2 Scope of Services ..... 4
2.3 Limiting Conditions, Deviations, Exceptions, and Significant Assumptions ..... 5
2.4 User Reliance ..... 6
3.0 USER PROVIDED INFORMATION ..... 7
3.1 Title Records ..... 7
3.2 Environmental Liens or Activity and Use Limitations ..... 7
3.3 Specialized Knowledge ..... 7
3.4 Commonly Known or Reasonably Ascertainable Information ..... 7
3.5 Valuation Reduction for Environmental Issues ..... 7
3.6 Owner, Property Manager, and Occupant Information ..... 7
3.7 Reason for Performing Phase I ESA ..... 7
4.0 RECORDS REVIEW ..... 8
4.1 Previous Reports ..... 8
4.2 Standard and Additional Environmental Record Sources ..... 8
4.2.1 Subject Site Database Search Results ..... 9
4.2.2 Surrounding Properties Database Search Results ..... 9
4.3 Regulatory Agency File and Records Review ..... 12
4.4 Physical Setting Sources ..... 12
4.5 Radon ..... 13
4.6 Historical Use Information on the Subject and Adjoining Property ..... 13
4.6.1 Historical City Directories ..... 13
4.6.2 Historical Aerial Photographs ..... 13
4.6.3 Historical Topographic Maps ..... 15
4.6.4 Historical Fire Insurance Maps ..... 15
5.0 SITE RECONNAISSANCE ..... 17
5.1 Methodology ..... 17
5.2 General Site Setting ..... 17
5.3 Current Use of Property ..... 17
5.4 Description of Structures – Other Improvements on Site ..... 17
5.4.1 Structures ..... 17
5.4.2 Roads, Streets, Parking Facilities, Landscaping ..... 18
5.5 Current Uses of Adjacent Properties ..... 19
5.6 Interior and Exterior Observations ..... 19
5.6.1 Stormwater Runoff ..... 19
5.6.2 Hazardous Substances and Petroleum Products ..... 19
5.6.3 Storage Tanks ..... 20
5.6.4 Air Emissions and Odors ..... 20
5.6.5 Pools of Liquid ..... 20
5.6.6 Drums ..... 20

5.6.7 Unidentified Substance Containers ..... 20
5.6.8 Polychlorinated Biphenyl-Containing Materials and Equipment ..... 20
5.6.9 Heating, Cooling, and Electrical ..... 21
5.6.10 Interior Staining or Corrosion ..... 21
5.6.11 Drains and Sumps ..... 21
5.6.12 Pits, Ponds, or Lagoons ..... 21
5.6.13 Soil or Pavement Staining ..... 21
5.6.14 Vegetative Stress ..... 21
5.6.15 Solid Waste/ Soil Disturbance ..... 21
5.6.16 Solid and Hazardous Waste Generation, Storage, and Disposal ..... 22
5.6.17 Potable Water Supply and Wastewater Disposal ..... 22
5.6.18 Wells ..... 22
5.6.19 Septic Systems ..... 22
5.6.20 Spills/Releases ..... 22
5.6.21 Vapor Encroachment Screening ..... 22
6.0 INTERVIEWS ..... 23
6.1 Interview with Site Manager ..... 23
6.2 Interviews with Occupants ..... 23
6.3 Interviews with Government Officials ..... 23
6.4 Interviews with Others ..... 23
7.0 EVALUATION ..... 24
7.1 Findings and Opinions ..... 24
7.2 Conclusions and Recommendations ..... 25
7.3 Data Gaps and Deletions ..... 26
7.4 Environmental Professional Statement and Signatures ..... 26
8.0 REFERENCES ..... 27

**FIGURES**

No. Description
1 Project Location Map
2 Site Plan

**APPENDICES**

A Environmental Professional Qualifications
B Environmental Due Diligence Owner/Occupant Questionnaire and ESA User Questionnaire
C Excerpts from Environmental Documents
D Environmental Risk Information Services Database Search: Database Report, City Directory, Historical Aerials, Historical Topographic Maps, Physical Setting Report, and Fire Insurance Maps
E Site Photograph Log
F Freedom of Information Act (FOIA) Requests and Responses

## 1.0 SUMMARY

On May 5, 2021, Gannett Fleming Inc. (GF) was retained by the City of Beaver Falls to conduct a Phase I Environmental Site Assessment (ESA) of the property known as the Beaver Falls Wastewater Treatment Plant, located at 7th Avenue, City of Beaver Falls, Beaver County, Pennsylvania (hereinafter referred to as "subject site"). The subject site consists of eight tax parcels: 01-001-0100-001, 01-001-0100-002, 01-001-0100-003, 01-001-0100-004, 01-001-0100-007, 01-001-0111-000, 01-002-0100-001, and 01-002-0101-000. This Phase I ESA has been requested by the property owner (City of Beaver Falls) for a potential future sale of the property.

The subject site is approximately 4.76 acres and is currently an operating water filtration plant.

This Phase I ESA was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) guidance document, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E 1527-13) and consisted of the following activities:

- A site reconnaissance of the subject site was performed on May 19 and 20, 2021.
- An interview was conducted with Mr. Joseph Durish, Jr., Plant Manager
- A review of reasonably ascertainable regulatory and historical records obtained from environmental agency computer databases and local agencies.
- Preparation of this Phase I ESA Report with GF's findings, opinions, and conclusions.

### 1.1 Findings

A *recognized environmental condition* (REC) is defined in ASTM Practice 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A *Historical REC* (HREC) is a past release of any hazardous substances or petroleum products that has occurred in relation with the property and has been addressed to the satisfaction of the applicable regulatory authority or has met the unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. A *Controlled REC* (CREC) is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. These terms are not meant to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

GFs opinions regarding the presence of RECs, HRECs, CRECs and *de minimis* conditions are summarized in the following table:

| Environmental Conditions | Recognized Environmental Conditions | Historical Recognized Environmental Conditions | Controlled Recognized Environmental Conditions | *De Minimis* Conditions |
|---|---|---|---|---|
| On-Site Listings | NO | NO | NO | NO |
| Off-Site Listings | NO | YES | NO | NO |
| Present/Historic Site Use | YES | YES | NO | NO |
| Surrounding Land Use | NO | NO | NO | NO |

In consideration of the information collected during historical research; the site reconnaissance; and local, state, and federal environmental record reviews, the following four RECs and two HRECs were identified at the subject site during the Phase I ESA:

**RECs:** Four RECs were identified as follows:

1) Beaver Falls Steel Works: the former location of the Beaver Falls Steel Works on the northern portion of the subject site. The Steel Works appear on fire insurance maps from 1886 through 1907. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination by various metals, inorganic and organic compounds, and acids/alkalis.
2) Beaver Falls Iron Company: the former location of the Beaver Falls Iron Company in the central portion of the subject site. The Iron Company appears on fire insurance maps from 1886 through 1901. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination by various metals, inorganic and organic compounds, and acids/alkalis.
3) Beaver Falls Gas Works: the former location of the Beaver Falls Gas Works on the southern portion of the subject site. The Gas Works appear on fire insurance maps from 1886 through 1907. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination from the manufactured gas process that was common with these early gas plants. Coal tar was the main waste from these early gas works and the contaminants associated with coal tar are various volatile organics, semivolatile organics, cyanide and acid.
4) Hazardous Building Materials: Given the age of some of the structures present on the subject site, it is possible that they contain hazardous building materials such as asbestos and lead containing paint.

**HRECs:** Two HRECs were identified as follows:

1) Former UST: An estimated 500-gallon gasoline UST formerly supplied leaded gasoline to a generator and was removed in 1998. During removal, the UST and piping were determined to be in good condition with no holes observed as well as minimal rusting. No contaminated soil was discovered or excavated. Confirmation soil sampling was conducted to ensure the surrounding soil was not contaminated. The former UST is not considered to pose a significant environmental concern at present.
2) 220 7th Avenue: This property appears on multiple database listings for UST removals and a sulfuric acid spill. It is not considered to pose a significant environmental concern at present.

### 1.2 Opinions and Conclusions

GF has performed a Phase I ESA for the subject site located at 7th Avenue, city of Beaver Falls, Beaver County, Pennsylvania in general conformance with the scope and limitations of practice ASTM E 1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.3 and 7.4 of this report. This assessment revealed evidence of four RECs associated with the subject property. GF recommends that in order to determine the presence or extent of these RECs, a Phase II ESA be conducted to:

- Characterize the subsurface soil in the vicinity of the former Beaver Falls Steel Works, Iron Company, and Gas Works as it appears from the current property use that these areas were disturbed/redeveloped as part of the WWTP build out. The soil investigation would determine if soil meets or exceeds applicable regulatory criteria and presents a concern to the existing and future property owners.
- Verify the presence or absence of hazardous building materials at the subject site.

## 2.0 INTRODUCTION

### 2.1 Property Description and Purpose

The subject site is an approximately 4.76-acre parcel known as the Beaver Falls Wastewater Treatment Plant (WWTP) located at 7th Avenue, City of Beaver Falls, Beaver County, Pennsylvania. The subject site is located along the right (west) bank of the Beaver River between the Beaver Falls-New Brighton Bridge to the south and southwest, railroad tracks to the west and northwest, a vacant city owned lot to the north, and the river to the northeast through southeast. The immediate surrounding area is dominated by industrial development and transportation infrastructure. The subject site is located at Latitude 40°44'31.88" North and Longitude 80°19'9.96" West. A site location map created from the United States Geological Survey (USGS) 7.5 Minute Topographic Map, Beaver, Pennsylvania (2020) is presented as Figure 1. An aerial map displaying the subject site and the surrounding area is presented as Figure 2.

The subject site is currently in operation as a wastewater treatment plant. The following structures are located on site:

- Main Equipment Building
- Garage
- Pumping Station
- BFP/GBT Building (Press Building)
- Grit Building
- Control Building
- Storage Garage
- Oxidation Towers Nos.1 and 2
- Digesters Nos. 1 and 2
- Final Settling Tanks Nos. 1 through 5
- Chlorine Contact Tanks Nos. 1 and 2
- Primary Settling Tanks Nos. 1 through 3
- Thickened Sludge Storage Tank
- Aerated Sludge Holding Tank
- Sludge Bed

The purpose of this Phase I ESA is to identify RECs, HRECs, CRECs, and *de minimis* conditions in connection with the subject site. This Phase I included a site reconnaissance, interviews with knowledgeable parties, contacting local government agencies via Freedom of Information Act (FOIA) letters, and a review of Environmental Risk Information Services (ERIS) reports concerning the subject site and surrounding area.

### 2.2 Scope of Services

The scope of services was performed in accordance with GF's proposal for the Phase I ESA dated May 5, 2021. Peter Falnes, a GF Senior Environmental Scientist with experience in environmental site assessments and qualified as an *Environmental Professional* as set forth in the United States Environmental Protection Agency (USEPA) All Appropriate Inquiry (AAI) Final Rule (40 CFR Part 312) and ASTM E 1527-13, conducted the site reconnaissance on May 19 and 20, 2021 for the Phase I ESA. GF

performed this assessment in a professional manner using standard practices of the environmental consulting industry. The qualifications for the GF personnel involved in this Phase I ESA are included in Appendix A.

This Phase I ESA included the following scope of services:

- Review of the ERIS environmental regulatory database reports regarding the subject site and surrounding site land uses. The reports provided by ERIS include a database report, city directories, historical aerial photographs, historical topographic maps, and fire insurance maps.
- Performance of a site reconnaissance which included a walk-through of the subject site assessing evidence of ASTs and/or USTs, unusual surficial staining, detectable odors, stressed vegetation, hazardous waste storage and/or handling activities, possible PCB-containing materials, drainage features, and obvious or potential environmental impairment due to the current land-use activities.
- Interviews with a Key Site Manager(s), Owners, or Developers familiar with the subject site regarding potential environmental concerns.
- Performance of an off-site reconnaissance to the extent visually and/or physically observed during the subject site reconnaissance.
- Preparation of a written report summarizing findings and conclusions.

### 2.3 Limiting Conditions, Deviations, Exceptions, and Significant Assumptions

This Phase I ESA report is based partially on information, documents, and data obtained from others, and GF makes no representation or warranty concerning the accuracy and completeness of this information describing site operations or environmental conditions. Some of the information in this report may be subject to varying interpretation and conclusions. The information contained in this report was developed from information available and conditions observed on the survey date. GF shall not be held liable for financial or other losses or subsequent damage caused by or related to any use of this document.

During the site reconnaissance, GF also noted the use of properties in the immediate vicinity. This off-site reconnaissance was performed to observe land use and operations at adjacent properties and to note obvious environmental conditions such as vacant drums, stained surface soil, underground storage tanks (USTs), aboveground storage tanks (ASTs), and filled areas. Portions of adjacent properties may not have been visible from GF's observation point on the subject site and/or right-of-ways.

The following items are considered non-scope considerations under ASTM E 1527-13 and were not included in the scope of work for this Phase I ESA:

- Asbestos-containing material (ACM)
- Radon surveys
- Lead-based paint (LBP)
- Lead-in drinking water
- Wetlands evaluation
- Regulatory Compliance Evaluation
- Cultural and historic resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- High voltage power lines

### 2.4 User Reliance

This report has been prepared on behalf of the City of Beaver Falls. No other party is entitled to rely upon information or opinions contained in this report without GF's prior written authorization. This Phase I ESA was conducted using the industry standard of diligence, and skill that experienced professionals in the field would use in completing a Phase I ESA under similar circumstances. In preparing this report, GF relied on the information provided to it except to the extent that GF had actual knowledge that certain information was incorrect, or unless it was obvious that certain information was incorrect based on additional information obtained in performing the Phase I ESA.

If additional information becomes available which might impact our environmental conclusions, we request the opportunity to review the information, reassess the potential concerns, and modify our opinion, if warranted. Although this assessment has attempted to identify the potential for environmental conditions or "contamination" on the subject site, potential sources of environmental impact may have escaped detection due to: (1) the limited scope of this assessment, (2) the inaccuracy of public records, and (3) the presence of undetected and unreported environmental incidents.

## 3.0 USER PROVIDED INFORMATION

### 3.1 Title Records

The ASTM standard provides that the user review title records and provide answers to an ESA User Questionnaire. GF provided the owner's representative, Joseph Durish, Jr., Plant Manager, with an Environmental Due Diligence Owner/Occupant Questionnaire on May 19, 2021. GF has received the completed copy of the questionnaire on May 20, 2021 which is included in Appendix B.

### 3.2 Environmental Liens or Activity and Use Limitations

There is no known information regarding Environmental Liens or Activity and Use Limitations located at the subject site.

### 3.3 Specialized Knowledge

This Phase I ESA will be used during a potential sale of the property.

### 3.4 Commonly Known or Reasonably Ascertainable Information

No other information was provided regarding commonly known or reasonably ascertainable information other than what is incorporated into this report.

### 3.5 Valuation Reduction for Environmental Issues

According to ASTM E 1527-13, it is the responsibility of the user of this Phase I ESA to consider the relationship of the purchase price of the subject site to the fair market value if it was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price that does not reasonably reflect fair market value if the subject site were not contaminated and make a written record of such explanation. Among the factors to consider will be the information that becomes known to the user pursuant to this Phase I ESA report. The ASTM standard does not require that a real estate appraisal be obtained in order to ascertain fair market value of the property. Information regarding a valuation reduction was not provided to GF to make this assessment.

### 3.6 Owner, Property Manager, and Occupant Information

The subject site is currently owned by the City of Beaver Falls.

### 3.7 Reason for Performing Phase I ESA

The Phase I ESA was conducted for Due Diligence purposes to identify RECs and/or potential environmental conditions in connection with the subject site and to qualify for landowner liability protection as defined in 42 U.S. C. 9601(35)(B) under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

## 4.0 RECORDS REVIEW

The purpose of the records review is to obtain and review readily available and reasonably ascertainable documents to assist in the identification of potential RECs.

### 4.1 Previous Reports

An environmental document was provided to GF by the Water Filtration Plant.

*Underground Storage Tank Closure Report*
Aurora Environmental, Inc. submitted a report to the City of Beaver Falls on June 16, 1998, summarizing the description of an UST closure at the subject site. On May 5th, 1998, an estimated 500-gallon gasoline UST used to supply leaded gasoline to a generator was removed. Unusable product, gasoline/wash-water, and sediments were placed into a 55-gallon drum for disposal. The UST and piping were determined to be in good condition with no holes observed as well as minimal rusting. No contaminated soil was discovered or excavated. Confirmation soil sampling was conducted to ensure the surrounding soil was not contaminated. Excerpts from this document is provided in Appendix C.

### 4.2 Standard and Additional Environmental Record Sources

Databases maintained by various local, state, and federal regulatory agencies were accessed by ERIS and reviewed by GF. ERIS is a company that utilizes computer search techniques to query governmental agency environmental database information for a specified geocoded area. The subject site and nearby properties were reviewed for potential environmental concerns. Search radii or approximate minimum search distances by ERIS comply with those specified in ASTM Practice E 1527-13. Where the search radius is specified as "Property Only" (PO), positive results within 0.25 miles are included. GF reviewed the ERIS Database Report dated May 20, 2021, which is included in Appendix D. The following table is a summary of environmental databases which had regulatory-listed surrounding properties plotted by ERIS.

| | Environmental Database | Search Radius from Property Perimeter (miles) | Site | Off-Site Properties |
|---|---|---|---|---|
| **Standard Environmental Records** | RCRA TSD | 0.5 | 0 | 2 |
| | RCRA LQG | 0.25 | 0 | 1 |
| | RCRA SQG | 0.25 | 0 | 2 |
| | RCRA NON GEN | 0.25 | 1 | 0 |
| | SHWS | 1.0 | 0 | 1 |
| | LUST | 0.5 | 0 | 7 |
| | UST | 0.25 | 0 | 4 |
| | AST | 0.25 | 0 | 1 |
| | UNREG TANK | 0.25 | 0 | 3 |
| | ENG | 0.5 | 0 | 1 |
| | INST | 0.5 | 0 | 1 |
| | VCP | 0.5 | 0 | 4 |
| | CLEANUP EFACTS | 0.5 | 0 | 16 |
| | HMIRS | 0.125 | 0 | 1 |
| | SPL | 0.125 | 0 | 1 |

### 4.2.1 Subject Site Database Search Results

Based on a review of the ERIS report, the subject site is listed on the RCRA Non-Generators (RCRA NON GEN) database. This database is a listing of facilities that do not presently generate hazardous waste, and therefore does not represent a REC. This listing occurred under the unplottable list, which consists of sites with poor address quality, usually without zip code information.

### 4.2.2 Surrounding Properties Database Search Results

Properties with regulatory listings which are not adjacent and are inferred to be hydraulically down-gradient of the subject site are not anticipated to be RECs since potential contaminants would not typically impact the subsurface at the subject site except in instances where a vapor encroachment or contaminated groundwater pathway may exist (see Section 5.6.21). No properties with regulatory listings in the ERIS Database Report are upgradient or cross gradient and within a distance considered to potentially pose some form of environmental risk to the subject site. Properties mapped within a quarter

mile of the subject site, even though they are not adjacent, are summarized below. The complete list of database findings and descriptions/reports associated with those findings are included as part of the ERIS Database Report in Appendix D.

AST: The Aboveground Storage Tanks database is a listing of aboveground storage tanks (ASTs) registered with the Pennsylvania Department of Environmental Protection (PADEP). It does not include ASTs storing highly hazardous substances, or ASTs with capacities greater than 21,000 gallons. Twelve listings were reported at the Keystone Profiles at 220 7th Ave Beaver Falls City. Nine ASTs have current permits and have no recorded violations. The nine active tanks range in size from eight 310-gallon active tanks listed as other, and one 10,000-gallon hazardous substance tank. The three inactive tanks include one 250-gallon gasoline tank, one 500-gallon diesel fuel tank, and one 10,000-gallon hazardous substance tank. This is not considered a REC.

VCP: The Voluntary Cleanup Program database is a listing of participants in PADEP Land Recycling Program's voluntary cleanup and reuse of contaminated commercial and industrial sites. Republic Technologies INTL FAC at 220 7th Avenue Beaver Falls, PA is listed as sites completed, Land Recycling Cleanup Locations – Groundwater and Soil Media. Contamination categories include Inorganics, PCB, and Other Organics. Due to the completed status of the cleanup, this is not considered a REC.

LUST: The Underground Storage Tank Releases is a listing of confirmed release incidents that have been reported to PADEP since enactment of the Storage Tank and Spill Prevention Act (Tank Act) in July, 1989. Two separate cleanups were completed in the years 1994 and 1999 for an UST system containing petroleum at the Keystone Profiles Facility at 220 7th Avenue Beaver Falls, PA. Due to the completed status of the cleanup, this is not considered a REC.

CLEANUP EFACTS: The Environmental Facility Application Compliance Tracking System database is a listing of Environmental Cleanup and Brownfields sites maintained by PADEP and includes leaks from unregulated and home heat fuel tanks. Two entities are mapped by ERIS within a quarter mile of the subject site: Keystone Profiles and Republic Technologies Intl. Fac., both located at 220 7th Avenue Beaver Falls. Both listings are associated with completed UST cleanups and active USTs, are currently in use and active. Due to the completed status of the UST cleanups, this site is not considered a REC.

ENG: The Engineering Controls database lists sites with engineering controls recorded by the Pennsylvania Department of Environmental Protection Land Recycling and Environmental Cleanup program. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. The Republic Technologies INTL facility located at 220 7th Ave Beaver Falls is listed on the database as deed restricted. It does not represent a REC.

HMIRS: The Hazardous Materials Information Reporting System Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation. Keystone Profiles at 220 7th Avenue Beaver Falls has a hazardous material incident listed on May 10th, 2019. 400 liquid gallons of sulfuric acid was spilled and cleaned up by facility personnel. Due to the recommendation for further training on truck

gauges and monitoring equipment, and no recommendation of further remediation, this is not considered a REC.

INST: List of sites with institutional controls recorded by the Pennsylvania Department of Environmental Protection (DEP)'s Land Recycling and Environmental Cleanup program prior to the implementation of the Pennsylvania Activity and Use Limitation Registry in 2008. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. The Republic Technologies INTL facility located at 220 7th Ave Beaver Falls is deed restricted and does not represent a REC.

RCRA SQG: The RCRA Small Quantity Generator's List is provided by USEPA and lists hazardous waste generators that are responsible for generating more than 100 kilograms, but less than 1,000 kilograms per month. One facility located at 201 7th Avenue Beaver Falls occupied by Morrow Lincoln Mercury. As of January 2021, there are no compliance monitoring and enforcement (violations)records associated with this facility. Therefore, this is not considered a REC.

UNREG TANK: The Tank Facilities Not Currently Listed database is a list of tanks not currently registered with PADEP. One site is mapped within a quarter mile the subject site: Keystone Profiles 220 7th Avenue Beaver Falls, PA. Six tanks are listed under this database; all have either been closed, removed, or exempt from state law. A 10,000-gallon Hazardous Substance tank was installed in 1970 and removed in 2000. A 20,000-gallon Heating Oil tank was installed in 1974 and closed in 1994. A 500-gallon AST containing Diesel Fuel was installed in 1992 and exempt in 1992. A 15,000-gallon UST containing heating oil was installed in 1972 and closed in 1994. A 30,000-gallon UST containing Heating oil was installed in 1977 and closed in 1994. A 250-gallon AST containing gasoline was installed in 1988 and exempt in 1988. Due to the listed status these listings are not considered RECs.

UST: The Underground Storage Tanks database is a list of USTs registered with PADEP. One site appearing in this database is mapped within a quarter mile of the subject site: Keystone Profiles at 200 7th Avenue Beaver Falls. The site contains three inactive heating oil USTs with capacities of a 15,000-gallons, 20,000-gallons, and 30,000-gallons. Due to the closed status of the USTs, this is not considered a REC.

RCRA LQG: The RCRA Generator List is provided by USEPA and lists hazardous waste generators that are responsible for generating 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste. One site is listed within a quarter mile of the subject site: Keystone Profiles LTD at 220 7th Avenue. Violations listed for the operator include record keeping, reporting, and container use and management. Due to the nature of the violations, this is not considered a REC.

RCRA TSD: The RCRA non-CORRACTS TSD Facilities database is a listing of Non-Corrective Action sites listed as treatment, storage, and/or disposal facilities of hazardous waste as defined by RCRA. The listing of Keystone Profiles LTD at 220 7th Avenue is identical to the listing under RCRA LQG above. This is not considered a REC.

The ERIS unplottable list consists of sites with poor address quality, usually without zip code information. However, if street addresses are available, these locations are checked against the known vicinity of the subject site to evaluate if they are located within the select ASTM E 1527-13 search distance. According to the ERIS report, 14 unplottable records were found that may be relevant for the search criteria. Only one of these, the inclusion of the subject site on the RCRA NON GEN database, is relevant to this investigation. That listing is discussed in Section 4.2.1 above. The complete ERIS reports are included in Appendix D.

### 4.3 Regulatory Agency File and Records Review

Findings of the regulatory agency file and records reviewed are provided in Section 4.2.

### 4.4 Physical Setting Sources

A property's physical setting critically influences its potential to be impacted by possible on-site and off-site contaminant sources and influences the probable extent and magnitude of resulting contamination. The geologic, hydrogeologic, climatic, and land-use settings are of particular importance in influencing potential contaminant migration. Physical setting source information was obtained using the following:

- U.S. Geological Survey (USGS) 7.5 Minute Quadrangle Topographic Map, Beaver, Pennsylvania (2020) (Figure 1).
- U.S. Geological Survey (USGS) 7.5 Minute Quadrangle Topographic Map, Beaver Falls, Pennsylvania (2020) (Figure 1).
- ERIS Physical Setting Report dated (PSR) May 18, 2021 (Appendix D).

The subject site is located at a surface elevation of approximately 724 feet above the National Geodetic Vertical Datum of 1929 (NGVD). The closest downgradient surface water body is Beaver River located adjacent to the southeast of the subject site. The surface topography is generally flat, dropping approximately 15 feet abruptly at the southeastern margin to the river. Based on the site and local topography, groundwater likely flows from the site to the southeast. However, the local direction of groundwater flow cannot be conclusively ascertained without the installation of groundwater monitoring wells or piezometers.

The ERIS PSR indicates that the majority of the subject site is mapped within Federal Emergency Management Agency (FEMA) Flood Zone X-12, an area of minimal flood hazard. A narrow portion of the site adjacent to the river is mapped as Flood Zone X-01, a zone indicating a 0.2 percent annual chance flood hazard.

The subject site is underlain by the Pottsville Formation which consists predominantly of gray sandstone and conglomerate, also containing thin beds of shale, claystone, limestone, and coal. It includes thin marine limestones in Beaver County, and minable coals and commercially valuable high-alumina clays may be present locally. The soils of the subject site are mapped by the USDA Natural Resources Conservation Service (NRCS) as Urban land-Conotton complex, 0 to 8 percent slopes (Map Unit UfB).

### 4.5 Radon

Radon is a colorless, radioactive, inert gas, formed by the decay of radium and may be present in soils and rocks containing granite, shale, phosphate, and pitchblende. The United States Environmental Protection Agency's (USEPA) Radon Zone Map for Beaver County (Zone 1) has predicted average indoor radon screening levels of greater than 4 picocuries per liter (pCi/L). The scope of work for this ESA did not include evaluating or testing radon levels.

### 4.6 Historical Use Information on the Subject and Adjoining Property

As required by ASTM E 1527-13, obvious uses of the subject site should be identified from the present back to the site's first developed use or back to 1940, whichever is earlier. This task requires reviewing as many of the standard historical sources as are necessary and that are reasonably ascertainable and likely to be useful. The following text summarizes the historical use information as obtained from ERIS and reviewed by GPI as part of this assessment. The subsections following this summary further describe each historical source consulted.

Historical site use was researched by a review of the following ERIS packages: City Directory, Historical Aerials, Topographic Maps, and Fire Insurance Maps.

#### 4.6.1 Historical City Directories

The City Directory for various years between 1925 and 2020 were obtained from ERIS and are provided in Appendix D. The subject site was not listed on any directories, a common situation for largely unoccupied properties operated by municipal utility authorities. The lack of entries in any directories implies that no previous owners (other than direct antecedents to the Beaver Falls Wastewater Treatment Plant) or uses exist for the subject site after 1925.

1925-2020: Not listed.

#### 4.6.2 Historical Aerial Photographs

Historical aerial photographs for various years between 1939 and 2019 were obtained from ERIS and are provided in Appendix D. The following is a summary of observations from the historical aerial photographs:

1939: Several structures are located at the subject site, including two circular structures at the approximate location of Digesters Nos. 1 and 2 at the southern end. Poor photo quality makes identification of other structures uncertain. To the north, two small structures occupy the currently vacant adjacent lot. To the west, railroad tracks are located in the same alignment as the present day tracks. Three medium to large industrial buildings are located immediately adjacent to the west of tracks. To the south, a two-lane bridge traverses Beaver River in the same relative alignment as the current four-lane Beaver Falls-New Brighton Bridge. Beyond the adjacent properties to the southwest, the residential development along Bridge Street is similar in extent to the current

development. Residential development is also located to the north-northwest of the subject site, with industrial development to the north beyond the railroad tracks.

1947: No significant changes are noted on the subject site. The small buildings on the adjacent lot to the north are no longer visible. Industrial and residential development has increased to the north and northwest of the subject site.

1952: No significant changes are noted on the subject site, other than the regrowth of trees along the bank of the river along the eastern portion of the subject site and on the vacant lot to the north.

1958: No significant changes are noted on the subject site, although photo quality precludes identification of individual structures.

1960: No significant changes are noted on the subject site, although photo quality precludes identification of individual structures.

1969: Several structures associated with the current water filtration plant can be identified, including the two circular structures to the south noted above, and the main equipment building, and the Primary Settling Tanks Nos. 1 through 3. A small outbuilding has been constructed at the north end of the subject site.

1975: The subject site features more structures, including Oxidation Tank No. 1 at the north end and several associated buildings and pools. One of the structures across the railroad tracks to the west has been demolished.

1982: No significant changes are noted on the subject site, although photo quality precludes identification of individual structures.

1993: With the exception of Oxidation Tank No. 2, the northernmost circular structure on the subject site, all extant buildings appear to be depicted in the photo. The other structure to the west of the adjacent railroad tracks has been demolished. Two lanes have been added to the bridge traversing Beaver River to the south. To the north-northeast, a new channel along the right (west) bank of the river diverts water around the dam to the northeast.

2006: The Oxidation Tank No. 2 has been constructed on the subject site.

2010: No significant changes are noted to the subject site or surrounding area.

2013: No significant changes are noted to the subject site or surrounding area.

2015: No significant changes are noted to the subject site or surrounding area.

2017: No significant changes are noted to the subject site or surrounding area.

2019: No significant changes are noted to the subject site or surrounding area.

### 4.6.3 Historical Topographic Maps

Historical topographic maps for various years between 1901 and 2016 were obtained from ERIS and are provided in Appendix D. The following is a summary of observations from the historical topographic maps:

1901: In general, the road, railroad, and bridge alignments in the vicinity of the subject site are similar to their present counterparts. The footprint of development in the area is also similar, although less dense. A cluster of dots representing buildings are depicted at the subject site.

1904: No significant changes are noted to the subject site or surrounding area.

1953: The subject site is labeled "Filtration Plant", although individual buildings are not represented. A building is depicted to the west of the adjacent railroad tracks.

1969: The outlines of pools as well as three of the four circular structures on the subject property are depicted.

1979: No significant changes are noted to the subject site. Development in the surrounding area has reached present day density.

2016: Individual buildings are no longer depicted on the USGS Quadrangles. No significant changes are noted to the subject site or surrounding area.

### 4.6.4 Historical Fire Insurance Maps

Fire insurance maps for various years between 1886 and 1950 were obtained from ERIS and are provided in Appendix D. The following is a summary of observations from the historical fire insurance maps:

1886: Three entities are depicted at the subject site. From north to south, they are the Beaver Falls Steel Works, the Beaver Falls Iron Company, and the Beaver Falls Gas Works. Multiple buildings are associated with each entity. A tail race is depicted at the northeastern corner of the subject site, and a stream or channelized waterway is depicted immediately north.

1891: No significant changes are noted to the subject site.

1896: No significant changes are noted to the subject site.

1901: The buildings associated with the Beaver Falls Iron Company are no longer depicted.

1907: A junk yard and junk shed are depicted at the former location of the Beaver Falls Iron Company.

1912: The junk yard and Beaver Falls Steel Works are no longer depicted.

1921: A Sewage Disposal Plant is depicted in the southern portion of the subject site, directly to the north of Digesters Nos. 1 and 2. The remainder of the subject site is vacant.

1931: No significant changes are noted to the subject site.

## 5.0 SITE RECONNAISSANCE

The purpose of the site reconnaissance was to examine the subject site to assess visual evidence of current or previous activities that may have resulted in adverse environmental impacts. The following section details the subject and adjoining sites' uses and conditions to the extent visually and/or physically observed during the site reconnaissance. A photographic log illustrating conditions and observations made during the site reconnaissance is included in Appendix E.

### 5.1 Methodology

A site reconnaissance of the subject site was completed on May 19 and 20 by Peter Falnes of GF. The site reconnaissance involved a visual assessment for potential indicators of on-site contamination; a review of on-site chemicals, materials, and activities that could potentially produce such contamination; and an evaluation of potential off-site impacts from adjoining properties. Adjoining properties were visually observed from the subject site's boundary.

### 5.2 General Site Setting

The subject site, currently owned by the City of Beaver Falls, is an approximately 4.76-acre irregularly shaped property consisting of eight tax parcels: 01-001-0100-001, 01-001-0100-002, 01-001-0100-003, 01-001-0100-004, 01-001-0100-007, 01-001-0111-000, 01-002-0100-001, and 01-002-0101-000. The subject site is oblong with its long axis oriented northeast to southwest along the right (west) bank of, the adjacent Beaver River. The subject site houses 7 buildings, two digesters, two oxidation tanks, and 13 other tanks and beds associated with water treatment. A majority of the subject site is paved or improved with buildings, with a narrow strip of lawn adjacent to the river and in between buildings. Site topography is generally level, with an approximately 15 foot drop from site elevation to the Beaver River. A narrow portion of the site adjacent to the river is mapped as a 0.2 percent annual chance flood hazard. The surrounding area consists of industrial properties and transportation infrastructure, with some residential development to the west.

### 5.3 Current Use of Property

The subject site is currently in operation as a wastewater treatment plant.

### 5.4 Description of Structures – Other Improvements Site

#### 5.4.1 Structures

The following structures are located on site:

- Main Equipment Building
- Garage
- Pumping Station
- BFP/GBT Building (Press Building)
- Grit Building
- Control Building

- Storage Garage
- Oxidation Towers Nos.1 and 2
- Digesters Nos. 1 and 2
- Final Settling Tanks Nos. 1 through 5
- Chlorine Contact Tanks Nos. 1 and 2
- Primary Settling Tanks Nos. 1 through 3
- Thickened Sludge Storage Tank
- Aerated Sludge Holding Tank
- Sludge Bed

Out of the fifteen structures listed above, the first seven are buildings supporting wastewater treatment. The buildings are summarized as follows:

- Digester Building – This building is situated at the southern end or the property and has a plaque on the exterior commemorating the building's construction date between 1936 and 1937. The building is constructed of brick walls and a wood roof system; the roof is reported to have been replaced in 2003. The Digester Building is approximately 795 square feet and has three levels. The building has electricity and is heated.
- Storage Garage – Insulated metal panel over structural steel frame. Approximately 3,518 square feet, 16 foot wall height at the eave, and 360 square feet of finished space. It is constructed on a concrete slab. Heating is by natural gas blowers. The building is accessed by one door and three 12 foot drive-in doors. The building was constructed in 1997.
- BFP/GBT Building (Press Building) – Decorative concrete building containing approximately 680 square feet of finished space, including a lab and office area. Approximately 1,224 square feet is over a basement. Roof is corrugated steel over steel web joists. The rubber membrane roof cover is original. The building was constructed in 1997.
- Grit Building – Approximately a 960 square feet metal pole building on a concrete slab. Electric heating and fluorescent lighting.
- Main Equipment Building – Brick with concrete block back-up, concrete floors, and a dox plank roof. A total of 1,959 square feet with approximately 980 feet on the first level with 17 foot ceilings. The remainder is 10 foot ceilings. Full basement plus a 400 square foot basement mezzanine. The building construction is reported to be in the 1960's. The roof was replaced in 1998.
- Pumping Station Building – Brick building with concrete floors and steel support structure. A total of 1,049 square feet and approximately 200 square feet of finished space. There is a full basement. The roof was replaced in 2010.
- Maintenance Garage – Brick with concrete back-up and concrete floor. Approximately 828 square feet on ground level with 10 feet of clearance. One overhead door. Rubber membrane roof cover over corrugated steel decking. Fluorescent lighting.

### 5.4.2 Roads, Streets, Parking Facilities, Landscaping

The subject site is located between Beaver River on the east, railroad tracks to the west and north, and Route 18 to the south. Route 18 is on a viaduct immediately south of the subject site and crosses Beaver

River on the Beaver Falls New Brighton Bridge to the southeast. Access to the site is via an access road at the north end. The access road ends at a railroad crossing to the north of the subject site, becoming 6th Avenue to the northwest of the tracks. To the south, the access road continues along the western length of the subject site, with two gates providing access to the plant. Asphalt paving and designated parking lots are located between the western fence and the buildings, with some lawn area to the rear and in between the buildings. A fence surrounds the subject site with a retaining wall on the river side.

### 5.5 Current Uses of Adjacent Properties

Adjoining properties to the extent visually and/or physically observed during the site reconnaissance were for industrial use or occupied by transportation infrastructure specific information relative to the current uses of adjacent properties are as follows:

**North:** A vacant city-owned lot used to stockpile gravel and fill material is located immediately north of the subject site, with the Central Rivers Power Beaver Hydroelectric Power Plant and associated buildings beyond it.

**Northwest:** Railroad tracks and an access road border the site from the west to the north. Beyond the railroad tracks to the northwest lies vacant land and industrial development.

**West:** To the west, the Beaver Falls New Brighton Bridge begins its curve toward the river southeast of the subject site. Beyond the bridge to the west and southwest lie 2nd Street and more railroad tracks. A residential neighborhood is located approximately a tenth of a mile to the west and southwest of the subject site.

**South:** The Beaver Falls New Brighton Bridge is directly adjacent and to the south of the subject site. Beyond the vehicular bridge is a railroad bridge and the Beaver River.

**East:** The Beaver River flows north to south to the east of the subject site.

### 5.6 Interior and Exterior Observations

#### 5.6.1 Stormwater Runoff

Excess stormwater from the site appears to flow to east and southeast toward Beaver River. While onsite, no surface water was observed. Storm drains were identified in the paved areas on site and drain to the plant. A large dual box culvert runs under the site from NW to SE between the two Oxidation Towers conveying runoff to the Beaver River.

#### 5.6.2 Hazardous Substances and Petroleum Products

Chlorine was observed in the Chlorine Storage room of the Main Equipment Room in cylinders. Oil for the diesel generator was observed in a 55-gallon drum in the Emergency generator enclosure and a diesel tank is built into the base of the enclosure. Motor oil, used motor oil, and flammable fluids are stored in the storage garage. No other hazardous substances and/or petroleum products were observed during

the site reconnaissance.

### 5.6.3 Storage Tanks

The subject site currently houses 10 ASTs related to the treatment of wastewater. One 400-gallon AST contains fuel for the emergency generator. No storage tanks were observed on site, and no USTs are known to have been located on the site.

On May 5th, 1998, an estimated 500-gallon gasoline UST used to supply leaded gasoline to a generator was removed. Unusable product, gasoline/wash-water, and sediments were placed into a 55-gallon drum for disposal. The UST and piping were determined to be in good condition with no holes observed as well as minimal rusting. No contaminated soil was discovered or excavated. Confirmation soil sampling was conducted to ensure the surrounding soil was not contaminated. No other USTs are located on the subject site

### 5.6.4 Air Emissions and Odors

No air emissions or odors indicative of a significant environmental release were evident during the site reconnaissance.

### 5.6.5 Pools of Liquid

Wastewater was observed in the oxidation towers, final settling tanks, primary settling tanks, and the sludge holding tank. No other pools of liquid were observed on the site.

### 5.6.6 Drums

One 55-gallon drum was observed in the Emergency Generator Enclosure containing diesel oil. Two 55-gallon plastic drums containing a polymer were observed in the Press building. Three 55-gallon drums were observed in the Garage storage area containing used oil, one drum containing hydraulic fluid, four 55 gallon drums containing motor oil. No other drums were observed on the subject site.

### 5.6.7 Unidentified Substance Containers

No unidentified substance containers were observed on the subject site.

### 5.6.8 Polychlorinated Biphenyl-Containing Materials and Equipment

During the site reconnaissance, mechanical and electrical components at the subject site were evaluated to identify PCB containing equipment. PCBs were used historically in dielectric fluids as an insulating and cooling agent and are regulated under the Toxic Substances and Control Act (TSCA) of 1976.

Prior to 1979, PCBs were used widely in electrical equipment such as transformers, capacitors, switches, and voltage regulators for their dielectric fluid cooling properties. Light ballasts are the primary electrical components of fluorescent light fixtures and are typically located within the light fixture (beneath a metal

cover plate). Ballast units are usually composed of a transformer to reduce incoming voltage, a small capacitor (which may contain PCBs), and possibly a thermal cut-off switch and/or safety fuse. PCBs are also known to be used in various caulking material, especially those around windows and door frames.

Considering the age of the subject site building predates 1979, it is possible that there are PCB-containing materials. Precaution should be taken when handling potentially containing PCB equipment and/or material such as any spent fluorescent lamps or specialized equipment.

Six pole top transformers are located along the access road adjacent to the subject site. The transformers appear to be in good order with no leaks or staining.

### 5.6.9 Heating, Cooling, and Electrical

The buildings are heated and some are cooled. The subject site receives electric power from Duquesne Light, natural gas is supplied by Columbia Gas.

### 5.6.10 Interior Staining or Corrosion

Interior staining or corrosion was not observed.

### 5.6.11 Drains and Sumps

During the site reconnaissance, GF did observed floor drains in all buildings. All floor drains run into the wastewater treatment system.

### 5.6.12 Pits, Ponds, or Lagoons

No natural pits, ponds, or lagoons are located on the subject site. Multiple open storage tanks are used during the wastewater treatment processes.

### 5.6.13 Soil or Pavement Staining

No soil or pavement staining was observed.

### 5.6.14 Vegetative Stress

Stressed or obviously impacted vegetation was not observed.

### 5.6.15 Solid Waste/ Soil Disturbance

Solids are removed from the wastewater during the treatment process and removed from the site by a contractor as described in the next section. No other solid waste was observed on the subject site.

### 5.6.16 Solid and Hazardous Waste Generation, Storage, and Disposal

The solids that are removed during the wastewater treatment process are collected and removed from the site by Joseph J. Brunner, Inc. Disposal Service. No other solid or hazardous waste generation, storage, or disposal activities were observed on the subject site.

### 5.6.17 Potable Water Supply and Wastewater Disposal

The subject site receives potable water from the Beaver Falls Municipal Authority. The site services its own sanitary sewer waste.

### 5.6.18 Wells

No wells were observed or are known to be present.

### 5.6.19 Septic Systems

No septic systems were observed at the subject site.

### 5.6.20 Spills/Releases

No spills or releases were observed at the subject site.

### 5.6.21 Vapor Encroachment Screening

A vapor intrusion assessment was not performed and is outside of the scope of ASTM Practice E 1527-13.

## 6.0 INTERVIEWS

The following subsections summarize the results of the interviews conducted as part of this Phase I ESA.

### 6.1 Interview with Site Manager

Mr. Joseph Durish, Jr., Plant Manager, answered questions about the subject site. Information provided by Mr. Durish has been incorporated into relevant sections of this report.

### 6.2 Interviews with Occupants

The Beaver Falls Wastewater Treatment Plant is the only occupant of the site. Mr. Durish was provided with an Environmental Due Diligence Owner/Occupant Questionnaire on May 19, 2021. GF has received the completed copies of the questionnaire on May 20, 2021, which is included in Appendix B.

### 6.3 Interviews with Government Officials

Local government officials were not interviewed as part of the assessment; however, local government agencies were contacted via FOIA letters and government agencies which had searchable online environmental databases were referenced. To determine if the subject site is under investigation or is known as having a past or present record of actual/potential environmental impacts, GF submitted FOIA requests to the PADEP (via the informal file review process), Beaver County, and the City of Beaver Falls. FOIA responses were either not received as of the date of this report or did not return any records. If a FOIA response is received that indicates the presence of a REC relative to the subject site, GF will address these concerns in an addendum to this report. Copies of FOIA requests and responses are included in Appendix F.

### 6.4 Interviews with Others

Other individuals were not interviewed as part of this assessment.

## 7.0 EVALUATION

A REC is defined in ASTM Practice 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A *Historical REC* (HREC) is a past release of any hazardous substances or petroleum products that has occurred in relation with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. Definitions for CRECs and *de minimis* conditions are included in Section 1.1. GF's findings, opinions, conclusions, and recommendations regarding RECs, HRECs, CRECs, and *de minimis* conditions are described in the following sections.

### 7.1 Findings and Opinions

In consideration of the information collected during historical research, and local, state, and federal environmental record reviews, GF has formulated the opinion that there is evidence of two HRECs and four RECs at the subject site, and that there is not a presence of CRECs or *de Minimis* conditions in connection with the current and former usage of the subject site.

Our opinions regarding the presence of RECs, HRECs, CRECs, or *de Minimis* conditions are summarized in the following table:

| Environmental Conditions | Recognized Environmental Conditions | Historical Recognized Environmental Conditions | Controlled Recognized Environmental Conditions | *De Minimis* Conditions |
|---|---|---|---|---|
| On-Site Listings | NO | NO | NO | NO |
| Off-Site Listings | NO | YES | NO | NO |
| Present/Historic Site Use | YES | YES | NO | NO |
| Surrounding Land Use | NO | NO | NO | NO |

The environmental conditions identified in the table include:

**RECs:** Four RECs were identified as follows:

1) Beaver Falls Steel Works: the former location of the Beaver Falls Steel Works on the northern portion of the subject site. The Steel Works appear on fire insurance maps from 1886 through 1907. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination.
2) Beaver Falls Iron Company: the former location of the Beaver Falls Iron Company in the central portion of the subject site. The Iron Company appears on fire insurance maps from 1886 through 1901. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination.

3) Beaver Falls Gas Works: the former location of the Beaver Falls Gas Works on the southern portion of the subject site. The Gas Works appear on fire insurance maps from 1886 through 1907. The presence of this late 19th century industrial operation indicates the possible presence of subsurface soil contamination.
4) Hazardous Building Materials: Given the age of some of the structures present on the subject site, it is possible that they contain hazardous building materials such as asbestos and lead containing paint.

**HRECs:** Two HRECs were identified as follows:

1) Former UST: An estimated 500-gallon gasoline UST formerly supplied leaded gasoline to a generator and was removed in 1998. During removal, the UST and piping were determined to be in good condition with no holes observed as well as minimal rusting. No contaminated soil was discovered or excavated. Confirmation soil sampling was conducted to ensure the surrounding soil was not contaminated. The former UST is not considered to pose a significant environmental concern at present.
2) 220 7th Avenue: This property appears on multiple database listings for UST removals and a sulfuric acid spill. It is not considered to pose a significant environmental concern at present.

A site map identifying HRECs and RECs is presented as Figure 2.

**CRECs**: No CRECs were identified during this Phase I ESA.

**De Minimis conditions:** No de Minimis conditions were identified during this Phase I ESA.

**Other Pertinent Environmental Concerns**: No other environmental concerns are noted for the site at this time.

### 7.2 Conclusions and Recommendations

GF has performed a Phase I ESA for the subject site located at 7th Avenue, City of Beaver Falls, Beaver County, Pennsylvania in general conformance with the scope and limitations of practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.3 and 7.4 of this report.

This assessment revealed evidence of four RECs associated with the subject property. GF recommends that a Phase II ESA be conducted to:

- Characterize the subsurface soil in the vicinity of the former Beaver Falls Steel Works, Iron Company, and Gas Works as it appears from the current property use that these areas were disturbed/redeveloped as part of the WWTP build out. The soil investigation would determine if soil meets or exceeds applicable regulatory criteria and presents a concern to the existing and future property owners.
- Verify the presence or absence of hazardous building materials at the subject site. A limited hazardous building materials survey for asbestos containing material (ACM) within the thermal system insulation (TSI) was conducted in the Main Equipment Building and is reported in a separate technical memorandum.

### 7.3 Data Gaps and Deletions

In addition to those data gaps discussed in Section 2.3 of this report, no other data gaps were identified at the time of the report.

### 7.4 Environmental Professional Statement and Signatures

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Peter Falnes
Senior Environmental Scientist

## 8.0 REFERENCES

ASTM, 2013, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* ASTM Standard E1527-13.

ASTM, 2010, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions,* ASTM Standards E2600-10.

Environmental Risk Information Services, May 20, 2021. *Database Report*

Environmental Risk Information Services, May 18, 2021. *Fire Insurance Maps*

Environmental Risk Information Services, May 18, 2021. *Physical Setting Report*

Environmental Risk Information Services, May 18, 2021. *Topographic Maps*

Environmental Risk Information Services, May 19, 2021. *Historical Aerials*

Environmental Risk Information Services, May 20, 2021. *City Directory*

**FIGURES**




0 200 Feet

Scale

Gannett Fleming

## REC

1 Beaver Falls Steel Works

2 Iron Works

3 Gas Works

4 Hazardous Building Materials

## Historical REC

1 Removed UST

2 220 7th Ave Misc. Findings

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS, BEAVER COUNTY PENNSYLVANIA

City of Beaver Falls 715 15th Street Beaver Falls, PA 15010

June 2021

Figure 2

**APPENDIX A**

**Environmental Professional Qualifications**

# Peter J. Falnes

## Senior Environmental Scientist

**YEARS EXPERIENCE WITH FIRM:** 21

**YEARS EXPERIENCE WITH OTHER FIRMS:** 11

### CURRENT RESPONSIBILITIES:

Assists with the planning, permitting, and implementation of environmental projects. Has worked closely with public and private entities and with state and federal regulatory agencies to develop plans and specifications involving contaminated soil and groundwater and lead and asbestos.

### EDUCATION:

BS, Marine Science, Richard Stockton College of New Jersey, 1983

### PROFESSIONAL REGISTRATION(S):

Lead Inspector/Risk Assessor: New Jersey - No. 009927 (2011)
Transportation Worker Identification Credential (TWIC): Transportation Security Administration (2016)
Asbestos Inspector: Pennsylvania Department of Labor & Industry - No. 046110 (2018)

### SUMMARY OF EXPERIENCE:

**Port Authority Transit Corporation (PATCO) Control Center Relocation, Camden, NJ,** *Delaware River Port Authority (DRPA)*. Phase Project Manager and Senior Project Scientist for coordination of all contaminated issues with other disciplines for the preliminary study with an alternatives analysis and is providing preliminary and final design documents for the relocation of PATCO's Control Center. Coordinated activities with DRPA personnel during non-peak travel hours to not interfere with the public's use of transportation system. Prepared findings reports and technical specifications for design submission.

**General Engineering Consultant Contract 2014, Philadelphia, PA,** *Southeastern Pennsylvania Transportation Authority (SEPTA).* Phase Project Manager and Senior Project Scientist for coordination of all contaminated issues with other disciplines for design of upgrades to an existing SEPTA regional bus garage. The planned improvements for the site are to complete a stormwater collection system and address the parking lot areas with regrading and resurfacing upgrades. An environmental site investigation was performed in accordance with the Pennsylvania Department of Environmental Protection (PADEP) Land Recycling and PADEP's Bureau of Waste Management, *Management of Fill* # 258-2182-773. The purpose of this investigation was to evaluate the impact of subsurface soils associated with the improvement

construction plans. These activities were also conducted to assess potential construction-related impacts, for health and safety provisions, and for material handling purposes as part of construction.

**Secane Station Improvement Project, General Engineering Consultant Contract 2012, Secane, PA,** *Southeastern Pennsylvania Transportation Authority (SEPTA).* Phase Project Manager and Senior Project Scientist responsible for coordination of all contaminated issues with other disciplines for design of upgrades to an existing SEPTA regional rail station along the Media/Elwyn Line. The planned improvements for the station are aimed at providing Americans with Disabilities Act (ADA)-accessible high-level platforms; canopies; a new, modular station building; a safe and accessible route between platforms, which will be achieved with a precast underpass; and increased parking for commuters. Design services for repairs of the existing, 1870s-era station building are also being provided, which includes a submission to the Pennsylvania Bureau for Historic Preservation. Responsible for preparing site-specific health and safety plans for hazardous materials assessment and preparing work plans related to upcoming construction activities associated with design services. Design carefully incorporates construction phasing, as the existing station facility must remain online during construction.

**Port Authority Transit Corporation (PATCO) Elevator Design and Construction Administration Services, South Jersey, NJ,** *Delaware River Port Authority (DRPA).* Environmental Scientist responsible for preparing site-specific health and safety plans for hazardous materials assessment and preparing work plans related to upcoming construction activities associated with design services for PATCO accessibility improvement at six PATCO stations in Pennsylvania and New Jersey. Coordinated activities with DRPA personnel during nonpeak travel hours to not interfere with public use of transportation system. Prepared findings reports and technical specifications for design submission.

**General Engineering Consultant Contract 2009, Commuter Rail Station Renovations for Installation of New Payment Technologies, 69th Street Terminal, Philadelphia, PA,** *Southeastern Pennsylvania Transportation Authority (SEPTA).* Project Scientist responsible for overseeing all contaminated issues for design and construction of a new, steel-framed platform extension and enclosure for the Norristown High-Speed Trolley Line at SEPTA's 69th Street Terminal. The project also includes modifications to the existing masonry walls to accommodate new turnstiles and fare-collection equipment and to better facilitate pedestrian traffic. Responsibilities included performing hazardous materials investigations; preparing environmental documentation and incorporating into final design. Design carefully incorporated construction phasing, as the existing station facility must remain online during construction.

**Paoli Intermodal Transportation Center, Philadelphia, PA,** *Southeastern Pennsylvania Transportation Authority (SEPTA).* Environmental Task Leader responsible for conducting the environmental soil sampling and testing for the new Paoli Transportation Center, which includes a parking facility to accommodate existing and projected passenger demands for both

The National Railroad Passenger Corporation (Amtrak) and SEPTA. Amtrak owns the existing Paoli Station. The area where the new station and parking garage will be constructed and the right-of-way which surrounds it will be purchased. These areas were evaluated as well as the former Paoli Superfund Site.

**Environmental Regulatory Status of New Jersey Projects, Various Locations,** *National Railroad Passenger Corporation (Amtrak).* Project Manager responsible for working with Amtrak on various environmental assignments in this 3-year-term contract. Assigned task of developing spill prevention control and countermeasure (SPCC) plans for three Pennsylvania substations, one New Jersey substation, and one New York substation. Also assigned the task to identify and review the site status of Amtrak's New Jersey sites and assisting Amtrak in closing of specific sites according to New Jersey regulatory requirements.

**Transportation Center – Planning and Preliminary Design, Scranton, PA,** *County of Lackawanna Transit System (COLTS).* Project Scientist responsible for evaluating the hazardous soil and groundwater issues on the site and how it would be addressed by the other engineering disciplines for design and construction of a new intermodal center. The facility will have the ability to queue COLTS buses and intercity buses, serves as a transfer location for shared-riders to COLTS bus system, and provide a staging area for intercity bus operations providing trips to New York City, New York; Philadelphia, Pennsylvania; and Atlantic City, New Jersey. The goal of the facility is to enhance bus operations of COLTS and the other transportation modes by providing a downtown transfer and boarding center.

**Rail Yard Extension Project, PA,** *Confidential Client.* Environmental Manager responsible for the preparation of environmental documentation in the form of a Phase I environmental site assessment of the project corridor to evaluate the existing rail yard for potential, recognized, and/or historically recognized environmental conditions associated with past or current uses of the property or incidents that have occurred on or adjacent to the property.

**National Railroad Passenger Corporation (Amtrak) Security Improvements, Various Locations,** *Amtrak.* Environmental Task Leader responsible for coordinating the environmental sampling and testing for Amtrak's security upgrades design-build project. The prime contractor for this project was Adesta, and our firm was a subconsultant to Adesta. The project involved the design and construction of security upgrades at 11 Amtrak sites including stations and maintenance facilities in Maryland, Washington D.C., Pennsylvania, and Delaware. Each site was evaluated for potential impacts from hazardous materials. Sampling consisted of building material sampling for asbestos building materials and lead-based paint. Soil sampling was also performed at select sites and evaluated for disposal and health and safety concerns. Coordinated soil sampling at the Wilmington Shops site with Amtrak's environmental team. The contaminant of most concern at the Wilmington site are polychlorinated biphenyls (PCBs). The soil sampling that our firm performed was in line with Amtrak's focused feasibility study (FFS) work plan. The data collected by our firm was utilized by Amtrak to help address PCB loading through stormwater runoff on surface soils in unpaved areas.

**Sylvia Packard School, North Massapequa, NY,** *Town of Oyster Bay.* Environmental Scientist responsible for conducting an intrusive asbestos demolition assessment to prepare the plans and specifications for the asbestos abatement prior to demolition activities of the former middle school.

**Portal Bridge Capacity Enhancement, Value Engineering (VE) Study, Secaucus and Kearny, NJ,** *New Jersey Transit (NJ TRANSIT).* Senior Environmental Scientist and Hazardous Materials Discipline Manager for this 3-day VE study of the 50 percent preliminary engineering submission documents. The VE study was conducted using the VE and/or value analysis techniques as procreated by the SAVE International, the Value Society utilizing a multi-disciplined team approach, stressing function and creativity. The study followed a 5-phase job plan: information, creative, analysis, development, and presentation. Following the review of the environmental documentation, Proposal No. G-8 used in-situ remediation; Proposal No. G-9 used remediated historic fill as fill above the flood plain elevation; and Proposal No. G-10 used entomb contamination, in lieu of removal. Argued a presumptive remedy approach using this method coupled with the above proposal subjects as the method to achieve the least cost/highest value to site closure for contaminated sites in the environmentally sensitive part of the project.

**Grove Street and Watchung Avenue Pump Stations, Montclair Township, Essex County, NJ,** *Township of Montclair.* Environmental Manager responsible for the performance of asbestos investigations at both stations to identify asbestos-containing materials that had to be removed prior to upgrade activities. Assisted in the identification and labeling of polychlorinated biphenyl (PCB) transformers and reported on them to the U.S. Environmental Protection Agency to bring the facility into regulatory compliance prior to replacement activities.

**I-95, Section GIR, Philadelphia, PA,** *Pennsylvania Department of Transportation, District 6-0.* Environmental Manager for the reconstruction of I-95 in Philadelphia. Responsibilities included performing hazardous materials investigations; preparing environmental documentation for an updated Phase I environmental site assessment of the project corridor and the subsequent Phase II and III investigations; and serving as the health and safety officer for site operations during the 2008 subsurface boring, sampling, and testing contract for structures and retaining walls.

**Garden State Parkway Interchange 142 Improvements, Essex and Union Counties, NJ,** *New Jersey Turnpike Authority*. Senior Environmental Scientist/Discipline Manager for the preliminary and final design of this interchange improvement project that involves the implementation of new ramp connections from the Garden State Parkway southbound to I-78 eastbound and from the Garden State Parkway northbound to I-78 westbound. Served as the environmental liaison between Gannett Fleming and another firm. The construction cost estimate is $125 million.

**Navy Yard Access (Open-End), Philadelphia, PA,** *Pennsylvania Department of Transportation, District 6-0.* Environmental Manager responsible for conducting a Phase I environmental site assessment of the station and surrounding area. Evaluated site contamination caused by a leaking underground storage tank. Conducted Phase II investigation of soils within the project cut areas. Coordinated site activities with Southeastern Pennsylvania Transportation Authority's consultant performing groundwater remediation. Prepared specifications to address asbestos, lead-based paint hazards as well as soil and groundwater contamination concerns. Assisted geotechnical group with dewatering specifications.

**Remediation and Site Investigation in Support of a No Further Action (NFA) Determination at a Former Automobile Dealership, Bridgewater, NJ,** *Gannett Fleming Project Development Corporation.* Senior Environmental Scientist/Assistant Project Manager responsible for assisting in the development of the scope of work and the implementation of a remediation work plan for the cleanup of a former automobile dealership. Managed on-site remediation activities and environmental sampling in support of cleanup activities. Also responsible for site investigation activities in support of obtaining an NFA letter for the project site.

**Navy Yard Access, Philadelphia, PA,** *Pennsylvania Department of Transportation, District 6-0.* Environmental Manager responsible for assisting in the development of temporary and permanent access roads to the Philadelphia Naval Shipyard to facilitate the redevelopment of the site. Tasks included performing Phase I and II hazardous waste investigations.

**Phase V Escalator Modernization/Standardization Program at the Norristown Transportation Center and the Olney, Pattison Avenue, and 30th Street Stations, Norristown and Philadelphia, PA,** *Southeastern Pennsylvania Transportation Authority.* Licensed City of Philadelphia Asbestos Project Investigator responsible for performing asbestos field investigations and finalizing a building materials survey report covering all four stations.

**Subsurface Investigations and Compliance Monitoring, NJ and PA,** *Confidential Client.* Senior Environmental Scientist responsible for conducting soil and groundwater investigations and assisting in compliance monitoring at an existing gasoline station in New Jersey and at the site of a tank farm in Pennsylvania.

**Phase I and Phase II Site Investigations at Parts Remanufacturing Plants, Philadelphia, PA,** *Pennsylvania Department of Environmental Protection and Cardone Industries, Inc.* Senior Environmental Scientist/Project Manager responsible for conducting Phase I and Phase II investigations in support of property acquisitions and advising both the buyer and the seller of recognized environmental concerns associated with 10 inactive Cardone Industries automobile parts remanufacturing plants.

**NJ Route 18 Extension, Section 3A, Hoes Lane Corridor, Piscataway Township, Middlesex County, NJ,** *New Jersey Department of Transportation.* Senior Environmental Scientist for the preliminary engineering, final design, and final scope development for the extension of NJ Route 18 from the Section 2A terminus at Hoes Lane to I-287 in Piscataway Township. This

project includes the widening and rehabilitation of 2.5 miles of land service highway, along with improvements for 20 at-grade intersections. The project contains one bridge superstructure replacement and widening, two pedestrian bridges, two culverts, and five retaining walls. It also includes more than 4 miles of bikeway and multiuse path design; extensive local roadway, driveway, and parking lot improvements; hydraulic analyses; drainage improvements; 10 traffic signals; and right-of-way document preparation for 45 parcels. Responsible for historic research and a site review for a preliminary site assessment and hazardous waste screening in support of the preparation of a categorical exclusion document for the Hoes Lane Corridor section of the NJ Route 18 Extension project.

**Wayne Junction Electric Car Shop Roof Replacement, Philadelphia, PA,** *Southeastern Pennsylvania Transportation Authority (SEPTA).* Licensed City of Philadelphia Asbestos Project Inspector responsible for providing and coordinating quality assurance air monitoring during the removal of asbestos-containing roofing material in an active train maintenance building. Worked closely with SEPTA construction inspectors to coordinate environmental issues with the contractor, SEPTA's Capital Design and Construction Maintenance Facilities Department, and SEPTA's System Safety Department. Coordinated staffing and laboratory analyses and served as a liaison between the client and the SEPTA workers' union.

**Phase I and II Site Investigations, Various Locations, Staten Island, NY,** *Menicucci Villa & Associates, PLLC.* Environmental Scientist responsible for conducting Phase I environmental site assessments at several Staten Island commercial properties. Also successfully conducted a subsequent Phase II soil and groundwater investigation at an active automobile dealership to collect the information necessary for developing remediation costs, which were critical to property transfer negotiations. This Phase II investigation was performed within an expedited time frame.

**Port Authority Transit Corporation (PATCO) Bridge Painting and Structural Repairs, Camden County, NJ,** *Delaware River Port Authority*. Environmental Scientist responsible for evaluating existing coatings on bridges to determine if they contained hazardous materials, developing specifications for the removal of these coatings in compliance with current environmental regulations, and evaluating background soil samples to document existing soil conditions prior to the removal of lead-based paint from various structures along the PATCO High-Speed Line corridor.

**Roebling Station Parking Lot, Roebling Steel Works Superfund Site, Roebling, NJ,** *New Jersey Transit (NJ Transit).* Environmental Scientist responsible for assisting NJ Transit in preparing a response action work plan in conformance with a U.S. Environmental Protection Agency (U.S. EPA) prospective-purchaser agreement and New Jersey Department of Environmental Protection technical requirements for site remediation on this brownfield project as part of the U.S. EPA's Redevelopment Initiative Program. Worked with the design team to make sure that design features to minimize the adverse effects of contaminated soil and groundwater were in compliance with the work plan.

**Civil and Environmental Design Services for a Railroad Maintenance Yard Expansion, Lindenwold, NJ,** *Delaware River Port Authority.* Environmental Scientist responsible for providing environmental support services for the expansion of a Port Authority Transit Corporation railroad maintenance facility. Proposed improvements included the installation of a new train wash system, a dust collection system for the blowdown pit, a new oil-water separator, a new electrical substation, and a new parts washer. The project involved the design of overall site grading, wetlands delineation and permitting, the preparation of a categorical exclusion document, the design of the oil-water separator, and a soil erosion and sediment control permit. Individual responsibilities involved preparing final plans and specifications and providing construction management services, which included reviewing shop drawings, performing resident observations, and providing clarifications during construction for all asbestos and lead-based paint issues.

**South Jersey Regional Rail Study, Atlantic, Camden, Cape May, Cumberland, and Gloucester Counties, NJ,** *South Jersey Transportation Planning Organization.* Senior Environmental Scientist responsible for identifying and screening known contaminated waste sites along four existing South Jersey rail corridors, which are currently being used for freight service in some sections and have been abandoned in others, to assess the potential impacts of these sites on each of the corridors. The scope of services included inspecting the four rail corridors, evaluating the condition of the existing facilities, determining the potential environmental impacts of new rail service, developing recommendations for new passenger facilities and services, and preparing cost estimates for needed improvements to the corridors.

**Phase I and II Site Investigations, Various Locations, NJ and PA,** *SUPERVALU INC.* Environmental Scientist responsible for conducting Phase I preliminary site assessments and in some cases the subsequent Phase II site investigations for one of the largest supermarket chains in the country. Properties ranged from former grocery stores to abandoned fields. Assessed these properties for potential environmental hazards.

**Chemrex Facility, Bristol, PA,** *Degussa Construction Chemicals, Inc.* Construction Manager responsible for quality assurance/quality control air monitoring for an asbestos removal project involving approximately 48,000 square feet of asbestos surfacing material and thermal insulation. Assisted in preparing the removal specifications and later in providing specification enforcement services. The multiphased project lasted more than a year and was performed concurrently with plant renovations. Asbestos abatement activities took place in an occupied facility without interrupting plant operations.

**Environmental Consulting Services, Various Locations, Southern NJ,** *South Jersey Gas.* Site Manager responsible for coordinating environmental services involving site investigations and remediation activities at 13 South Jersey Gas properties, which fall under two main holding companies. The 10 Energy & Minerals, Inc., properties are either currently or were once

involved with the mining of sand for industrial products. The three South Jersey Fuel, Inc., properties were once used for fuel storage and distribution.

**Site Investigation Activities, Vineland, NJ,** *Vitillo Corporation.* Project Manager responsible for providing environmental services for the National Distribution Corporation (NDC) site in Vineland. The scope of work included evaluating sensitive receptors, profiling and sampling soil contaminants, installing and sampling monitoring wells, and preparing a remedial action work plan. Prior to submitting the remedial action work plan to the New Jersey Department of Environmental Protection, our firm reviewed the site investigation data and remedial options with NDC.

**NJ Route 18, Sections 2F, 7E, and 11H, New Brunswick, NJ,** *New Jersey Department of Transportation.* Senior Environmental Scientist responsible for performing historic research and a site review in support of a preliminary site assessment and hazardous waste screening along three sections of NJ Route 18. Also prepared a proposed sampling plan and a health and safety plan for hazardous waste screening, coordinated the efforts of drillers and laboratory personnel, and collected samples during a subsurface evaluation. Served as one of the principal authors of the hazardous material screening technical environmental study for the project. Addressed hazardous waste management issues during the preparation of final plans and specifications for the project, providing management support for environmental issues during project construction, and serving as the materials discipline leader for the NJ Route 18 Community Partnering Team.

**U.S. Route 1/U.S. Route 130/NJ Route 171 Interchange, Middlesex County, NJ,** *New Jersey Department of Transportation (NJDOT).* Senior Environmental Scientist responsible for assisting with a supplemental investigation and testing for hazardous waste in soils and groundwater for an interchange improvement project. Prepared a summary report for sampling and property acquisition environmental cost estimate reports for use in property acquisitions by NJDOT. Handled hazardous waste management issues during the preparation of final plans and specifications for the project. Provided management support for environmental issues during the construction phase and the closeout of the project.

**Whitehead Road Bridge Replacement, Hamilton Township, Mercer County, NJ,** *New Jersey Department of Transportation (NJDOT).* Senior Environmental Scientist responsible for performing field observations and monitoring the construction of a replacement bridge for conformance to a New Jersey Department of Environmental Protection-approved soil reuse plan. Also prepared daily monitoring reports and attended coordination meetings with NJDOT and the contractor relative to soil reuse.

**Asbestos and Lead-Based Paint Services, Philadelphia Shipyard, Philadelphia, PA,** *Kvaerner Construction, Inc.* Asbestos Investigator/Asbestos Project Inspector, licensed by the City of Philadelphia, responsible for providing Kvaerner Construction with an up-to-date asbestos and lead-based paint inspection for Building No. 772, the findings of which required the removal of asbestos-containing materials and lead-based paint prior to planned renovation activities.

Subsequently, in the role of Inspector, provided enforcement services and performed air sampling during the removal of these materials.

**U.S. Routes 1 and 9, Sections 1K and 3M, Preliminary and Final Designs, Middlesex and Union Counties, NJ,** *New Jersey Department of Transportation (NJDOT).* Senior Environmental Scientist involved in the reconstruction and widening of Sections 1K and 3M for improved capacity and safety. The project involved right-of-way, signalization, jughandles, and the rehabilitation or replacement of four structures. Project permits included a U.S. Coast Guard permit for a new bridge, landfill disruption permits, and New Jersey Department of Environmental Protection wetland permits. Assisted with hazardous waste and property acquisition environmental cost estimate reports. Prepared a site development cost estimate report for the Union County Resource Recovery Facility in support of condemnation proceedings for a partial take of the landfill property and provided expert testimony in the condemnation hearing for NJDOT vs. Union County Utilities Authority in 2006. Also responsible for providing management support for environmental issues during project construction.

**Oak Glen Regional Water Treatment Plant Expansion, Howell Township, Monmouth County, NJ,** *New Jersey American Water.* Senior Environmental Scientist responsible for assisting in the preparation of a temporary dewatering permit project report. Compiled dewatering information, including a radius search for known and suspected hazardous waste sites and a prediction of water quantity and quality for the proposed construction of improvements at an existing treatment plant.

**EXPERIENCE PRIOR TO GANNETT FLEMING:**

**Earth Tech, Inc., Cherry Hill, NJ**

**Naval Contracts, Various Locations, MA, NY, and NJ,** *Naval Facilities Engineering Command, Northern Division.* Project Superintendent responsible for providing oversight during remediation and stabilization activities involving underground storage tank removals and replacements; the cleanup of contaminated soil and water; polychlorinated biphenyl (PCB)-containing transformer removals; asbestos abatement and stabilization; lead abatement, stabilization, and decontamination; and demolition activities. Coordinated work activities with local unions, tracked and ordered supplies, coordinated waste disposal activities, and maintained daily contact with the U.S. Navy's resident officer in charge of construction for the site.

**Resource Conservation and Recovery Act (RCRA) Facility Closure, PR,** *Confidential Client.* Field Team Leader for the implementation of a RCRA feasibility investigation work plan at a decommissioned chemical facility. Implemented a sampling program and the subsequent remediation of asbestos debris and mercury-contaminated soil.

**Phase 2 Remedial Investigation, NJ,** *Confidential Client.* Environmental Technician responsible for assisting in the initial remedial investigation where soil and groundwater sampling identified several areas of concern. Field Team Leader in the Phase 2 remedial investigation responsible for coordinating field efforts with on-site and off-site laboratories. Worked directly with a Geoprobe to delineate the extent of a chlorinated solvent plume.

**Wetlands Restoration, NJ,** *Confidential Client.* Environmental Scientist responsible for overseeing a wetlands restoration project in response to a notice of violation (NOV) from the New Jersey Department of Environmental Protection, which indicated that wetlands had been filled. Worked with the state to delineate the former wetlands and directed the excavation contractor in the removal of contaminated fill to preconstruction contours. The NOV was later rescinded. At the same site, implemented a wetlands restoration plan for a 1.03-acre area, converting an old parking lot into a freshwater palustrine forested wetland.

**Asbestos, Lead-Based Paint, and Polychlorinated Biphenyl (PCB) Ballast Survey, Philadelphia, PA,** *Covenant Life Insurance Company.* Senior Staff Professional responsible for conducting an asbestos survey, a lead-based paint survey, and a PCB ballast inventory for a nine-story office building, a four-story 18th century mansion, and 4 four-story townhouses located on a property in Philadelphia. Provided on-site specification enforcement services for the subsequent asbestos, lead-based paint, PCB light ballast, and PCB transformer removal program. Also conducted a subsurface soil investigation in the basement during the remediation project.

**Asbestos Reinspection, Jersey City, NJ,** *Jersey City Board of Education.* As Program Manager, acted as an Asbestos Management Planner, Coordinator, and Quality Control Coordinator for field inspectors assigned to the project.

**PROFESSIONAL AFFILIATIONS:**

American Industrial Hygiene Association
Association of Engineering Geologists

**APPENDIX B**

**Environmental Due Diligence Owner/Occupant Questionnaire**

# ENVIRONMENTAL DUE DILIGENCE
# OWNER/OCCUPANT QUESTIONNAIRE

The time you take to complete this questionnaire will help Gannett Fleming minimize the impact on your time and staff resources when we arrive onsite. Please feel free to use additional sheets if necessary. Thank you!

| SOURCE OF KNOWLEDGE CONCERNING SITE | |
|---|---|
| 1. Name of individual completing questionnaire | JOE DURISH |
| 2. Title | PLANT MANAGER |
| 3. Telephone | 724-561-6511 |
| 4. Fax | 724-843-6787 |
| 5. What is the nature of your knowledge of the Site (i.e. on-site management, staff, absentee owner, etc.)? | ON SITE MANAGEMENT |
| 6. When does your first-hand knowledge of the Site begin (year)? | 2012 |

| BASIC SITE INFORMATION | | Check if appropriate | ✓ |
|---|---|---|---|
| 1. Site number or unique identifier, such as facility name | BEAVER FALLS WASTEWATER TREATMENT PLANT | | |
| 2. Site address, including zip code | 100 6th AVE EXTENSION to 300 6th AVE BEAVER FALLS | | |
| 3. Inside incorporated area of... | CITY OF BEAVER FALLS | Not applicable | |
| 4. County | BEAVER | | |
| 5. Legal description (please attach if available) | | | |
| 6. Approximate size of property | 4.76 ACRES | | |
| 7. Tax parcel number | EIGHT PARCELS 12-006-0101-010 | | |

| CURRENT SITE CONDITIONS | |
|---|---|
| 1. Who owns the Site? | City of Beaver Falls |
| 2. Does anyone other than the owner occupy the Site? | No |
| 3. What is the nature of the current use? | Wastewater Treatment Plant |
| 4. When was the Site first occupied and/or developed? | 1936 " |
| 5. Was the Site ever occupied for the same use by a previous occupant? If so, when? | ~~Undeveloped~~ 30 UNKNOWN |

| SITE FEATURES/INDICATORS OF RECOGNIZED ENVIRONMENTAL CONDITIONS | | | |
|---|---|---|---|
| **To the best of your knowledge,** does the subject Site have, or has it ever had… | **Please check (✓) as appropriate and explain** | | |
| | **Never had** | **Currently has** | **Formerly had** |
| 1. Underground storage tanks? | No | | |
| 2. Indications of a release from an underground storage tank? | ✓ | | |
| 3. Above-ground storage tanks? | | 10 | |
| 4. Fuel storage and dispensing equipment? | NA | ✓ 400 gallon for Emergency generator | |
| 5. Ponds, pits or lagoons? | ✓ | | |
| 6. A septic system? | ✓ | | |
| 7. Water wells? | ✓ | | |
| 8. Disposal wells? | ✓ | | |
| 9. Retention basins? | ✓ | | |
| 10. Paint Booth? | ✓ | | |
| 11. Wash Rack or Area? | ✓ | | |
| 12. Storm drains? | | ✓ | |
| 13. Dry wells? | ✓ | | |
| 14. On-site waste treatment or disposal? | ~~✓~~ | ✓ Waste sludge ↓ LANDFILL | |

| SITE FEATURES/INDICATORS OF RECOGNIZED ENVIRONMENTAL CONDITIONS | | | |
|---|---|---|---|
| **To the best of your knowledge,** does the subject Site have, or has it ever had… | **Please check (✓) as appropriate and explain** | | |
| | **Never had** | **Currently has** | **Formerly had** |
| 15. Electrical transformers or other equipment potentially containing polychlorinated biphenyls (PCBs)? | | Possibly. | |
| 16. Stationary, in-the-ground hydraulic lifts? | | 1 above ground | |
| 17. Fill material brought onto the Site? By whom? | N/A | | |
| 18. Pipelines carrying petroleum or hazardous materials? | ✓ | | |
| 19. Stained soil? | ✓ | | |
| 20. Unusual odors? | ✓ | sewage | |
| 21. Pipes, fill ports, or access ways of unknown origin protruding from the ground? | ✓ | | |
| 22. Sheen or other discoloration of surface water? | ✓ | | |
| 23. Distressed vegetation (other than due to lack of water)? | ✓ | | |
| 24. Does the Site accept construction debris for pit backfill? | ✓ | | |
| 25. Mixing, filling, or on-site application of pesticides other than for structural treatment or sanitation? | ✓ | | |
| 26. Environmental assessments or investigations? | ✓ | | |
| 27. Lead-based paint? | N/A | | |
| 28. Surveys for lead-based paint? | ✓ | | |
| 29. Lead abatement activities? | ✓ | | |
| 30. Asbestos-containing materials? | | SACM | |
| 31. Asbestos surveys? | ✓ | | |
| 32. Asbestos abatement activities? | | | 2000 or 2001 |
| 33. Environmental liens against the Site? | ✓ | | |

| SITE FEATURES/INDICATORS OF RECOGNIZED ENVIRONMENTAL CONDITIONS | | | |
|---|---|---|---|
| **To the best of your knowledge,** does the subject Site have, or has it ever had… | **Please check (✓) as appropriate and explain** | | |
| | **Never had** | **Currently has** | **Formerly had** |
| 34. Notices of environmental violations from any regulatory agency? | | 2019 DEP Suspended solid, Administrative | |
| 35. Any investigation by a governmental agency of potential responsibility for environmental contamination, including responsibility for off-Site concerns? | ✓ | | |
| 36. Any lawsuits, disputes or administrative proceedings regarding environmental concerns associated with the Site, or activities conducted at the Site? | ✓ | | |

| PREVIOUS SITE USES | | |
|---|---|---|
| **To the best of your knowledge,** please identify previous uses, occupants, and dates of occupancy for the subject Site | **Check if appropriate** | ✓ |
| • Previous occupant | | |
| • Nature of use | | |
| • Dates of occupancy | | |
| • Previous occupant | | |
| • Nature of use | | |
| • Dates of occupancy | | |
| • Previous occupant | | |
| • Nature of use | | |
| • Dates of occupancy | | |

| **To the best of your knowledge, has the subject Site or an adjoining property ever been used as a…** | **Subject Site** | | **Adjoining Properties (including those across the street)** | |
|---|---|---|---|---|
| | **Yes** | **No** | **Yes** | **No** |
| 1. Fueling station (other than during current use)? | | ✓ | | |
| 2. Manufacturing facility, Round coil small | ✓ | | | |
| 3. Vehicle repair facility? | | ✓ | | |

| PREVIOUS SITE USES | | | | |
|---|---|---|---|---|
| **To the best of your knowledge, has the subject Site or an adjoining property ever been used as a…** | **Subject Site** | | **Adjoining Properties (including those across the street)** | |
| | **Yes** | **No** | **Yes** | **No** |
| 4. Commercial printing facility? | | ✓ | | ✓ |
| 5. Dry cleaner? | | ✓ | | ✓ |
| 6. Photo-processing laboratory? | | ✓ | | ✓ |
| 7. Junkyard? | | ✓ | | ✓ |
| 8. Commercial painting facility? | | ✓ | | ✓ |
| 9. Recycler? | | ✓ | | ✓ |
| 10. Waste treatment, storage or disposal facility? | ✓ | | | |
| 11. Waste transfer station? | | ✓ | | ✓ |
| 12. Landfill? | | ✓ | | ✓ |
| 13. Pest control facility? | | ✓ | | ✓ |
| 14. Asphalt batch plants? | | ✓ | | ✓ |
| 15. Concrete batch plants? | | ✓ | | ✓ |
| 16. Gravel pit or other mining operations? | | ✓ | | ✓ |
| 17. Other industrial facility? | | ✓ | | ✓ |

| WASTE DISPOSAL | How is waste disposed of and by whom (if applicable)? | Check (✓) if N/A |
|---|---|---|
| 1. Used oil | motor oil, pump oil, local ✓ | |
| 2. Oil filters | | |
| 3. Wash rack oil/grease | | ✓ |
| 4. Mud/grit from wash racks | | ✓ |
| 5. Paint waste | | ✓ |
| 6. Solvent wash tank waste | | ✓ |
| 7. Off-spec fuel | | ✓ |
| 8. Waste antifreeze | | ✓ |
| 9. Non-hazardous solid waste (dumpsters) | sludge, rags, grit | |
| 10. Tires | | ✓ |

| WASTE DISPOSAL | How is waste disposed of and by whom (if applicable)? | Check (✓) if N/A |
|---|---|---|
| 11. Batteries | | ✓ |
| 12. Return concrete or off-spec products | | ✓ |
| 13. Slimes or fines from wash plant | | ✓ |
| 14. Other wastes (please specify) | Water Wastewater waste | |
| 15. Other wastes (please specify) | " | |

| UTILITIES | |
|---|---|
| Who provide the following services to the Site? | |
| 1. drinking water | Beaver Falls Municipal Authority |
| 2. gas | Columbia Gas |
| 3. electricity | DUQUESNE |
| 4. heating oil, if applicable | N/A |
| 5. sanitary sewage disposal | SELF |
| 6. garbage disposal | Bruner's "all dumpsters" |
| 7. industrial wastewater disposal | NO |

| PERMITS | | | | |
|---|---|---|---|---|
| **To the best of your knowledge,** does the Site have, or has it ever had, any of the following? | **Yes** | **No** | **Don't know** | **Descriptions and/or comments** |
| 1. Storm Water Discharge Permit? Issuing agency and issue date? Fees/taxes paid? Any actions required? When? | X | | | Permit No. PA0026883 Expiration Date: 10/31/2023 |
| 2. Air quality permit? Issuing agency and issue date? Fees/taxes paid? Any actions required? When? | | X | | Permit No. Expiration Date: |
| 3. Is the Site registered as a hazardous waste generator? Other registration numbers? Fees/taxes paid? Any actions required? When? | | X | | RCRA EPA ID No.<br>RCRA State ID No. |

| PERMITS | | | | |
|---|---|---|---|---|
| **To the best of your knowledge,** does the Site have, or has it ever had, any of the following? | **Yes** | **No** | **Don't know** | **Descriptions and/or comments** |
| 4. Wastewater discharge permit? Issuing agency and issue date? Fees/taxes paid? Any actions required? When? | X | | | Permit No. PA 0026883 Expiration Date: 10/31/2023 |
| 5. Reclamation or mining permit? | | X | | |
| 6. Special use permit? | | X | | |
| 7. Any other types of permits? Please list. | | X | | |

| OTHER HELPFUL DOCUMENTS | Check (✓) if Yes (attach copy of each document) | Check (✓) if No |
|---|---|---|
| **Do you have any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental conditions. These include, but are not necessarily limited to:** | | |
| 1. Environmental site assessment report(s) | | ✓ |
| 2. Environmental compliance audit report(s) | ✓ | |
| 3. Environmental permit(s) and/or registrations | ✓ | |
| 4. Registrations for underground storage tanks and/or above-ground storage tanks | | ✓ |
| 5. Registrations for underground injection systems | | ✓ |
| 6. Material safety data sheets | ✓ | |
| 7. Community right-to-know reports | ✓ | |
| 8. Safety plans; preparedness and prevention/contingency plans; spill prevention, control, and countermeasures plans; etc. | ✓ | |
| 9. Reports regarding hydrogeologic conditions on the property or surrounding area | | ✓ |
| 10. Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property | | ✓ |
| 11. Hazardous waste generator notices or reports | | ✓ |

mostly OMPs

| OTHER HELPFUL DOCUMENTS | Check (✓) if Yes (attach copy of each document) | Check (✓) if No |
|---|---|---|
| 12. Geotechnical studies and tests | | ✓ |
| 13. Risk assessments | | ✓ |
| 14. Deed restrictions and/or other activity and use limitations (AULs) | | ✓ |
| 15. Other (please specify) | | |

**Completed by:**

Signature: Joe Durish Jr

Printed Name: JOE DURISH JR

Organization: CITY OF BEAVER FALLS STP

Date: 5-19-21

# APPENDIX C

**Excerpts from Environmental Documents**

Aurora Environmental Inc.

1031 Third Avenue
New Brighton, PA 15066
(724) 843-1494
FAX: (724) 843-2392

June 16, 1998

Mr. Darwin Main
City of Beaver Falls
Water Pollution Control Plant
715 15th Street
Beaver Falls, PA 15010

RE: Underground Storage Tank Closure Report Project No. 98-038

Dear Mr. Main:

Enclosed are two copies of the Underground Storage Tank System Closure Report. The submission and maintenance of closure report options can be located on page 9 of the Closure Report. You are not required to submit to the Pennsylvania Department of Environmental Protection, but must maintain this report for a minimum of three years.

If you have any questions please do not hesitate to call.

Sincerely,

Gregory D. Barr
Environmental Scientist/Project Manager

enclosure

RECEIVED
JUN 25 1998

2530-FM-LRWM0159 4/96

ATTACHMENT 4

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

04-84073
Facility I.D.

City of Beaver Falls — Beaver
Municipality — County

June 12, 1998
Date Prepared

Gregory D. Barr
Name of Person Submitting Report
(Please Print)

Aurora Environmental, Inc.
Company Name
(If Applicable)

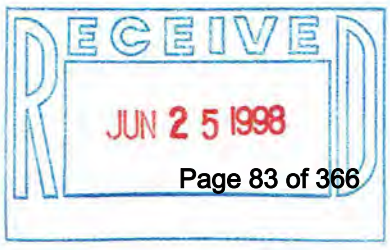
Environmental Scientist/Project Manager
Title

Closure Method (Check all that apply):

- ☒ Removal
- ☐ Closure-In-Place
- ☐ Change-In-Service

Site Assessment Results (Check all that apply):

- ☒ No Obvious Contamination - Sample Results Meet Standards/Levels
- ☐ No Obvious Contamination - Sample Results Do Not Meet Standards/Levels
- ☐ Obvious, Localized Contamination - Sample Results Met Standards/Levels
- ☐ Obvious, Localized Contamination - Sample Results Do Not Meet Standards/Levels
- ☐ Obvious, Extensive Contamination



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

DATE RECEIVED: _____

# UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

Owners who are permanently closing underground storage tanks may use this form to demonstrate than an underground storage tank closure was performed in accordance with the "Closure Requirements for Underground Storage Tank Systems" document. PLEASE PRINT OR TYPE. COMPLETE ALL QUESTIONS.

## SECTION 1.Owner/Facility/Tank/Waste Management and Disposal Information

1. Facility ID Number: 04-84073
2. Facility Name: City of Beaver Falls - *Water Pollution Control Plant*
3. Facility County: Beaver
4. Facility Municipality: City of Beaver Falls
5. Facility Address: 715 15th Street, Beaver Falls, PA 15010
6. Facility Contact Person: Darwin Main
7. Facility Telephone Number: (724) 843-7184
8. Owner Name: City of Beaver Falls
9. Owner Mailing Address: 715 15th Street, Beaver Falls, PA 15010
10. Description of Underground Storage Tanks (Complete for each tank closed)

| | | | | | |
|---|---|---|---|---|---|
| DATE OF TANK CLOSURE (Month/Day/Year) | | 5/5/98 | | | |
| Tank Registration Number | | 001 | | | |
| Estimated Total Capacity (Gallons) | | 500 | | | |
| Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply) | **a. Petroleum** | | | | |
| | Unleaded Gasoline | ☐ | ☐ | ☐ | ☐ |
| | Leaded Gasoline | ☒ | ☐ | ☐ | ☐ |
| | Aviation Gasoline | ☐ | ☐ | ☐ | ☐ |
| | Kerosene | ☐ | ☐ | ☐ | ☐ |
| | Jet Fuel | ☐ | ☐ | ☐ | ☐ |
| | Diesel Fuel | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 1 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 2 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 4 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 5 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 6 | ☐ | ☐ | ☐ | ☐ |
| | New Motor Oil | ☐ | ☐ | ☐ | ☐ |
| | Used Motor Oil | ☐ | ☐ | ☐ | ☐ |
| | Other, Please Specify | ☐ | ☐ | ☐ | ☐ |
| NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS) | **b. Hazardous Substance** Name of Principal CERCLA Substance | ☐ | ☐ | ☐ | ☐ |
| | AND | | | | |
| | Chemical Abstract Service (CAS) No. | | | | |
| | **c. Unknown** | ☐ | ☐ | ☐ | ☐ |
| Tank Closure Method (Check Only One) | a. Removal | ☒ | ☐ | ☐ | ☐ |
| | b. Closure-in-Place | ☐ | ☐ | ☐ | ☐ |
| | c. Change-in-Service | ☐ | ☐ | ☐ | ☐ |
| Partial System Closure (Yes or No) | | No | | | |

| | | | | | |
|---|---|---|---|---|---|
| DATE OF TANK CLOSURE (Month/Day/Year) | | | | | |
| ...nk Registration Number | | | | | |
| Estimated Total Capacity (Gallons) | | | | | |
| Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply) | a. **Petroleum** | | | | |
| | Unleaded Gasoline | ☐ | ☐ | ☐ | ☐ |
| | Leaded Gasoline | ☐ | ☐ | ☐ | ☐ |
| | Aviation Gasoline | ☐ | ☐ | ☐ | ☐ |
| | Kerosene | ☐ | ☐ | ☐ | ☐ |
| | Jet Fuel | ☐ | ☐ | ☐ | ☐ |
| | Diesel Fuel | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 1 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 2 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 4 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 5 | ☐ | ☐ | ☐ | ☐ |
| | Fuel Oil No. 6 | ☐ | ☐ | ☐ | ☐ |
| | New Motor Oil | ☐ | ☐ | ☐ | ☐ |
| | Used Motor Oil | ☐ | ☐ | ☐ | ☐ |
| | Other, Please Specify | ☐ | ☐ | ☐ | ☐ |
| NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS) | b. **Hazardous Substance** Name of Principal CERCLA Substance | ☐ | ☐ | ☐ | ☐ |
| | AND | | | | |
| | Chemical Abstract Service (CAS) No. | | | | |
| | c. **Unknown** | ☐ | ☐ | ☐ | ☐ |
| Tank Closure Method (Check Only One) | a. Removal | ☐ | ☐ | ☐ | ☐ |
| | b. Closure-in-Place | ☐ | ☐ | ☐ | ☐ |
| | c. Change-in-Service | ☐ | ☐ | ☐ | ☐ |
| ...artial System Closure (Yes or No) | | | | | |

**Yes** **N/A**

11. Briefly describe the storage tank facility and the nature of the operations which were conducted at the facility (both historical and present) including use of tanks: The city of Beaver Falls Water Pollution Control Plant is a sewage treatment facility. The unleaded gasoline tank was used to supply fuel to a gasoline generator.

☒ 12. A site location and sampling map of the site, drawn to scale, is attached. See page 11 of 11.

☒ 13. Original, color photographs of the closure process are attached (i.e., inside of excavation/piping runs, pit water, tanks showing condition). ***Please see Attachment 1***

☒ ☐ 14. An amended "Registration of Storage Tanks" form was submitted to the DEP, Bureau of Water Quality Management, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762.
Date: 6/03/98 ***Please see Attachment 2***

☐ ☒ 15. If a reportable release was confirmed, the appropriate regional office of DEP was notified by the owner or operator.
Date: _____ Office _____

| Yes | N/A | | |
|---|---|---|---|
| ☒ | ☐ | 16. | If tanks were cleaned on-site: |
| | | a. | Briefly describe the disposition of usable product: Not Applicable |
| | | b. | Briefly describe the disposal of unusable product, sludges, sediments, and wastewater generated during cleaning. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal): The unusable product gasoline/washwater and sediments were placed into a 55-gallon drum for disposal. ***Please see Attachment 3 for disposal document.*** |
| | | c. | If tank contents were determined/deemed to be hazardous waste, provide: |
| | | (1) | Generator ID Number: PADEP0005580 |
| | | (2) | Licensed Hazardous Waste Transporter Name and ID Number: United Environmental, Inc. #PAD987283140 |
| ☐ | ☒ | 17. | If tanks were removed from the site for cleaning: |
| | | a. | Provide the name and permit number of the processing, treatment, storage or disposal facility performing the tank cleaning: |
| | | b. | If tank contents were determined/deemed to be hazardous waste, provide: |
| | | (1) | Generator ID Number: |
| | | (2) | Licensed Hazardous Waste Transporter Name and ID Number: |
| | | 18. | Briefly describe the disposition of tanks/piping (Attach documentation of proper disposal): The UST and piping was in good condition. No holes were found with minimal rusting. ***Please see Attachment 3 for disposal documentation.*** |
| ☐ | ☒ | 19. | If contaminated soil is excavated: |
| | | a. | Briefly describe the disposition and amount _____ (tons) of contaminated soil. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal): |
| | | b. | If contaminated soil is determined/deemed to be hazardous waste, provide: |
| | | (1) | Generator ID Number: |
| | | (2) | Licensed Hazardous Waste Transporter Name and ID Number: |

| Yes | N/A | | |
|---|---|---|---|
| ☐ | ☒ | 20. | Briefly describe the disposition and amount _____ (tons) of uncontaminated soil. (attach analyses): |

_____

_____

_____

I, Darwin R. Main (Print Name) hereby certify, under penalty of law as provided in 18Pa. C.S. §4904 (relating to unsworn falsification to authorities) that I am the owner of the above referenced storage tank(s) and that the information provided by me in this closure report (Section I) is true, accurate and complete to the best of my knowledge and belief.

Darwin R. Main
Signature of Tank Owner

6-15-98
Date

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

## SECTION II. Tank Handling Information

Yes N/A

1. Briefly describe the excavation and initial on-site staging of uncontaminated/contaminated soil:
The excavation was difficult due to the thickness of the asphalt and large limestone cobbles. The uncontaminated soil was placed adjacent to the excavation due to a small working area.

2. Briefly describe the method of piping system closure and the closure of the piping systems including the quantity and condition of the piping:
The product was removed from the UST and purged. The product supply and return lines were cut and removed back to the tank. No holes were found in the piping. Approximately 50 ft. of copper tubing was removed.

3. Briefly describe the condition of the tanks and any problems encountered during tank removal:
The tank was in good condition with no visible holes and minimal rusting. The product and supply lines were previously capped prior to tank closure.

4. Briefly describe the method used to purge the tanks of and monitor for explosive vapors:
Dry ice was used to purge the UST. An $O_2$/LEL meter was used to monitor explosive vapors.

☒ ☐ 5. If tanks were cleaned on-site:

a. Briefly describe the tank cleaning process:
After purging the tank holes were cut into the tank for access. The inside of the tank was pressure washed. The washwater and sediment was removed and drummed for disposal.

b. If subcontracted, name and address of company that performed the tank cleaning:
Not Applicable

☐ ☒ 6. If tanks were closed-in-place, briefly describe the tank fill material:

☐ ☒ 7. If contamination was suspected or observed, the "Notification of Contamination" form was submitted.

## SECTION II (continued)

Gregory D. Barr , hereby certify, under penalty of law as provided in 18Pa. C.S. §4904 (relating to unsworn falsification to authorities) that I am the certified installer who performed the tank handling activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section II) is true, accurate and complete to the best of my knowledge and belief.

Gregory D Barr

Signature of Certified Installer

6-12-98

Date

4882

Installer Certification Number

354

Company Certification Number

Aurora Environmental, Inc.

Company Name

1031 Third Avenue

Street

New Brighton, PA 15066

City/Town, State, Zip

(724) 843-1494

Phone

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER QUALITY MANAGEMENT
DIVISION OF STORAGE TANKS

# UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

**SECTION III. Site Assessment Information**

**Tank Registration #** 001 **(complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)**

**Facility ID Number** 04-84073

**A.** Provide depth of *BEDROCK* and *WATER* IF encountered during excavation or soil boring (write "N/A" if NOT encountered).

Bedrock N/A feet below land surface Water N/A feet below land surface

**B.** Provide Length of *PIPING* IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
Length of piping N/A feet

## C. TANK SYSTEM REMOVED FROM THE GROUND

1) Was obvious contamination observed while excavating?

☒ **NO** ➤ Conduct confirmatory sampling ➤ See end of this section for options on submission and maintenance of closure records ➤ Do not complete Item C.2. below. ***Please see Attachment 4 for Analytical Results***

☐ **YES** ➤ Report release to DEP within 2 hours ➤ Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills): _____

_____

_____ ➤ Complete item C.2. below.

2. Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?

☐ **YES** ➤ Remove or remediate contaminated soil ➤ Conduct confirmatory sampling ➤ See end of this section for options on submission and maintenance of closure records ➤ Call Indemnification Fund (717-787-0763).

☐ **NO** ➤ Continue Interim remedial actions ➤ See end of this section for options on submission and maintenance of closure records ➤ Call Indemnification Fund (717-787-0763).

## D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE

1) Was obvious contamination observed during sampling, boring or assessing water depths?

☐ **NO** ➤ Conduct confirmatory sampling ➤ See end of this section for options on submission and maintenance of closure records

☐ **YES** ➤ Report release to DEP within 2 hours ➤ Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills):

_____

_____ ➤ Complete item C.2. below.

Continue with corrective action ➤ See end of this section for options on submission and maintenance of closure records ➤Call Indemnification Fund (717-787-0763).

E. If the answer to C.1 is "no," the answer to C.2. is "yes" or the answer to D is "no," confirmatory samples are required . Use of the sample/analysis information sheet on page 10 of 11 to provide the information on confirmatory sampling and complete the diagram on Page 11 of 11.

**Options for Submission and Maintenance of Closure Site Assessment Records**

Records of the site assessment must be maintained for at least three years after completion of permanent closure or change-in-service in one of the following ways:

(a) By the owners and operators who took the UST system out of service;
(b) By the current owners and operators of the UST system site; or
(c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the closure report form should be sent to the DEP regional-office responsible for the county in which the tank was located.

Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling show levels below the statewide standard/action levels, this closure report form (Sections I, II, and III) or some other acceptable site characterization report must be received by the Department within 180 days of verbally reporting the release.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standard/action levels, or where there is obvious, extensive contamination, Section 245.310(a)(8) of the CAP regulation requires that details of removal from service be included in the site characterization report. A copy of the completed closure report form should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

I, Gregory D. Barr , hereby certify, under penalty of law as provided in 18Pa. C.S. §4904 (relating to nsworn falsification to authorities) that I am the certified installer who performed the tank handling activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section III) is true, accurate and complete to the best of my knowledge and belief.

Gregory D Barr
Signature of Person Performing Site Assessment

6-12-98
Date

Environmental Scientist/Project Manager
Title of Person Performing Site Assessment

Aurora Environmental, Inc.
Name of Company Performing Site Assessment

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

## Sample/Analysis Information
### (Attachment for Section III)
### Facility ID Number 04-84073

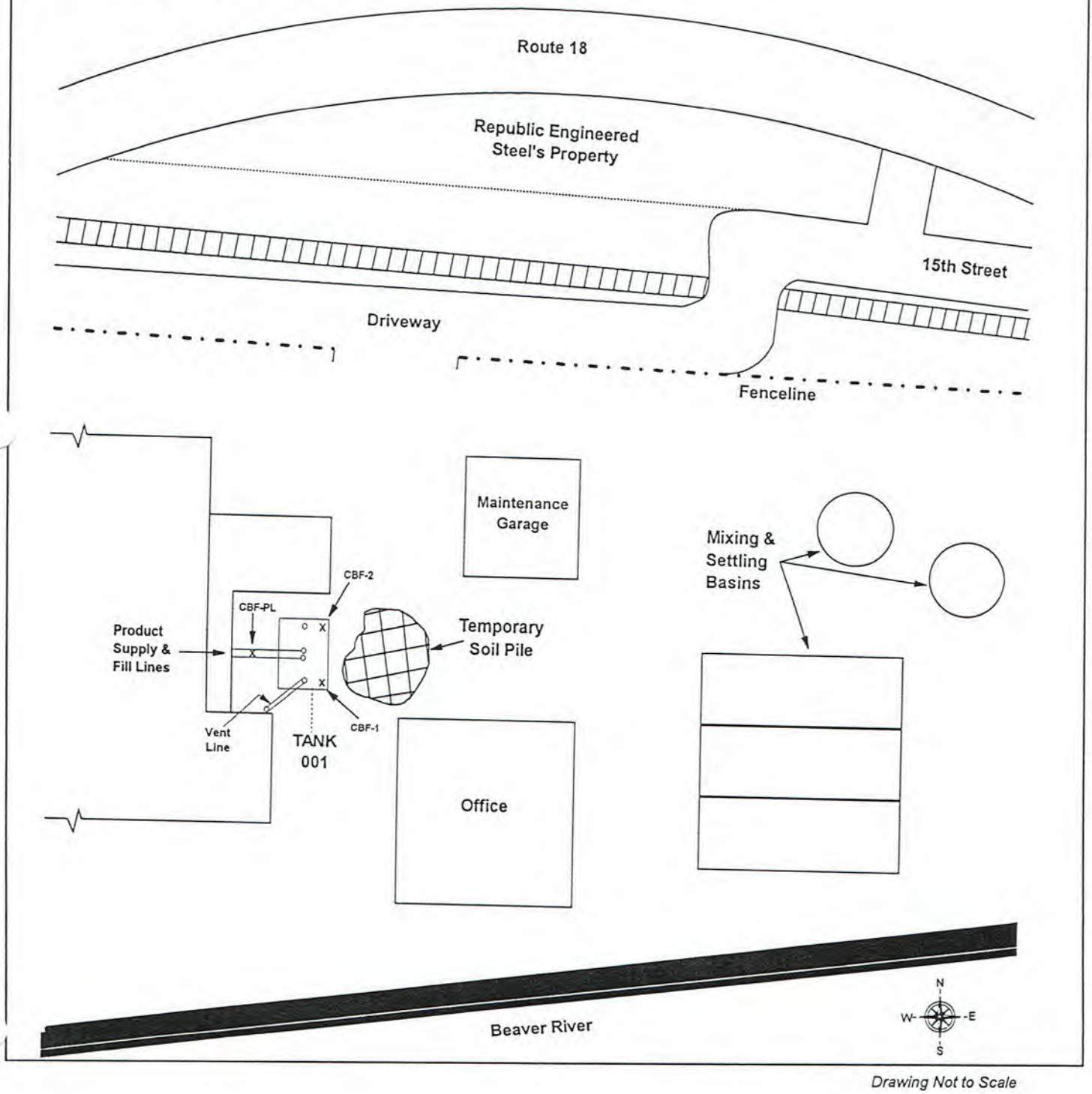
| Sample I.D. (See diagram) | Parameter | Analytical Method | Media | Result (units) *mg/kg* | Detection Limit (units) mg/kg | Date Sample Taken | Date Sample Analyzed |
|---|---|---|---|---|---|---|---|
| CBF-1 | Benzene | EPA 5035/8260B | soil | 0.022 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Toluene | EPA 5035/8260B | soil | 0.010 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Ethylbenzene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Total Xylene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Cumene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Naphthalene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | 1,2 Dichloroethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | 1,2 Dibromoethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-1 | Total Lead | EPA 6010B | soil | 18.3 | 2 | 5/5/98 | 5/15/98 |
| CBF-2 | Benzene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Toluene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Ethylbenzene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Total Xylene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Cumene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Naphthalene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | 1,2 Dichloroethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | 1,2 Dibromoethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/5/98 | 5/13/98 |
| CBF-2 | Total Lead | EPA 6010B | soil | 33.4 | 2 | 5/5/98 | 5/15/98 |
| CBF-PL | Benzene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Toluene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Ethylbenzene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Total Xylene | EPA 5035/8260B | soil | 0.007 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Cumene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Naphthalene | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | 1,2 Dichloroethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | 1,2 Dibromoethane | EPA 5035/8260B | soil | <0.005 | <0.005 | 5/8/98 | 5/12/98 |
| CBF-PL | Total Lead | EPA 6010B | soil | 123 | 2 | 5/5/98 | 5/15/98 |

Site Location and Sampling Map - use this page or suitable facsimile to provide a large scale map of the site where tanks were closed. Scales between 1" = 10 and 1" = 100 feet frequently work out well. Include the following information as each applies to the site: facility name and I.D., county, township or borough, property boundaries or area of interest, buildings, roads and streets with names or route numbers, utilities, location and ID number of storage tanks removed including piping and dispensers, soil stockpile locations, excavations or other locations of product recovery, north arrow, approximate map scale and legend. Also show depth and location of samples with sample ID numbers cross-referenced to the same ID numbers shown on Page 10 of 11.

Facility Name and ID: City of Beaver Falls Water Pollution Control Plant 04-84073

County: Beaver

Township/Borough: City of Beaver Falls




*Drawing Not to Scale*

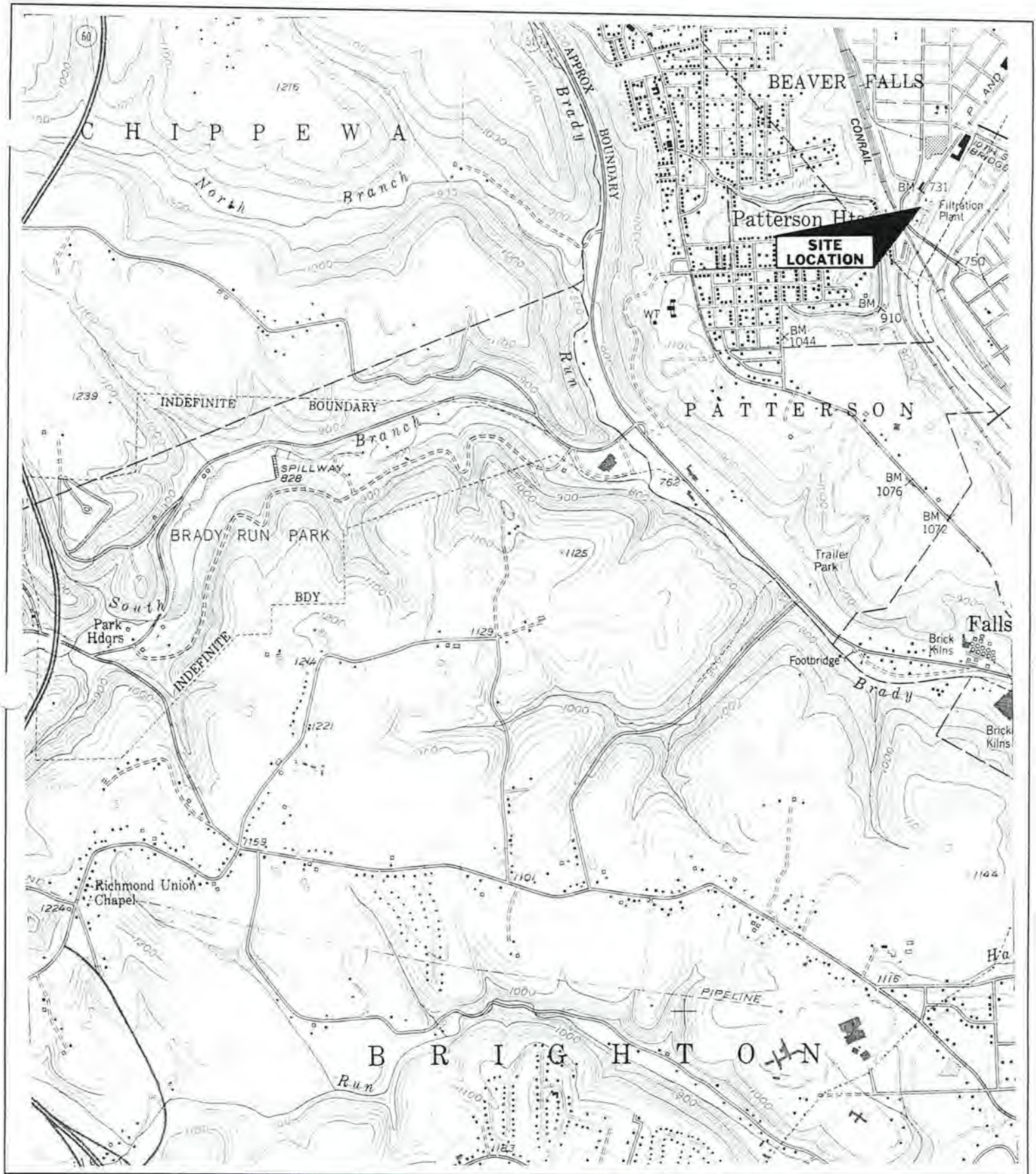



Figure 1
Property Location
City of Beaver Falls
Beaver Falls, Pennsylvania

N
W E
S

Source: U.S.G.S.
Photo Revised 1979
Scale: 1 : 24000

Aurora Environmental, Inc.
AEI Project No. 98-038
City of Beaver Falls

# Attachment 1

## Photographic Documentation of the UST Removal at the City of Beaver Falls Water Pollution Control Plant

# Photographic Documentation of the UST Removal at the City of Beaver Falls Water Pollution Control Plant

Photo 1 Beginning of the tank excavation.

Photo 2 Uncovering the UST.

Photo 3 Pulling the tank from the excavation after purging the vapors.

Photo 4 Picture shows the soil beneath the tank.

Photo 5 Cutting the tank for cleaning. Also, this picture shows the tank condition.

Photo 6 Completion of the excavation of the tank.



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6

Attachment 2

Copy of the Amended Registration

**AEI** Aurora Environmental, Inc.
Phone Number: (724) 843-1494
1031 Third Avenue, New Brighton, PA 15066
FAX Number: (724) 843-2392

# LETTER OF TRANSMITTAL

To: CITY OF BEAVER FALLS
715 15TH STREET
BEAVER FALLS, PA 15010
Attn: ROBERT T. GRIMM

Date: 6/05/98
Project No. 98-038
From: GREG BARR
From:

Items Transmitted ☒ Herewith ☐ Under Separate Cover

*If enclosed are not as noted, please contact us immediately*

Action to be Taken:

- ☐ Per your Request
- ☒ For your Information
- ☐ For your Approval
- ☐ For your Review & Comment
- ☐ Approved as Noted
- ☐ Not Approved, Revise & Resubmit
- ☐ For your Coordination
- ☐ Other/Describe

Remarks:

Copy to: PADEP- BUREAU OF WATER QUALITY MGMT.
GREG BARR- AEI

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER QUALITY MANAGEMENT

# REGISTRATION OF STORAGE TANKS

In accordance with Sections 303 and 503 of the Storage Tank and Spill Prevention Act of 1989, owners of regulated storage tanks quired to register their tanks with the Department and pay the required fees.

***INSTRUCTIONS ARE INCLUDED FOR YOUR REFERENCE.
INCOMPLETE FORMS WILL BE RETURNED, DELAYING REGISTRATION.***

STATE USE ONLY

## I. PURPOSE OF SUBMITTAL *(Check (✓) Those That Apply)*

| INITIAL REGISTRATION | AMENDED REGISTRATION | CHANGE OF OWNERSHIP |
|---|---|---|
| ☐ Initial Registration | ☐ Change in Previous Info | ☐ Sold ☐ Purchased |
| Registration for Removal of Underground Tank(s) | ☐ Adding Tank(s) | ☐ All Tanks (Will Remain at Same Facility) |
| ☐ Registration for Un-Registered Tank(s) Closed in Place | ☐ Temporarily Not Using Tank(s) | ☐ Some Tanks (Will Remain at Same Facility) |
| | ☒ Removed / Closed Tank(s) | ☐ Some Tanks (Relocated to Another Regulated Facility) |
| | ☐ Change from Regulated to Unregulated Substance or Use | ☐ Some Tanks (Relocated to a New Facility and the Tanks are to be Registered) |
| | ☐ Relocated Tank(s) | |

## II. TANK OWNER / BUSINESS INFORMATION *(Type or Print Legibly)*

A. DEP CLIENT ID NO. (STATE USE ONLY) _____

Federal Tax ID No. (EIN or SSN)
2 5 6 0 0 0 5 4 5

Owner Name CITY OF BEAVER FALLS

Address 715 15TH STREET

City BEAVER FALLS State PA Zip 15010

Phone No. 724 843 - 7184

County BEAVER Municipality CITY OF BEAVER FALLS

e of Owner/Business *(Check Only One)*

- ☐ Vol. Fire Co./EMS Org.
- ☐ Federal Government
- ☐ State Government
- ☒ Local Government
- ☐ Corporate
- ☐ Private (Business)
- ☐ Private (Residential)

B. CHANGE OF OWNERSHIP

*(This section is to be completed in addition to all sections if some or all tanks have been sold/transferred or purchased.)*

Effective Date of Change _____

Sold/Transferred To _____

*(New Owner Name)* _____

*(New Owner Address)* _____

Purchased/Transferred From _____

*(Previous Owner Name)* _____

*(Previous Owner Address)* _____

(Previous Facility ID No.) _____

(Previous Tank No.(s)) _____

## III. FACILITY INFORMATION *(Type or Print Legibly)*

A. DEP FACILITY ID NO. 04 - 84013

Facility Name WATER POLLUTION CONTROL PLANT

Location 715 15TH STREET
*(PO Box NOT Acceptable) (RR Box IS Acceptable)*

City BEAVER FALLS State PA Zip 15010

Phone No. 724 843 - 7184

County BEAVER Municipality CITY OF BEAVER FALLS

Type of Facility *(Check Only One)*

- ☐ 00 Unknown
- ☐ 01 Gas Station
- ☐ 02 Petroleum Distr.
- ☐ 03 Air Taxi
- ☐ 04 Aircraft Owner
- ☐ 05 Auto Dealership
- ☐ 06 Railroad
- ☐ 07 Local Govt.
- ☐ 08 State Govt.
- ☐ 09 Federal, Non-Military
- ☐ 10 Federal, Military
- ☐ 11 Commercial
- ☐ 12 Industrial
- ☐ 13 Residential
- ☐ 14 Contractor
- ☐ 15 Trucking/Transport
- ☐ 16 Utilities
- ☐ 17 Farm
- ☐ 99 Other _____ SPECIFY

B. FIRE MARSHAL PERMIT NO. (IF APPLICABLE)

N/A

C. CONTACT (Optional)

- ☒ Send all mail to Facility address noted to the left.
- ☐ Delete previously submitted Contact address and send all mail to the Owner address noted above.
- ☐ Send all mail to the Contact address noted below:

Name _____

Company Name _____

Mailing address _____

City _____ State _____ Zip _____

Phone No. _____ - _____

*Detach and return this page to the Division of Storage Tanks*

3600-FM-WQ0014 Rev. 9/95

DEP Facility ID No. 04 - 84073 Facility Name WATER POLLUTION CONTROL PLANT

## IV. DESCRIPTION OF STORAGE TANKS

(Type or print legibly each regulated storage tank at this facility under your ownership.)

### A. ABOVEGROUND TANK

List all tanks. If amending information, identify the Amended Tank(s) with an asterisk (*) to the left of the tank number.

| Tank Number | STATUS | Install Date (Mo-Day-Yr) | Remove Date (Mo-Day-Yr) | Capacity (Gallons) | Substance Code (Currently or Last Stored) | CERCLA Name (If Hazardous Substance) Substance Name (If Other Petroleum Substance or Petroleum-Based Mixture) | CAS No. (If Hazardous Substance) | Tank Exempt Reference Code (See Instructions) |
|---|---|---|---|---|---|---|---|---|
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |
| A | | | | | | | | |

Status Codes: C - Currently in Use: T - Temporarily Out of Use: R - Removed or Closed in Place

### B. UNDERGROUND TANKS

List all tanks. If amending information, identify the Amended Tank(s) with an asterisk (*) to the left of the tank number.

| Tank Number | STATUS | Install Date (Mo-Day-Yr) | Remove Date (Mo-Day-Yr) | Capacity (Gallons) | Substance Code (Currently or Last Stored) | CERCLA Name (If Hazardous Substance) Substance Name (If Other Petroleum Substance or Petroleum-Based Mixture) | CAS No. (If Hazardous Substance) | Tank Exempt Reference Code (See Instructions) |
|---|---|---|---|---|---|---|---|---|
| 1 | R | 1965 | 5-5-98 | 500 | A | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

Status Codes: C - Currently in Use: T - Temporarily Out of Use: R - Removed or Closed in Place

## V. OWNER CERTIFICATION

(Read and Sign After Completing Sections I through IV.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. This registration is conditioned upon compliance with provisions of the Storage Tank and Soil Prevention Act of 1989, with any regulations and orders issued pursuant to this Act, and with the requirements for obtaining a permit required under the Act.

Please be advised that signature by an individual on this document represents to the Department that the individual owns the storage tank and is aware of those responsibilities and potential liabilities as an "owner" arising under the Storage Tank and Spill Prevention Act of 1989 and its regulations. Please be further advised that this registration is made subject to the penalties of 18 PA CS Section 4904 relating to unsworn falsification to authorities and that Section 107(c) of this Act grants agents and employees of the Department of Environmental Protection specific rights of entry.

| Name and Official Title of Owner | Signature | Date |
|---|---|---|
| ROBERT T. GRIMM, CITY MANAGER | Robert T. Grimm | 4/21/98 |

*Detach and return this page to the Division of Storage Tanks*

3600-FM-WQ0014 Rev. 9/95

DEP Facility ID No. 04-84073 Facility Name WATER POLLUTION CONTROL PLANT

## VI. INFORMATION FOR ABOVEGROUND AND UNDERGROUND NEW TANK INSTALLATIONS

(Write the Tank Number(s) and place a check (✓) in the appropriate box for each component that was installed.)

| | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***TANK CONSTRUCTION AND CORROSION PROTECTION (1)*** | | | | | | | | | | | |
| (A) SINGLE WALL UNPROTECTED STEEL | | | | | | | | | | | |
| (B) CATHODICALLY PROTECTED STEEL (GALVANIC) | | | | | | | | | | | |
| (C) CATHODICALLY PROTECTED STEEL (IMPRESSED CURRENT) | | | | | | | | | | | |
| (D) DOUBLE WALL STEEL | | | | | | | | | | | |
| (E) SINGLE WALL FIBERGLASS | | | | | | | | | | | |
| (F) DOUBLE WALL FIBERGLASS | | | | | | | | | | | |
| (G) STEEL WITH PLASTIC OR FIBERGLASS JACKET | | | | | | | | | | | |
| (H) STEEL WITH FRP COATING | | | | | | | | | | | |
| (I) STEEL WITH LINED INTERIOR | | | | | | | | | | | |
| (J) CONCRETE | | | | | | | | | | | |
| (99) OTHER (SPECIFY) | | | | | | | | | | | |
| ***UNDERGROUND PIPING CONSTRUCTION AND CORROSION PROTECTION (2)*** | | | | | | | | | | | |
| (A) BARE STEEL | | | | | | | | | | | |
| (B) CATHODICALLY PROTECTED STEEL | | | | | | | | | | | |
| (C) COPPER | | | | | | | | | | | |
| (D) FIBERGLASS | | | | | | | | | | | |
| (E) FLEXIBLE (NON-METALLIC) | | | | | | | | | | | |
| (G) NONE | | | | | | | | | | | |
| (99) OTHER (SPECIFY) | | | | | | | | | | | |
| ***ABOVEGROUND PIPING CONSTRUCTION AND CORROSION PROTECTION (3)*** | | | | | | | | | | | |
| (A) BARE STEEL | | | | | | | | | | | |
| (B) CATHODICALLY PROTECTED STEEL | | | | | | | | | | | |
| (C) COPPER | | | | | | | | | | | |
| (D) FIBERGLASS | | | | | | | | | | | |
| (E) FLEXIBLE (NON-METALLIC) | | | | | | | | | | | |
| (G) NONE | | | | | | | | | | | |
| (99) OTHER (SPECIFY) | | | | | | | | | | | |
| ***PUMP (PIPING) SYSTEM (4)*** | | | | | | | | | | | |
| (A) SUCTION: CHECK VALVE AT PUMP | | | | | | | | | | | |
| (B) SUCTION: CHECK VALVE AT TANK | | | | | | | | | | | |
| (C) PRESSURE | | | | | | | | | | | |
| (D) GRAVITY FED | | | | | | | | | | | |
| ***PIPE RELEASE DETECTION METHOD (5)*** | | | | | | | | | | | |
| (A) AUTOMATIC LINE LEAK DETECTOR | | | | | | | | | | | |
| (B) ANNUAL LINE TIGHTNESS TESTING (PRESSURE) | | | | | | | | | | | |
| (C) LINE TIGHTNESS TEST - 3 YEARS (SUCTION) | | | | | | | | | | | |
| (D) INTERSTITIAL MONITORING | | | | | | | | | | | |
| (E) GROUNDWATER MONITORING | | | | | | | | | | | |
| (F) VAPOR MONITORING | | | | | | | | | | | |
| (G) VISUAL INSPECTION | | | | | | | | | | | |
| (H) NONE | | | | | | | | | | | |
| (I) EXEMPT | | | | | | | | | | | |
| (J) STATISTICAL INVENTORY RECONCILIATION (SIR) | | | | | | | | | | | |
| ***SPILL PREVENTION (6)*** | | | | | | | | | | | |
| (Y) YES | | | | | | | | | | | |
| (N) NO | | | | | | | | | | | |
| ***OVERFILL PREVENTION PRESENT (7)*** | | | | | | | | | | | |
| (Y) YES | | | | | | | | | | | |
| (N) NO | | | | | | | | | | | |

*Detach and return this page to the Division of Storage Tanks*

3600-FM-WQ0014 Rev. 9/95

DEP Facility ID No. 04 - 84023 Facility Name WATER POLLUTION CONTROL PLANT

## VI. INFORMATION FOR ABOVEGROUND AND UNDERGROUND NEW TANK INSTALLATIONS (cont.)

(Write the Tank Number(s) and place a check (✓) in the appropriate box for each component that was installed.)

| | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***VAPOR RECOVERY PRESENT (11)*** | | | | | | | | | | | |
| (A) STAGE I INSTALLED | | | | | | | | | | | |
| (B) STAGE II INSTALLED | | | | | | | | | | | |
| (C) STAGE I AND II INSTALLED | | | | | | | | | | | |
| (D) NONE | | | | | | | | | | | |
| ***TANK RELEASE DETECTION METHOD (12)*** | | | | | | | | | | | |
| (A) MONTHLY INVENTORY CONTROL | | | | | | | | | | | |
| (B) ANNUAL TANK TIGHTNESS TESTING | | | | | | | | | | | |
| (C) TANK TIGHTNESS TESTING (EVERY 5 YEARS) | | | | | | | | | | | |
| (D) STATISTICAL INVENTORY RECONCILIATION | | | | | | | | | | | |
| (E) AUTOMATIC TANK GAUGING | | | | | | | | | | | |
| (F) MANUAL TANK GAUGING (36 HRS) | | | | | | | | | | | |
| (G) MANUAL TANK GAUGING (44 OR 58 HRS) | | | | | | | | | | | |
| (H) INTERSTITIAL MONITORING (2 WALLS) | | | | | | | | | | | |
| (I) INTERSTITIAL MONITORING (LINER) | | | | | | | | | | | |
| (J) GROUNDWATER MONITORING | | | | | | | | | | | |
| (K) VAPOR MONITORING | | | | | | | | | | | |
| (L) GROOVES MADE IN THE IMPERMEABLE PAD | | | | | | | | | | | |
| (M) SLOTTED PIPE ABOVE THE IMPERMEABLE PAD | | | | | | | | | | | |
| (N) NONE | | | | | | | | | | | |
| (O) EXEMPT | | | | | | | | | | | |
| (99) OTHER | | | | | | | | | | | |

## VII. ABOVEGROUND AND UNDERGROUND TANK INFORMATION FOR REMOVAL FROM SERVICE

(Write the Tank Number(s) and place a check (✓) in the appropriate box for each tank that was removed or closed in place.)

| | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number | Tank Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 001 | | | | | | | | | | |
| TANK EMPTIED AND REMOVED | ✓ | | | | | | | | | | |
| TANK CLEANED ON SITE AND REMOVED | ✓ | | | | | | | | | | |
| TANK CLEANED ON SITE AND CLOSED IN PLACE | | | | | | | | | | | |
| CONTAMINATION SUSPECTED OR OBSERVED AND NOTIFICATION OF CONTAMINATION FORM WAS SUBMITTED | | | | | | | | | | | |
| CLOSURE DOCUMENT SUBMITTED (FOR USTS ONLY) | ✓ | | | | | | | | | | |

## VIII. OWNER CERTIFICATION (Read and Sign After Completing Sections I through VII.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. This registration is conditioned upon compliance with provisions of the Storage Tank and Soil Prevention Act of 1989, with any regulations and orders issued pursuant to this Act, and with the requirements for obtaining a permit required under the Act.

Please be advised that signature by an individual on this document represents to the Department that the individual owns the storage tank and is aware of those responsibilities and potential liabilities as an "owner" arising under the Storage Tank and Spill Prevention Act of 1989 and its regulations. Please be further advised that this registration is made subject to the penalties of 18 PA CS Section 4904 relating to unsworn falsification to authorities and that Section 107(c) of this Act grants agents and employees of the Department of Environmental Protection specific rights of entry.

| Name and Official Title of Owner | Signature | Date |
|---|---|---|
| ROBERT T. GRIMM, CITY MANAGER | | 4/21/98 |

## IX. INSTALLER/REMOVER CERTIFICATION (This section must be completed by the certified installer(s) who are responsible for the installation or removal from service of the aboveground and underground storage tank systems listed in Sections VI and VII.)

As the certified installer responsible for the tank handling activities in the category or categories I have listed, I certify that all tank handling activities were conducted in compliance with the design, installation, and operation standards of the Storage Tank and Spill Prevention Act of 1989 and all applicable regulations. I also certify, under penalty of law as provided in 18 PA C S A 4904 (relating to unsworn falsification to authorities), that the information provided hereto is true, accurate, and complete to the best of my knowledge and belief.

| Tank Number | Installer/Remover Name | Certification Number | Certification Category | Installer/Remover Signature | Date |
|---|---|---|---|---|---|
| 001 | GREGORY D. BARR | 4882 | UMR | | 4-21-98 |
| | | | | | |
| | | | | | |

*Detach and return this page to the Division of Storage Tanks*

Attachment 3

Copy of the Disposal Documentation
for the UST and Gasoline/Washwater

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management
P.O. Box 8550
Harrisburg, PA 17105-8550

2500-FM-LRWM0051 REV. 11/95

OFFICIAL PENNSYLVANIA MANIFEST FORM

Form approved.
OMB No. 2050-0039
Expires 9-30-96

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.: PAD E P 0 0 0 5 5 6 0 | Manifest Document No.: 6 0 6 5 0

2. Page 1 of 1

Information within the blue border is not required by Federal law but may be required by State law.

3. Generator's Name and Mailing Address
CITY OF BEAVER FALLS
715-15TH ST.

4. Generator's Phone (724) 843-1494 BEAVER FALLS PA 15010

A. State Manifest Document Number: PAE 6460650

B. State Gen. ID:

5. Transporter 1 Company Name: UNITED ENVIRONMENTAL GROUP

6. US EPA ID Number: P A D 9 8 7 2 8 3 1 4 0

C. State Trans. ID: PA-AH 0431

7. Transporter 2 Company Name:

8. US EPA ID Number:

D. Transporter's Phone ( 412) 367-8255

E. State Trans. ID: PA-AH

9. Designated Facility Name and Site Address
UNITED ENVIRONMENTAL GROUP INC.
241 MCALEER ROAD
SEWICKLEY PA 15143

10. US EPA ID Number: P A D 9 8 7 2 8 3 1 4 0

F. Transporter's Phone ( )

G. State Facility's ID

H. Facility's Phone ( 412) 367-8265

| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. |
|---|---|---|---|---|---|
| a. WASTE FLAMMABLE LIQUID, N.O.S., #3, UN 1993, PG II. | 1 | D M | 28 | G | D001 D018 |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |

Additional Descriptions for Materials Listed Above

| | Lab Pack | Physical State |
|---|---|---|
| a. | | A: L |
| b. | | |
| c. | | |
| d. | | |

K. Handling Codes for Wastes Listed Above: a. A: M081 b. c. d.

15. Special Handling Instructions and Additional Information
A: IN THE EVENT OF AN EMERGENCY, CONTACT JERRY WALKER AT 412-367-8265

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| K. BORGHI | K. Borghi | 10 | 2 | 98 |

17. Transporter 1 Acknowledgement of Receipt of Materials

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Scott Kelley | Scott Kelley | 10 | 02 | 98 |

18. Transporter 2 Acknowledgement of Receipt of Materials

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | | |

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| ROBERT E. LUCKAN JR | Robert E. Luckan Jr | 10 | 02 | 98 |

GENERATOR — TRANSPORTER — FACILITY

In the State of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DEP (717) 787-4343

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete

Copy 5 - TSD Facility; Mail to Generator

PAE 6460650

# Certificate

412-367-0515
Petroleum Industry
Maintenance

PTD INC
AN ENVIRONMENTAL COMPANY
412-367-8265
Penn Tank
Disposal

## OF RECYCLING/TREATMENT/DISPOSAL
## UNITED ENVIRONMENTAL GROUP INC.

241 McALEER ROAD
SEWICKLEY, PA 15143

RESIDUAL WASTE
FACILITY ID #301224
EPA #PAD987283140

Receipt for Recycling/Treatment/Disposal.

I certify I have examined the materials delivered to this approved facility and accepted same:

One 55-gallon drum of waste flammable liquid water/gas

Generator: City of Beaver Falls

Address: 715 15th St., Beaver Falls, PA 15010

Transported by: United Environmental Group, Inc.

Address: 241 McAleer Rd., Sewickley, PA 15143

Name and Title: [signature] Operations Mgr. Date: June 9, 1998

Aurora Environmental, Inc.
1031 Third Street
New Brighton, PA 15066
Phone: (724) 843-1494
FAX: (724) 843-2392

# BILL OF LADING

**Job No.** 98-038 **Date:** May 7, 1998

**From:** City of Beaver Falls Sewage Plant
715 15th Street
Beaver Falls, PA 15010

**Material:** 500-Gallon Steel Tank

**Transporter:** Martino, Inc. **Transporter Signature:**

**Disposal Facility:** Marino Scrap Yard

**Disposal Facility Signature** **Title**

Attachment 4

Copy of the Analytical Results

Microbac Laboratories, Inc.
Microbac Inc. Pgh Division
100 Marshall Dr.
Warrendale PA 15086
(724)772-0610



AIR • FUEL • WATER • FOOD • WASTES

RECEIVED MAY 18

# CERTIFICATE OF ANALYSIS

AURORA ENVIRONMENTAL
Mr. Greg Barr
1031 Third Avenue

New Brighton PA 15066

Date Reported 5/15/98
Date Received 5/08/98
Order No 9805-00260
Invoice No 073317
Cust # BA031
Sampled Date 0/00/00
Sampled Time 00:00

Permit No
Cust P.O.

Subject: 98-038/City of Beaver Falls - Soil Samples for Analysis

| SMP | TEST | METHOD | RESULT | UNITS | DATE | TECH |
|---|---|---|---|---|---|---|
| 1 | CBF-1 Collected 5/5/98 @ 13:30 | | | | | |
| | Underground Storage Tanks | | | | 5/13/98 | MSM |
| | Benzene | SW-846 8260B | 0.022 | mg/Kg | 5/13/98 | MSM |
| | Toluene | SW-846 8260B | 0.010 | mg/Kg | 5/13/98 | MSM |
| | Ethylbenzene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Total Xylenes | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Cumene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Naphthalene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | 1,2-Dichloroethane | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | 1,2-Dibromoethane | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Total Lead | SW-846 6010B | 18.3 | mg/Kg | 5/15/98 | JGR |
| | Total Solids | EPA 160.3 | 91.5 | % | 5/13/98 | MSM |
| | Volatiles Sample Prep | SW-846 5035 | | | 5/13/98 | MSM |
| | Equipment Charge | | yes | | 5/12/98 | FPM |
| 2 | CBF-2 Collected 5/5/98 @ 13:40 | | | | | |
| | Underground Storage Tanks | | | | 5/13/98 | MSM |
| | Benzene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Toluene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Ethylbenzene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Total Xylenes | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Cumene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Naphthalene | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | 1,2-Dichloroethane | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | 1,2-Dibromoethane | SW-846 8260B | <0.005 | mg/Kg | 5/13/98 | MSM |
| | Total Lead | SW-846 6010B | 33.4 | mg/Kg | 5/15/98 | JGR |
| | Total Solids | EPA 160.3 | 93.0 | % | 5/13/98 | MSM |
| | Volatiles Sample Prep | SW-846 5035 | | | 5/13/98 | MSM |

Certificate Of Analysis Continued On Next Page

The data and other information contained on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon the condition that it is not to be reproduced wholly or in part for advertising or other purposes without written approval from the laboratory.



USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

MEMBER ACIL

Microbac Laboratories, Inc.
Microbac Inc.-Pgh Division
100 Marshall Dr.
Warrendale PA 15086
(724)772-0610



AIR • FUEL • WATER • FOOD • WASTES

# CERTIFICATE OF ANALYSIS

AURORA ENVIRONMENTAL
Mr. Greg Barr
1031 Third Avenue

New Brighton PA 15066

Date Reported 5/15/98
Date Received 5/08/98
Order No 9805-00260
Invoice No 023317
Cust # BA031
Sampled Date 0/00/00
Sampled Time 00:00

Permit No
Cust P.O.

Subject: 98-038/City of Beaver Falls - Soil Samples for Analysis

| SMP | TEST | METHOD | RESULT | UNITS | DATE | TECH |
|---|---|---|---|---|---|---|
| 3 | CBF-PL Collected 5/8/98 @ 8:00 | | | | | |
| | Underground Storage Tanks | | | | 5/12/98 | MSM |
| | Benzene | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | Toluene | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | Ethylbenzene | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | Total Xylenes | SW-846 8260B | 0.007 | mg/Kg | 5/12/98 | MSM |
| | Cumene | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | Naphthalene | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | 1,2-Dichloroethane | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | 1,2-Dibromoethane | SW-846 8260B | <0.005 | mg/Kg | 5/12/98 | MSM |
| | Total Lead | SW-846 6010B | 123 | mg/Kg | 5/15/98 | JGR |
| | Total Solids | EPA 160.3 | 69.8 | % | 5/12/98 | MSM |
| | Volatiles Sample Prep | SW-846 5035 | | | 5/12/98 | MSM |

Approved By Laboratory Director: David J. Davis

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USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

MEMBER ACIL

## APPENDIX D

**Environmental Risk Information Services Database Search: Database Report, City Directory, Historical Aerials, Historical Topographic Maps, Physical Setting Report, and Fire Insurance Maps**

# DATABASE REPORT

| | |
|---|---|
| **Project Property:** | *Beaver Falls Water Filtration Plant*<br>*Water Filtration Plant*<br>*Beaver Falls PA 15010* |
| **Project No:** | *68417.008* |
| **Report Type:** | *Database Report* |
| **Order No:** | *21051700311* |
| **Requested by:** | *Gannett Fleming, Inc.* |
| **Date Completed:** | *May 20, 2021* |

**Environmental Risk Information Services**
*A division of Glacier Media Inc.*
1.866.517.5204 | info@erisinfo.com | erisinfo.com

# Table of Contents


Table of Contents.....2
Executive Summary.....3
Executive Summary: Report Summary.....4
Executive Summary: Site Report Summary - Project Property.....8
Executive Summary: Site Report Summary - Surrounding Properties.....9
Executive Summary: Summary by Data Source.....13
Map.....19
Aerial.....22
Topographic Map.....23
Detail Report.....24
Unplottable Summary.....94
Unplottable Report.....96
Appendix: Database Descriptions.....108
Definitions.....119



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**Reliance on information in Report:** This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

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# Executive Summary

***Property Information:***

| | |
|---|---|
| **Project Property:** | *Beaver Falls Water Filtration Plant*<br>*Water Filtration Plant  Beaver Falls PA 15010* |
| **Project No:** | *68417.008* |

**Coordinates:**

| | |
|---|---|
| **Latitude:** | *40.74218871* |
| **Longitude:** | *-80.31943329* |
| **UTM Northing:** | *4,510,360.93* |
| **UTM Easting:** | *557,459.35* |
| **UTM Zone:** | *UTM Zone 17T* |

**Elevation:** *724 FT*

***Order Information:***

| | |
|---|---|
| **Order No:** | *21051700311* |
| **Date Requested:** | *May 17, 2021* |
| **Requested by:** | *Gannett Fleming, Inc.* |
| **Report Type:** | *Database Report* |

***Historicals/Products:***

| | |
|---|---|
| **Aerial Photographs** | *Historical Aerials (Boundaries)* |
| **City Directory Search** | *CD - 2 Street Search* |
| **ERIS Xplorer** | *ERIS Xplorer* |
| **Excel Add-On** | *Excel Add-On* |
| **Fire Insurance Maps** | *US Fire Insurance Maps* |
| **Physical Setting Report (PSR)** | *Physical Setting Report (PSR)* |
| **Topographic Map** | *Topographic Maps* |

# Executive Summary: Report Summary

| Database | Searched | Search Radius | Project Property | Within 0.12mi | 0.125mi to 0.25mi | 0.25mi to 0.50mi | 0.50mi to 1.00mi | Total |
|---|---|---|---|---|---|---|---|---|
| **Standard Environmental Records** | | | | | | | | |
| **Federal** | | | | | | | | |
| DOE FUSRAP | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| NPL | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PROPOSED NPL | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| DELETED NPL | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| SEMS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| SEMS ARCHIVE | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| ODI | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| IODI | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| CERCLIS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| CERCLIS NFRAP | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| CERCLIS LIENS | Y | PO | 0 | - | - | - | - | 0 |
| RCRA CORRACTS | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| RCRA TSD | Y | 0.5 | 0 | **1** | 0 | **1** | - | **2** |
| RCRA LQG | Y | 0.25 | 0 | **1** | 0 | - | - | **1** |
| RCRA SQG | Y | 0.25 | 0 | **1** | **1** | - | - | **2** |
| RCRA VSQG | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| RCRA NON GEN | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| FED ENG | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| FED INST | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| LUCIS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| ERNS 1982 TO 1986 | Y | PO | 0 | - | - | - | - | 0 |
| ERNS 1987 TO 1989 | Y | PO | 0 | - | - | - | - | 0 |
| ERNS | Y | PO | 0 | - | - | - | - | 0 |
| FED BROWNFIELDS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| FEMA UST | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| FRP | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| HIST GAS STATIONS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |

| Database | Searched | Search Radius | Project Property | Within 0.12mi | 0.125mi to 0.25mi | 0.25mi to 0.50mi | 0.50mi to 1.00mi | Total |
|---|---|---|---|---|---|---|---|---|
| REFN | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| BULK TERMINAL | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| SEMS LIEN | Y | PO | 0 | - | - | - | - | 0 |
| SUPERFUND ROD | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **State** | | | | | | | | |
| SHWS | Y | 1 | 0 | 0 | 0 | 0 | **1** | **1** |
| DELISTED SHWS | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| DELISTED DRYCLEANERS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| HSCA | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| SWF | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| LUST | Y | 0.5 | 0 | **1** | 0 | **6** | - | **7** |
| LST UNREG | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| LAST | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| DELISTED LST | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| UST | Y | 0.25 | 0 | **1** | **3** | - | - | **4** |
| AST | Y | 0.25 | 0 | **1** | 0 | - | - | **1** |
| TANKS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| UNREG TANK | Y | 0.25 | 0 | **1** | **2** | - | - | **3** |
| DEL TANK | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| ENG | Y | 0.5 | 0 | **1** | 0 | 0 | - | **1** |
| INST | Y | 0.5 | 0 | **1** | 0 | 0 | - | **1** |
| AUL | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| VCP | Y | 0.5 | 0 | **1** | 0 | **3** | - | **4** |
| BROWNFIELDS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| CLEANUP EFACTS | Y | 0.5 | 0 | **2** | **1** | **13** | - | **16** |
| DELISTED ECBF | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| **Tribal** | | | | | | | | |
| INDIAN LUST | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| INDIAN UST | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| DELISTED ILST | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| DELISTED IUST | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |

**County** ***No County standard environmental record sources available for this State.***

**Additional Environmental Records**

| Database | Searched | Search Radius | Project Property | Within 0.12mi | 0.125mi to 0.25mi | 0.25mi to 0.50mi | 0.50mi to 1.00mi | Total |
|---|---|---|---|---|---|---|---|---|
| **Federal** | | | | | | | | |
| PFAS NPL | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| FINDS/FRS | Y | PO | 0 | - | - | - | - | 0 |
| TRIS | Y | PO | 0 | - | - | - | - | 0 |
| PFAS TRI | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| PFAS WATER | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| HMIRS | Y | 0.125 | 0 | **1** | - | - | - | **1** |
| NCDL | Y | 0.125 | 0 | 0 | - | - | - | 0 |
| TSCA | Y | 0.125 | 0 | 0 | - | - | - | 0 |
| HIST TSCA | Y | 0.125 | 0 | 0 | - | - | - | 0 |
| FTTS ADMIN | Y | PO | 0 | - | - | - | - | 0 |
| FTTS INSP | Y | PO | 0 | - | - | - | - | 0 |
| PRP | Y | PO | 0 | - | - | - | - | 0 |
| SCRD DRYCLEANER | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| ICIS | Y | PO | 0 | - | - | - | - | 0 |
| FED DRYCLEANERS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| DELISTED FED DRY | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| FUDS | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| FORMER NIKE | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PIPELINE INCIDENT | Y | PO | 0 | - | - | - | - | 0 |
| MLTS | Y | PO | 0 | - | - | - | - | 0 |
| HIST MLTS | Y | PO | 0 | - | - | - | - | 0 |
| MINES | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| SMCRA | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| MRDS | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| URANIUM | Y | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| ALT FUELS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| SSTS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| PCB | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| **State** | | | | | | | | |
| SPL | Y | 0.125 | 0 | **1** | - | - | - | **1** |
| DRYCLEANERS | Y | 0.25 | 0 | 0 | 0 | - | - | 0 |
| PFAS | Y | 0.5 | 0 | 0 | 0 | 0 | - | 0 |
| **Tribal** | ***No Tribal additional environmental record sources available for this State.*** | | | | | | | |

| Database | Searched | Search Radius | Project Property | Within 0.12mi | 0.125mi to 0.25mi | 0.25mi to 0.50mi | 0.50mi to 1.00mi | Total |
|---|---|---|---|---|---|---|---|---|
| **County** | ***No County additional environmental record sources available for this State.*** | | | | | | | |
| ***Total:*** | | | *0* | ***14*** | ***7*** | ***23*** | ***1*** | ***45*** |

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

# Executive Summary: Site Report Summary - Project Property

| Map Key | DB | Company/Site Name | Address | Direction | Distance (mi/ft) | Elev Diff (ft) | Page Number |
|---|---|---|---|---|---|---|---|

No records found in the selected databases for the project property.

# Executive Summary: Site Report Summary - Surrounding Properties

| Map Key | DB | Company/Site Name | Address | Direction | Distance (mi/ft) | Elev Diff (ft) | Page Number |
|---|---|---|---|---|---|---|---|
| 1 | RCRA LQG | KEYSTONE PROFILES LTD | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID:*** PAD004391421 | NNW | 0.05 / 282.63 | 7 | 24 |
| 1 | RCRA TSD | KEYSTONE PROFILES LTD | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID:*** PAD004391421 | NNW | 0.05 / 282.63 | 7 | 35 |
| 2 | RCRA SQG | MORROW LINCOLN MERCURY | 201 7TH AVE<br>BEAVER FALLS` PA 15010<br>***EPA Handler ID:*** PAD013849674 | NNW | 0.07 / 365.39 | 1 | 47 |
| 3 | ENG | REPUBLIC TECHNOLOGIES INTL FAC | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | N | 0.09 / 498.53 | 4 | 49 |
| 3 | INST | REPUBLIC TECHNOLOGIES INTL FAC | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | N | 0.09 / 498.53 | 4 | 49 |
| 3 | HMIRS | | 220 SEVENTH AVENUE<br>BEAVER FALLS PA | N | 0.09 / 498.53 | 4 | 49 |
| 4 | AST | KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274<br>***Site ID:*** 247661<br>***Full Seq No \| Status:*** 593966 - 006A \| Currently In Use, 593963 - 003A \| Currently In Use, 593964 - 004A \| Currently In Use, 593968 - 008A \| Currently In Use, 593970 - 010A \| Currently In Use, 593965 - 005A \| Currently In Use, 593967 - 007A \| Currently In Use, 593972 - 012A \| Currently In Use, 593969 - 009A \| Currently In Use, 593961 - 002A \| Exempt From State Law, 593971 - 011A \| Exempt From State Law, 593959 - 001A \| Removed | N | 0.11 / 581.71 | 7 | 51 |
| 4 | VCP | REPUBLIC TECHNOLOGIES INTL FAC | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 7 | 55 |
| 4 | LUST | KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274<br>***Facility ID:*** 578749<br>***Incident ID \| Status Description \| Status Date:*** 23311 \| Cleanup Completed \| 10/24/2011, 23949 \| Cleanup Completed \| 10/24/2011 | N | 0.11 / 581.71 | 7 | 56 |
| 4 | UNREG TANK | KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274<br>***Other ID:*** 04-04263<br>***Tank Seq No \| Status Desc:*** 593959 - 001A \| Removed, 593960 - 002 \| Closed, 593971 - 011A \| Exempt From State Law, 593958 - 001 \| Closed, 593962 - 003 \| Closed, 593961 - 002A \| Exempt From State Law | N | 0.11 / 581.71 | 7 | 57 |

| Map Key | DB | Company/Site Name | Address | Direction | Distance (mi/ft) | Elev Diff (ft) | Page Number |
|---|---|---|---|---|---|---|---|
| 4 | CLEANUP EFACTS | KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA<br>***Facility ID:*** 578749 | N | 0.11 /<br>581.71 | 7 | 58 |
| 4 | CLEANUP EFACTS | REPUBLIC TECHNOLOGIES INTL FAC | 220 7TH AVE<br>BEAVER FALLS PA<br>***Facility ID:*** 646208 | N | 0.11 /<br>581.71 | 7 | 60 |
| 4 | UST | KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274<br>***Site ID:*** 247661<br>***Full Seq No \| Status Desc:*** 593960 - 002 \| Closed, 593962 - 003 \| Closed, 593958 - 001 \| Closed | N | 0.11 /<br>581.71 | 7 | 60 |
| 5 | SPL | | PA<br>***Complaint ID:*** 233010 | S | 0.12 /<br>655.13 | -21 | 62 |
| 6 | UST | SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA 15010-4711<br>***Site ID:*** 514148<br>***Full Seq No \| Status Desc:*** 594955 - 001 \| Closed, 594956 - 002 \| Closed | NW | 0.17 /<br>876.98 | 22 | 62 |
| 7 | RCRA SQG | SAHLI MOTOR INC | 300 NINTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID:*** PAD013850268 | NW | 0.19 /<br>980.58 | 23 | 64 |
| 7 | UNREG TANK | SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA 15010-4711<br>***Other ID:*** 04-28079<br>***Tank Seq No \| Status Desc:*** 594955 - 001 \| Closed, 594956 - 002 \| Closed | NW | 0.19 /<br>980.58 | 23 | 65 |
| 7 | CLEANUP EFACTS | SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA<br>***Facility ID:*** 578919 | NW | 0.19 /<br>980.58 | 23 | 66 |
| 8 | UST | MCCARLS SHEETMETAL SHOP | 711 4TH ST<br>BEAVER FALLS PA 15010-4726<br>***Site ID:*** 564024<br>***Full Seq No \| Status Desc:*** 595879 - 001 \| Closed | NNW | 0.19 /<br>996.55 | 8 | 66 |
| 9 | UNREG TANK | MCCARLS SHEETMETAL SHOP | 711 4TH ST<br>BEAVER FALLS PA 15010-4726<br>***Other ID:*** 04-81238<br>***Tank Seq No \| Status Desc:*** 595879 - 001 \| Closed | NNW | 0.20 /<br>1,067.39 | 8 | 67 |
| 10 | UST | NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA 15066<br>***Site ID:*** 564049<br>***Full Seq No \| Status Desc:*** 595709 - 002 \| Removed, 595710 - 003 \| Removed, 595708 - 001 \| Closed | SSE | 0.22 /<br>1,144.06 | 16 | 67 |
| 11 | CLEANUP EFACTS | SPEEDWAY 2928 | 410 5TH ST<br>NEW BRIGHTON PA<br>***Facility ID:*** 828029 | SE | 0.26 /<br>1,393.31 | 23 | 69 |
| 12 | LUST | NEW BRIGHTON IR WORK CTR | SEVENTH AVE & FIFTH ST<br>NEW BRIGHTON PA 15066 | ESE | 0.29 /<br>1,513.83 | 23 | 70 |

| Map Key | DB | Company/Site Name | Address | Direction | Distance (mi/ft) | Elev Diff (ft) | Page Number |
|---|---|---|---|---|---|---|---|
| | | | **Facility ID:** 578935<br>**Incident ID \| Status Description \| Status Date:** 20247 \| Inactive \| 04/21/2017 | | | | |
| 12 | CLEANUP EFACTS | NEW BRIGHTON IR WORK CTR | SEVENTH AVE & FIFTH ST<br>NEW BRIGHTON PA<br>**Facility ID:** 578935 | ESE | 0.29 / 1,513.83 | 23 | 71 |
| 13 | CLEANUP EFACTS | BEAVER FALLS CTL OFC | 620 6TH ST<br>BEAVER FALLS PA<br>**Facility ID:** 579207 | N | 0.29 / 1,539.58 | 16 | 72 |
| 14 | CLEANUP EFACTS | MCCARLS INC SHEET METAL SHOP | 400 4TH ST<br>BEAVER FALLS PA<br>**Facility ID:** 579028 | WSW | 0.30 / 1,559.13 | 318 | 73 |
| 15 | CLEANUP EFACTS | RAM ACOUSTICAL | 608 2ND AVE<br>BEAVER FALLS PA<br>**Facility ID:** 579237 | NNE | 0.31 / 1,620.19 | 9 | 73 |
| 16 | CLEANUP EFACTS | VESUVIUS MCDANEL CO | 510 9TH AVE<br>BEAVER FALLS PA<br>**Facility ID:** 579038 | NNW | 0.32 / 1,671.10 | 23 | 74 |
| 17 | LUST | KWIK FILL S 27 | FIFTH & SIXTH ST<br>NEW BRIGHTON PA 15066<br>**Facility ID:** 578724<br>**Incident ID \| Status Description \| Status Date:** 20246 \| Cleanup Completed \| 05/20/2010, 23718 \| Cleanup Completed \| 05/20/2010, 41524 \| Cleanup Completed \| 03/10/2015, 41572 \| Cleanup Completed \| 03/10/2015, 23835 \| Cleanup Completed \| 10/21/2009 | SE | 0.35 / 1,830.23 | 22 | 75 |
| 17 | CLEANUP EFACTS | KWIK FILL S 27 | FIFTH & SIXTH ST<br>NEW BRIGHTON PA<br>**Facility ID:** 578724 | SE | 0.35 / 1,830.23 | 22 | 76 |
| 18 | LUST | NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA 15066<br>**Facility ID:** 579069<br>**Incident ID \| Status Description \| Status Date:** 23856 \| Cleanup Completed \| 06/03/2008 | SSE | 0.35 / 1,852.67 | 17 | 79 |
| 18 | CLEANUP EFACTS | NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA<br>**Facility ID:** 579069 | SSE | 0.35 / 1,852.67 | 17 | 79 |
| 19 | LUST | JIMS SUNOCO SVC INC | 620 5TH AVE<br>NEW BRIGHTON PA 15066-1852<br>**Facility ID:** 579027<br>**Incident ID \| Status Description \| Status Date:** 20243 \| Cleanup Completed \| 09/11/2013, 20244 \| Administrative Close Out (ACO) \| 01/21/2011, 41763 \| Cleanup Completed \| 08/26/2013, 23817 \| Cleanup Completed \| 08/26/2013 | SE | 0.41 / 2,173.07 | 21 | 80 |
| 19 | CLEANUP EFACTS | JIMS SUNOCO SVC INC | 620 5TH AVE<br>NEW BRIGHTON PA<br>**Facility ID:** 579027 | SE | 0.41 / 2,173.07 | 21 | 81 |
| 20 | LUST | MCCARLS FABRICATION | 800 1ST AVE<br>BEAVER FALLS PA 15010-4630<br>**Facility ID:** 579218<br>**Incident ID \| Status Description \| Status Date:** 20162 \| Inactive \| 03/22/2000 | NE | 0.45 / 2,376.70 | 8 | 85 |

| Map Key | DB | Company/Site Name | Address | Direction | Distance (mi/ft) | Elev Diff (ft) | Page Number |
|---|---|---|---|---|---|---|---|
| 20 | CLEANUP EFACTS | MCCARLS FABRICATION | 800 1ST AVE<br>BEAVER FALLS PA<br>***Facility ID:*** 579218 | NE | 0.45 /<br>2,376.70 | 8 | 85 |
| 21 | VCP | TOWNSEND TEXTRON | PA | SE | 0.46 /<br>2,447.15 | 22 | 86 |
| 21 | VCP | IND WASTE NEW BRIGHTON | PA | SE | 0.46 /<br>2,447.15 | 22 | 87 |
| 21 | VCP | TATKOS AUTO WRECKING | PA | SE | 0.46 /<br>2,447.15 | 22 | 88 |
| 22 | LUST | FAST N FRIENDLY STORE | 7TH AVE & 9TH ST<br>BEAVER FALLS PA 15010<br>***Facility ID:*** 579247<br>***Incident ID \| Status Description \| Status Date:*** 20144 \| Cleanup Completed \| 09/29/2011 | N | 0.47 /<br>2,467.25 | 60 | 88 |
| 22 | CLEANUP EFACTS | FAST N FRIENDLY STORE | 7TH AVE & 9TH ST<br>BEAVER FALLS PA<br>***Facility ID:*** 579247 | N | 0.47 /<br>2,467.25 | 60 | 89 |
| 23 | CLEANUP EFACTS | PATTERSON TWP STREET DEPT | 1505 3RD ST<br>BEAVER FALLS PA<br>***Facility ID:*** 578847 | W | 0.48 /<br>2,513.81 | 329 | 89 |
| 24 | CLEANUP EFACTS | MCCARLS NEW BRIGHTON WHSE | 700 5TH AVE<br>NEW BRIGHTON PA<br>***Facility ID:*** 578760 | SE | 0.49 /<br>2,589.88 | 22 | 90 |
| 24 | RCRA TSD | PGH MINERAL | 700 5TH AVE<br>NEW BRIGHTON PA 15060<br>***EPA Handler ID:*** PAD987366432 | SE | 0.49 /<br>2,589.88 | 22 | 90 |
| 25 | SHWS | BIG BEAVER FALLS AREA SCH DIST LRCL | 820 16TH ST<br>BEAVER FALLS PA 15010 | N | 0.95 /<br>5,029.76 | 79 | 92 |

# Executive Summary: Summary by Data Source

## *Standard*

## Federal

### RCRA TSD - RCRA non-CORRACTS TSD Facilities

A search of the RCRA TSD database, dated Jan 22, 2021 has found that there are 2 RCRA TSD site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES LTD | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID**: PAD004391421* | NNW | 0.05 / 282.63 | 1 |
| PGH MINERAL | 700 5TH AVE<br>NEW BRIGHTON PA 15060<br>***EPA Handler ID**: PAD987366432* | SE | 0.49 / 2,589.88 | 24 |

### RCRA LQG - RCRA Generator List

A search of the RCRA LQG database, dated Jan 22, 2021 has found that there are 1 RCRA LQG site(s) within approximately 0.25 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES LTD | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID**: PAD004391421* | NNW | 0.05 / 282.63 | 1 |

### RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Jan 22, 2021 has found that there are 2 RCRA SQG site(s) within approximately 0.25 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| MORROW LINCOLN MERCURY | 201 7TH AVE<br>BEAVER FALLS` PA 15010<br>***EPA Handler ID**: PAD013849674* | NNW | 0.07 / 365.39 | 2 |
| SAHLI MOTOR INC | 300 NINTH AVE<br>BEAVER FALLS PA 15010<br>***EPA Handler ID**: PAD013850268* | NW | 0.19 / 980.58 | 7 |

## State

### SHWS - Hazardous Sites Response Actions Site List

A search of the SHWS database, dated Apr 20, 2021 has found that there are 1 SHWS site(s) within approximately 1.00 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| BIG BEAVER FALLS AREA SCH DIST LRCL | 820 16TH ST<br>BEAVER FALLS PA 15010 | N | 0.95 / 5,029.76 | 25 |

## LUST - Underground Storage Tank Releases

A search of the LUST database, dated Feb 18, 2021 has found that there are 7 LUST site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 4 |
| | ***Facility ID**: 578749*<br>***Incident ID \| Status Description \| Status Date**: 23311 \| Cleanup Completed \| 10/24/2011, 23949 \| Cleanup Completed \| 10/24/2011* | | | |
| NEW BRIGHTON IR WORK CTR | SEVENTH AVE & FIFTH ST<br>NEW BRIGHTON PA 15066 | ESE | 0.29 / 1,513.83 | 12 |
| | ***Facility ID**: 578935*<br>***Incident ID \| Status Description \| Status Date**: 20247 \| Inactive \| 04/21/2017* | | | |
| KWIK FILL S 27 | FIFTH & SIXTH ST<br>NEW BRIGHTON PA 15066 | SE | 0.35 / 1,830.23 | 17 |
| | ***Facility ID**: 578724*<br>***Incident ID \| Status Description \| Status Date**: 20246 \| Cleanup Completed \| 05/20/2010, 23718 \| Cleanup Completed \| 05/20/2010, 41524 \| Cleanup Completed \| 03/10/2015, 41572 \| Cleanup Completed \| 03/10/2015, 23835 \| Cleanup Completed \| 10/21/2009* | | | |
| NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA 15066 | SSE | 0.35 / 1,852.67 | 18 |
| | ***Facility ID**: 579069*<br>***Incident ID \| Status Description \| Status Date**: 23856 \| Cleanup Completed \| 06/03/2008* | | | |
| JIMS SUNOCO SVC INC | 620 5TH AVE<br>NEW BRIGHTON PA 15066-1852 | SE | 0.41 / 2,173.07 | 19 |
| | ***Facility ID**: 579027*<br>***Incident ID \| Status Description \| Status Date**: 20243 \| Cleanup Completed \| 09/11/2013, 20244 \| Administrative Close Out (ACO) \| 01/21/2011, 41763 \| Cleanup Completed \| 08/26/2013, 23817 \| Cleanup Completed \| 08/26/2013* | | | |
| MCCARLS FABRICATION | 800 1ST AVE<br>BEAVER FALLS PA 15010-4630 | NE | 0.45 / 2,376.70 | 20 |
| | ***Facility ID**: 579218*<br>***Incident ID \| Status Description \| Status Date**: 20162 \| Inactive \| 03/22/2000* | | | |
| FAST N FRIENDLY STORE | 7TH AVE & 9TH ST<br>BEAVER FALLS PA 15010 | N | 0.47 / 2,467.25 | 22 |
| | ***Facility ID**: 579247*<br>***Incident ID \| Status Description \| Status Date**: 20144 \| Cleanup Completed \| 09/29/2011* | | | |

## UST - Underground Storage Tanks

A search of the UST database, dated Mar 26, 2021 has found that there are 4 UST site(s) within approximately 0.25 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 4 |

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| | ***Site ID**: 247661*<br>***Full Seq No \| Status Desc**: 593960 - 002 \| Closed, 593962 - 003 \| Closed, 593958 - 001 \| Closed* | | | |
| SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA 15010-4711 | NW | 0.17 / 876.98 | 6 |
| | ***Site ID**: 514148*<br>***Full Seq No \| Status Desc**: 594955 - 001 \| Closed, 594956 - 002 \| Closed* | | | |
| MCCARLS SHEETMETAL SHOP | 711 4TH ST<br>BEAVER FALLS PA 15010-4726 | NNW | 0.19 / 996.55 | 8 |
| | ***Site ID**: 564024*<br>***Full Seq No \| Status Desc**: 595879 - 001 \| Closed* | | | |
| NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA 15066 | SSE | 0.22 / 1,144.06 | 10 |
| | ***Site ID**: 564049*<br>***Full Seq No \| Status Desc**: 595709 - 002 \| Removed, 595710 - 003 \| Removed, 595708 - 001 \| Closed* | | | |

## AST - Aboveground Storage Tanks

A search of the AST database, dated Mar 26, 2021 has found that there are 1 AST site(s) within approximately 0.25 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 4 |
| | ***Site ID**: 247661*<br>***Full Seq No \| Status**: 593966 - 006A \| Currently In Use, 593963 - 003A \| Currently In Use, 593964 - 004A \| Currently In Use, 593968 - 008A \| Currently In Use, 593970 - 010A \| Currently In Use, 593965 - 005A \| Currently In Use, 593967 - 007A \| Currently In Use, 593972 - 012A \| Currently In Use, 593969 - 009A \| Currently In Use, 593961 - 002A \| Exempt From State Law, 593971 - 011A \| Exempt From State Law, 593959 - 001A \| Removed* | | | |

## UNREG TANK - Tank Facilities Not Currently Registered

A search of the UNREG TANK database, dated May 11, 2021 has found that there are 3 UNREG TANK site(s) within approximately 0.25 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 4 |
| | ***Other ID**: 04-04263*<br>***Tank Seq No \| Status Desc**: 593959 - 001A \| Removed, 593960 - 002 \| Closed, 593971 - 011A \| Exempt From State Law, 593958 - 001 \| Closed, 593962 - 003 \| Closed, 593961 - 002A \| Exempt From State Law* | | | |
| SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA 15010-4711 | NW | 0.19 / 980.58 | 7 |
| | ***Other ID**: 04-28079*<br>***Tank Seq No \| Status Desc**: 594955 - 001 \| Closed, 594956 - 002 \| Closed* | | | |
| MCCARLS SHEETMETAL SHOP | 711 4TH ST<br>BEAVER FALLS PA 15010-4726 | NNW | 0.20 / 1,067.39 | 9 |
| | ***Other ID**: 04-81238*<br>***Tank Seq No \| Status Desc**: 595879 - 001 \| Closed* | | | |

## ENG - Engineering Controls

A search of the ENG database, dated May 2008 has found that there are 1 ENG site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| REPUBLIC TECHNOLOGIES INTL FAC | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | N | 0.09 / 498.53 | 3 |

### INST - Institutional Controls

A search of the INST database, dated May 2008 has found that there are 1 INST site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| REPUBLIC TECHNOLOGIES INTL FAC | 220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | N | 0.09 / 498.53 | 3 |

### VCP - Voluntary Cleanup Program

A search of the VCP database, dated Feb 10, 2021 has found that there are 4 VCP site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| REPUBLIC TECHNOLOGIES INTL FAC | 220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | N | 0.11 / 581.71 | 4 |
| IND WASTE NEW BRIGHTON | PA | SE | 0.46 / 2,447.15 | 21 |
| TOWNSEND TEXTRON | PA | SE | 0.46 / 2,447.15 | 21 |
| TATKOS AUTO WRECKING | PA | SE | 0.46 / 2,447.15 | 21 |

### CLEANUP EFACTS - eFACTS Environmental Cleanup & Brownfields

A search of the CLEANUP EFACTS database, dated Mar 2, 2021 has found that there are 16 CLEANUP EFACTS site(s) within approximately 0.50 miles of the project property.

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| REPUBLIC TECHNOLOGIES INTL FAC | 220 7TH AVE<br>BEAVER FALLS PA<br>***Facility ID**: 646208* | N | 0.11 / 581.71 | 4 |
| KEYSTONE PROFILES | 220 7TH AVE<br>BEAVER FALLS PA<br>***Facility ID**: 578749* | N | 0.11 / 581.71 | 4 |

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| SAHLI MOTOR INC | 300 9TH AVE<br>BEAVER FALLS PA<br><br>***Facility ID**: 578919* | NW | 0.19 / 980.58 | 7 |
| SPEEDWAY 2928 | 410 5TH ST<br>NEW BRIGHTON PA<br><br>***Facility ID**: 828029* | SE | 0.26 / 1,393.31 | 11 |
| NEW BRIGHTON IR WORK CTR | SEVENTH AVE & FIFTH ST<br>NEW BRIGHTON PA<br><br>***Facility ID**: 578935* | ESE | 0.29 / 1,513.83 | 12 |
| BEAVER FALLS CTL OFC | 620 6TH ST<br>BEAVER FALLS PA<br><br>***Facility ID**: 579207* | N | 0.29 / 1,539.58 | 13 |
| MCCARLS INC SHEET METAL SHOP | 400 4TH ST<br>BEAVER FALLS PA<br><br>***Facility ID**: 579028* | WSW | 0.30 / 1,559.13 | 14 |
| RAM ACOUSTICAL | 608 2ND AVE<br>BEAVER FALLS PA<br><br>***Facility ID**: 579237* | NNE | 0.31 / 1,620.19 | 15 |
| VESUVIUS MCDANEL CO | 510 9TH AVE<br>BEAVER FALLS PA<br><br>***Facility ID**: 579038* | NNW | 0.32 / 1,671.10 | 16 |
| KWIK FILL S 27 | FIFTH & SIXTH ST<br>NEW BRIGHTON PA<br><br>***Facility ID**: 578724* | SE | 0.35 / 1,830.23 | 17 |
| NEW BRIGHTON BORO GARAGE | 600 THIRD AVE<br>NEW BRIGHTON PA<br><br>***Facility ID**: 579069* | SSE | 0.35 / 1,852.67 | 18 |
| JIMS SUNOCO SVC INC | 620 5TH AVE<br>NEW BRIGHTON PA<br><br>***Facility ID**: 579027* | SE | 0.41 / 2,173.07 | 19 |
| MCCARLS FABRICATION | 800 1ST AVE<br>BEAVER FALLS PA<br><br>***Facility ID**: 579218* | NE | 0.45 / 2,376.70 | 20 |
| FAST N FRIENDLY STORE | 7TH AVE & 9TH ST<br>BEAVER FALLS PA<br><br>***Facility ID**: 579247* | N | 0.47 / 2,467.25 | 22 |
| PATTERSON TWP STREET DEPT | 1505 3RD ST<br>BEAVER FALLS PA<br><br>***Facility ID**: 578847* | W | 0.48 / 2,513.81 | 23 |

| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| MCCARLS NEW BRIGHTON WHSE | 700 5TH AVE<br>NEW BRIGHTON PA<br><br>***Facility ID**: 578760* | SE | 0.49 / 2,589.88 | 24 |

## *Non Standard*

## Federal

### HMIRS - Hazardous Materials Information Reporting System

A search of the HMIRS database, dated Sep 1, 2020 has found that there are 1 HMIRS site(s) within approximately 0.12 miles of the project property.

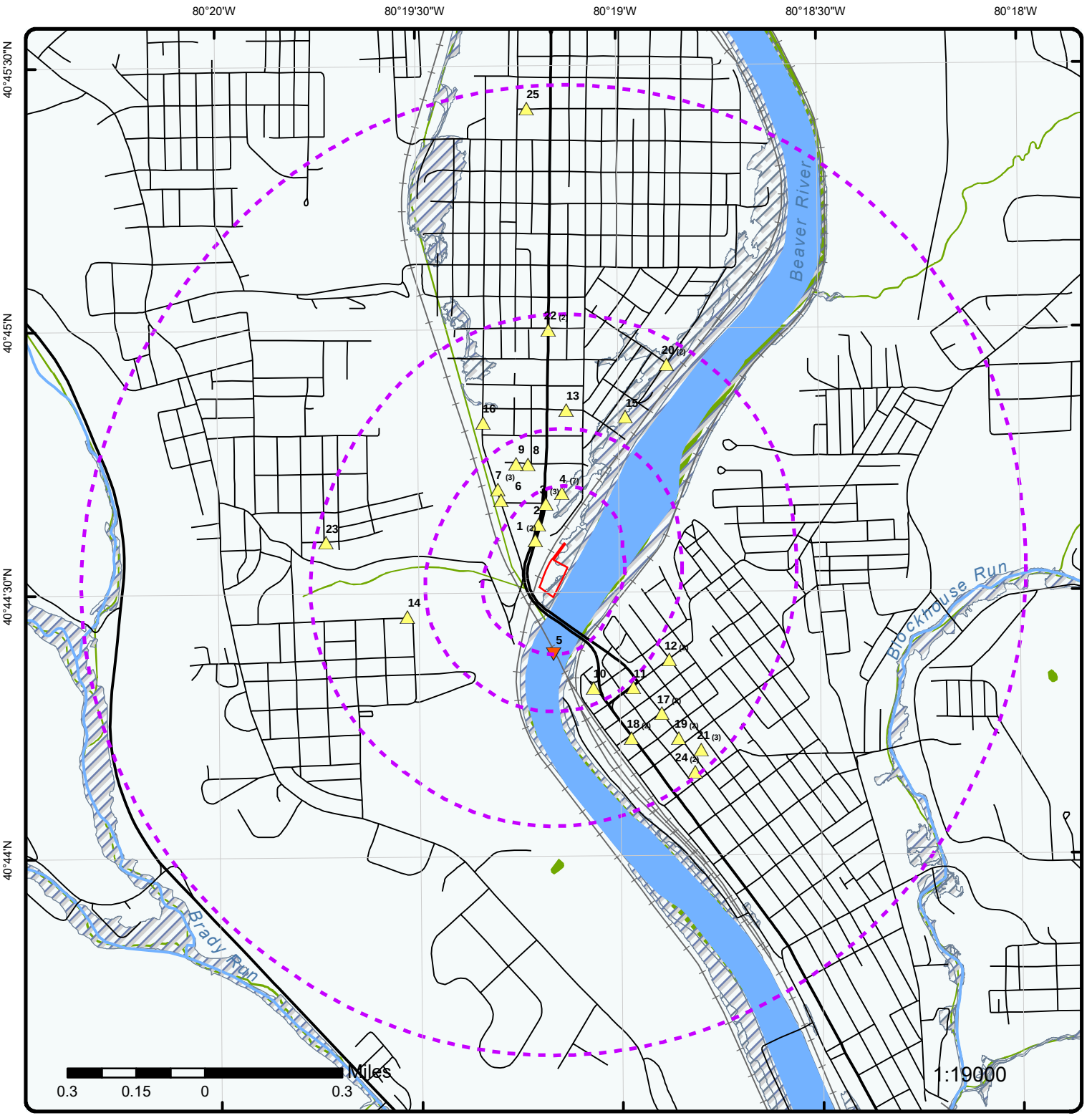
| Equal/Higher Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| | 220 SEVENTH AVENUE<br>BEAVER FALLS PA | N | 0.09 / 498.53 | 3 |

## State

### SPL - Spills

A search of the SPL database, dated May 11, 2021 has found that there are 1 SPL site(s) within approximately 0.12 miles of the project property.

| Lower Elevation | Address | Direction | Distance (mi/ft) | Map Key |
|---|---|---|---|---|
| | PA<br><br>***Complaint ID**: 233010* | S | 0.12 / 655.13 | 5 |




# Map: 1.0 Mile Radius

Order Number: 21051700311

Address: Water Filtration Plant, Beaver Falls, PA

| | | | |
|---|---|---|---|
| Project Property | Rails | State Boundary | FWS Special Designation Areas |
| Buffer Outline | Major Highways | National Priority List Sites | State Brownfield Sites |
| Eris Sites with Higher Elevation | Major Highways Ramps | National Wetland | State Brownfield Areas |
| Eris Sites with Same Elevation | Major Roads | Indian Reserve Land | State Superfund Areas:Dept. of Defense |
| Eris Sites with Lower Elevation | Major Roads Ramps | 100 Year Flood Zone | State Superfund Areas:NPL |
| Eris Sites with Unknown Elevation | Secondary Roads | 500 Year Flood Zone | WQARF Areas |
| County Boundary | Secondary Roads Ramps | Historic Fill | Federal Lands: Dept. of Defense (owned/administered areas) |
| | Local Roads and Ramps | | |



**Source:** © 2016 ESRI

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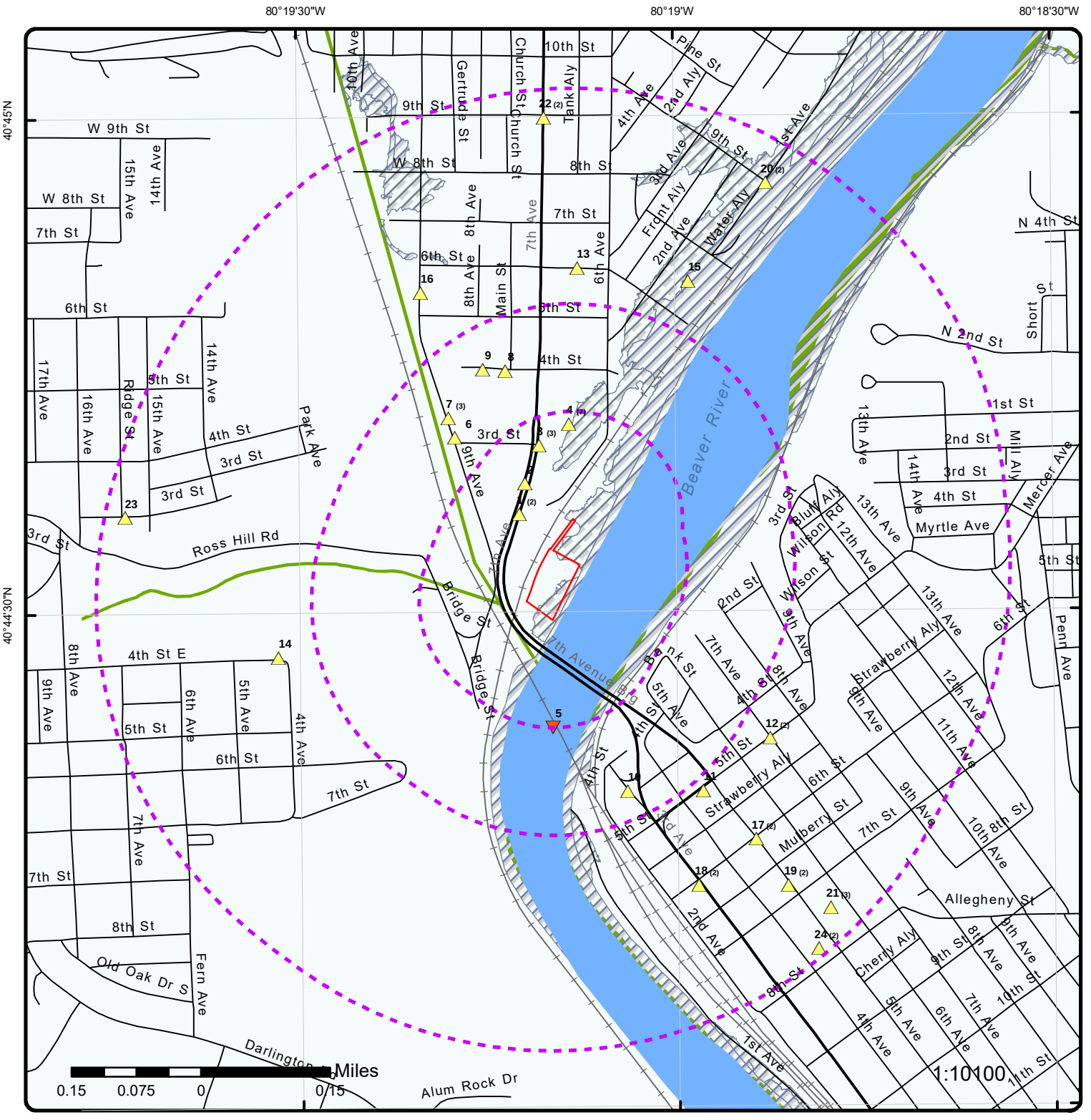


# Map: 0.5 Mile Radius

Order Number: 21051700311

Address: Water Filtration Plant, Beaver Falls, PA

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)

**Source:** © 2016 ESRI



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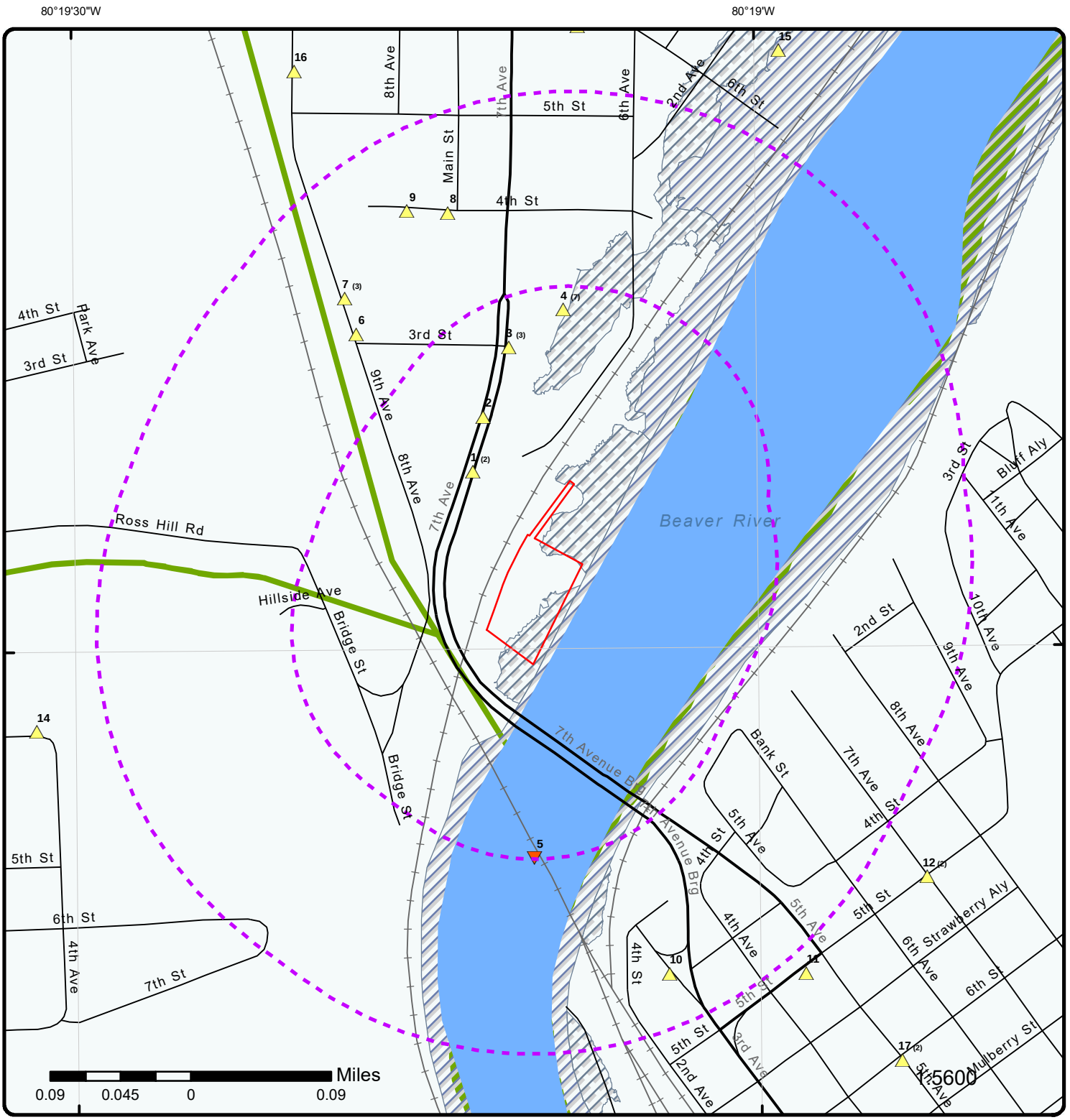


# Map: 0.25 Mile Radius

Order Number: 21051700311

Address: Water Filtration Plant, Beaver Falls, PA

| | | | |
|---|---|---|---|
| Project Property | Rails | State Boundary | FWS Special Designation Areas |
| Buffer Outline | Major Highways | National Priority List Sites | State Brownfield Sites |
| Eris Sites with Higher Elevation | Major Highways Ramps | National Wetland | State Brownfield Areas |
| Eris Sites with Same Elevation | Major Roads | Indian Reserve Land | State Superfund Areas:Dept. of Defense |
| Eris Sites with Lower Elevation | Major Roads Ramps | 100 Year Flood Zone | State Superfund Areas:NPL |
| Eris Sites with Unknown Elevation | Secondary Roads | 500 Year Flood Zone | WQARF Areas |
| County Boundary | Secondary Roads Ramps | Historic Fill | Federal Lands: Dept. of Defense (owned/administered areas) |
| | Local Roads and Ramps | | |



**Source:** © 2016 ESRI

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# Aerial **Year: 2006**

Order Number: 21051700311

Address: Water Filtration Plant, Beaver Falls, PA

**Source:** ESRI World Imagery

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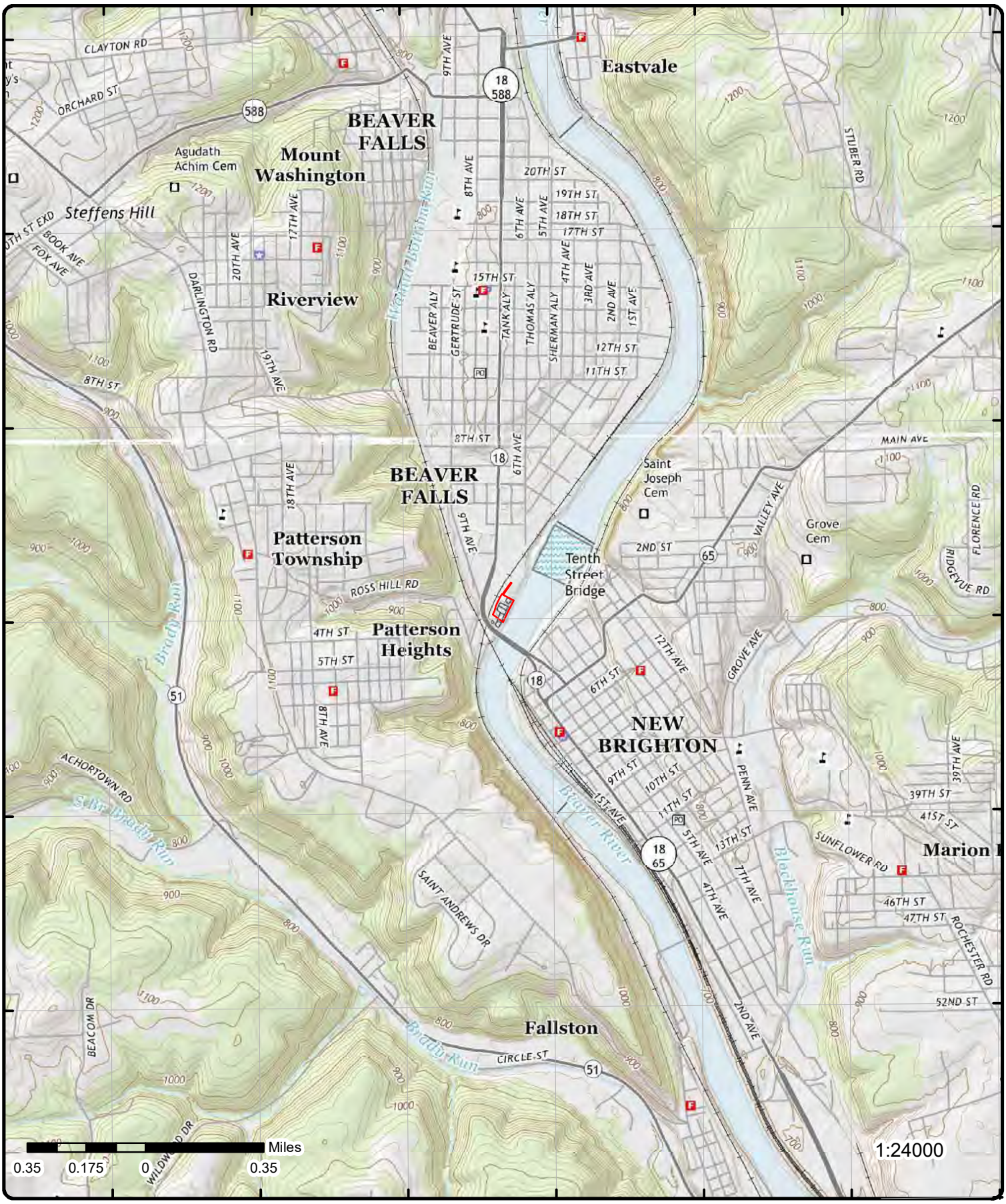


# Topographic Map

**Year: 2016**

Order Number: 21051700311

Address: Water Filtration Plant, PA

Quadrangle(s): Beaver Falls, PA; Beaver, PA

**Source:** USGS Topographic Map

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# Detail Report

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 1 | 1 of 2 | NNW | 0.05 / 282.63 | 730.57 / 7 | KEYSTONE PROFILES LTD<br>220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | RCRA LQG |

**EPA Handler ID:** PAD004391421
**Gen Status Universe:** Large Quantity Generator
**Contact Name:** JASON W GAHAN
**Contact Address:** 220 , SEVENTH AVE , , BEAVER FALLS , PA, 15010 , US
**Contact Phone No and Ext:** 724-506-1500 x229
**Contact Email:** JGAHAN@KEYSTONEPROFILES.COM
**Contact Country:** US
**County Name:** BEAVER
**EPA Region:** 03
**Land Type:** Private
**Receive Date:** 20200330
**Location Latitude:** 40.73855
**Location Longitude:** -80.328859

***Violation/Evaluation Summary***

**Note:** VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated Jan, 2021.

***Violation Details***

**Citation:**
**Violation Short Description:** TSD - Container Use and Management
**Violation Type:** 264.I
**Violation Determined Date:** 20170627
**Scheduled Compliance Date:**
**Return to Compliance:** Documented
**Actual Return to Compl:** 20171106
**Violation Responsible Agency:** State

***Violation Details***

**Citation:**
**Violation Short Description:** TSD IS-Container Use and Management
**Violation Type:** 265.I
**Violation Determined Date:** 20170627
**Scheduled Compliance Date:**
**Return to Compliance:** Documented
**Actual Return to Compl:** 20171106
**Violation Responsible Agency:** State

***Violation Details***

**Citation:**
**Violation Short Description:** TSD IS-Tank System Standards
**Violation Type:** 265.J
**Violation Determined Date:** 20170627
**Scheduled Compliance Date:**
**Return to Compliance:** Documented
**Actual Return to Compl:** 20171106
**Violation Responsible Agency:** State

***Violation Details***

***Citation:*** FR - 40CFR264.16
***Violation Short Description:*** Generators - Records/Reporting
***Violation Type:*** 262.D
***Violation Determined Date:*** 20010108
***Scheduled Compliance Date:***
***Return to Compliance:*** Documented
***Actual Return to Compl:*** 20010123
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:*** SR - 25 PA CODE 262.23(d)(e)(f)
***Violation Short Description:*** Generators - Manifest
***Violation Type:*** 262.B
***Violation Determined Date:*** 19950705
***Scheduled Compliance Date:***
***Return to Compliance:*** Observed
***Actual Return to Compl:*** 19950705
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:***
***Violation Short Description:*** Generators - General
***Violation Type:*** 262.A
***Violation Determined Date:*** 19871028
***Scheduled Compliance Date:*** 19880117
***Return to Compliance:*** Observed
***Actual Return to Compl:*** 19891115
***Violation Responsible Agency:*** State

***Enforcement Details***

***Enforcement Type:*** 120
***Enforcement Type Description:*** WRITTEN INFORMAL
***Enforcement Action Date:*** 19871117
***Enf Disposition Status:***
***Disposition Status Date:***
***Enforcement Lead Agency:*** State
***Proposed Penalty Amount:***
***Final Amount:***
***Paid Amount:***

***Evaluation Details***

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD - Container Use and Management
***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD IS-Container Use and Management
***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD IS-Tank System Standards

***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20030815
***Evaluation Type Description:*** FOCUSED COMPLIANCE INSPECTION
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20010108
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - Records/Reporting
***Return to Compliance Date:*** 20010123
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19990331
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19970401
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19960814
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19950705
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - Manifest
***Return to Compliance Date:*** 19950705
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19940509
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19920821
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19910808
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19891115
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19871028
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - General
***Return to Compliance Date:*** 19891115
***Evaluation Agency:*** State

***Handler Summary***

| | |
|---|---|
| ***Importer Activity:*** | No |
| ***Mixed Waste Generator:*** | No |
| ***Transporter Activity:*** | No |
| ***Transfer Facility:*** | No |
| ***Onsite Burner Exemption:*** | No |
| ***Furnace Exemption:*** | No |
| ***Underground Injection Activity:*** | No |
| ***Commercial TSD:*** | No |
| ***Used Oil Transporter:*** | No |
| ***Used Oil Transfer Facility:*** | No |
| ***Used Oil Processor:*** | No |
| ***Used Oil Refiner:*** | No |
| ***Used Oil Burner:*** | No |
| ***Used Oil Market Burner:*** | No |
| ***Used Oil Spec Marketer:*** | No |

***Hazardous Waste Handler Details***

| | |
|---|---|
| ***Sequence No:*** | 1 |
| ***Receive Date:*** | 19800818 |
| ***Handler Name:*** | REPUBLIC TECHNOLOGIES INTL |
| ***Federal Waste Generator Code:*** | 1 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Source Type:*** | Notification |

***Waste Code Details***

| | |
|---|---|
| ***Hazardous Waste Code:*** | D001 |
| ***Waste Code Description:*** | IGNITABLE WASTE |
| ***Hazardous Waste Code:*** | K062 |
| ***Waste Code Description:*** | SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL. |

***Hazardous Waste Handler Details***

| | |
|---|---|
| ***Sequence No:*** | 1 |
| ***Receive Date:*** | 19900227 |
| ***Handler Name:*** | REPUBLIC ENGINEERED STEELS BEAVER FALLS |
| ***Federal Waste Generator Code:*** | 1 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Source Type:*** | Annual/Biennial Report |

***Hazardous Waste Handler Details***

| | |
|---|---|
| ***Sequence No:*** | 2 |
| ***Receive Date:*** | 19920226 |
| ***Handler Name:*** | REPUBLIC ENGINEERED STEELS BEAVER FALLS |
| ***Federal Waste Generator Code:*** | 1 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Source Type:*** | Annual/Biennial Report |

***Hazardous Waste Handler Details***

| | |
|---|---|
| ***Sequence No:*** | 3 |
| ***Receive Date:*** | 19940225 |
| ***Handler Name:*** | REPUBLIC ENGINEERED STEELS BEAVER FALLS |
| ***Federal Waste Generator Code:*** | 1 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Source Type:*** | Annual/Biennial Report |

***Hazardous Waste Handler Details***

***Sequence No:*** 4
***Receive Date:*** 19960216
***Handler Name:*** REPUBLIC ENGINEERED STEELS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 5
***Receive Date:*** 19980212
***Handler Name:*** REPUBLIC ENGINEERED STEELS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 6
***Receive Date:*** 20010322
***Handler Name:*** REPUBLIC TECHNOLOGIES BEAVER FALLS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 7
***Receive Date:*** 20020416
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 2
***Receive Date:*** 20030707
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Notification

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** D008
***Waste Code Description:*** LEAD

***Hazardous Waste Code:*** D009
***Waste Code Description:*** MERCURY

***Hazardous Waste Code:*** D039
***Waste Code Description:*** TETRACHLOROETHYLENE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 8
***Receive Date:*** 20041122
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** D010
***Waste Code Description:*** SELENIUM

***Hazardous Waste Handler Details***

***Sequence No:*** 9
***Receive Date:*** 20060228
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 3
***Receive Date:*** 20071102
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Implementer

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** D008
***Waste Code Description:*** LEAD

***Hazardous Waste Code:*** D009
***Waste Code Description:*** MERCURY

***Hazardous Waste Code:*** D039
***Waste Code Description:*** TETRACHLOROETHYLENE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 10
***Receive Date:*** 20080229
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 20100219
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 2
***Receive Date:*** 20120229
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 3
***Receive Date:*** 20140310
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 4
***Receive Date:*** 20160317
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 5
***Receive Date:*** 20180321
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1

**Generator Code Description:** Large Quantity Generator
**Source Type:** Annual/Biennial Report update with Notification

***Waste Code Details***

**Hazardous Waste Code:** D002
**Waste Code Description:** CORROSIVE WASTE

**Hazardous Waste Code:** D007
**Waste Code Description:** CHROMIUM

**Hazardous Waste Code:** K062
**Waste Code Description:** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

**Sequence No:** 6
**Receive Date:** 20200330
**Handler Name:** KEYSTONE PROFILES LTD
**Federal Waste Generator Code:** 1
**Generator Code Description:** Large Quantity Generator
**Source Type:** Annual/Biennial Report update with Notification

***Waste Code Details***

**Hazardous Waste Code:** D001
**Waste Code Description:** IGNITABLE WASTE

**Hazardous Waste Code:** D002
**Waste Code Description:** CORROSIVE WASTE

**Hazardous Waste Code:** K062
**Waste Code Description:** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Owner/Operator Details***

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Owner | **Street No:** | 220 |
| **Type:** | Private | **Street 1:** | SEVENTH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report update with Notification | **Zip Code:** | 15010 |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Owner | **Street No:** | |
| **Type:** | Private | **Street 1:** | 220 7TH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20030627 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | 15010 |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20030627 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |

| | | | |
|---|---|---|---|
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report update with Notification | **Zip Code:** | |
| | | | |
| **Owner/Operator Ind:** | Current Owner | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20030627 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | |
| **Source Type:** | Notification | **Zip Code:** | |
| | | | |
| **Owner/Operator Ind:** | Current Owner | **Street No:** | 220 |
| **Type:** | Private | **Street 1:** | SEVENTH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | 15010 |
| | | | |
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | REPUBLIC TECHNOLOGIES INTL | **Street 2:** | |
| **Date Became Current:** | 19990813 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |
| | | | |
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | OPERSTREET |
| **Name:** | OPERNAME | **Street 2:** | |
| **Date Became Current:** | | **City:** | OPERCITY |
| **Date Ended Current:** | | **State:** | AK |
| **Phone:** | 215-555-1212 | **Country:** | |
| **Source Type:** | Notification | **Zip Code:** | 99999 |
| | | | |
| **Owner/Operator Ind:** | Current Owner | **Street No:** | |
| **Type:** | Private | **Street 1:** | 3770 EMBASSY PKWY |
| **Name:** | REPUBLIC TECHNOLOGIES INTL | **Street 2:** | |
| **Date Became Current:** | | **City:** | AKRON |
| **Date Ended Current:** | | **State:** | OH |
| **Phone:** | 330-670-3000 | **Country:** | |
| **Source Type:** | Notification | **Zip Code:** | 44333-8367 |
| | | | |
| **Owner/Operator Ind:** | Current Owner | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | REPUBLIC TECHNOLOGIES INTL | **Street 2:** | |
| **Date Became Current:** | 19990813 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |
| | | | |
| **Owner/Operator Ind:** | Current Operator | **Street No:** | 220 |
| **Type:** | Private | **Street 1:** | SEVENTH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report update with Notification | **Zip Code:** | 15010 |
| | | | |
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |

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|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040101 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | |
| ***Source Type:*** | Annual/Biennial Report update with Notification | ***Zip Code:*** | |

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|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20030627 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | |

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|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | 220 SEVENTH AVE |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040701 | ***City:*** | BEAVER FALLS |
| ***Date Ended Current:*** | | ***State:*** | PA |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | 15010 |

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|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040701 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | |

***Historical Handler Details***

| | |
|---|---|
| ***Receive Dt:*** | 20180321 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20160317 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20140310 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20120229 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20100219 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20080229 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20071102 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

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|---|---|
| ***Receive Dt:*** | 20060228 |
| ***Generator Code Description:*** | Large Quantity Generator |
| ***Handler Name:*** | KEYSTONE PROFILES LTD |

| | |
|---|---|
| ***Receive Dt:*** | 20041122 |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20030707
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20020416
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL

***Receive Dt:*** 20010322
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES BEAVER FALLS

***Receive Dt:*** 19980212
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS

***Receive Dt:*** 19960216
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS

***Receive Dt:*** 19940225
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19920226
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19900227
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19800818
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL

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|---|---|---|---|---|---|---|
| 1 | *2 of 2* | *NNW* | *0.05 / 282.63* | *730.57 / 7* | ***KEYSTONE PROFILES LTD<br>220 SEVENTH AVE<br>BEAVER FALLS PA 15010*** | ***RCRA TSD*** |

***EPA Handler ID:*** PAD004391421
***Gen Status Universe:*** Large Quantity Generator
***Contact Name:*** JASON W GAHAN
***Contact Address:*** 220 , SEVENTH AVE , , BEAVER FALLS , PA, 15010 , US
***Contact Phone No and Ext:*** 724-506-1500 x229
***Contact Email:*** JGAHAN@KEYSTONEPROFILES.COM
***Contact Country:*** US
***Land Type:*** Private
***County Name:*** BEAVER
***EPA Region:*** 03
***Receive Date:*** 20200330
***Location Latitude:*** 40.73855
***Location Longitude:*** -80.328859

***Violation/Evaluation Summary***

***Note:*** VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated Jan, 2021.

***Violation Details***

***Citation:***
***Violation Short Description:*** TSD - Container Use and Management

***Violation Type:*** 264.I
***Violation Determined Date:*** 20170627
***Scheduled Compliance Date:***
***Return to Compliance:*** Documented
***Actual Return to Compl:*** 20171106
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:***
***Violation Short Description:*** TSD IS-Container Use and Management
***Violation Type:*** 265.I
***Violation Determined Date:*** 20170627
***Scheduled Compliance Date:***
***Return to Compliance:*** Documented
***Actual Return to Compl:*** 20171106
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:***
***Violation Short Description:*** TSD IS-Tank System Standards
***Violation Type:*** 265.J
***Violation Determined Date:*** 20170627
***Scheduled Compliance Date:***
***Return to Compliance:*** Documented
***Actual Return to Compl:*** 20171106
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:*** FR - 40CFR264.16
***Violation Short Description:*** Generators - Records/Reporting
***Violation Type:*** 262.D
***Violation Determined Date:*** 20010108
***Scheduled Compliance Date:***
***Return to Compliance:*** Documented
***Actual Return to Compl:*** 20010123
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:*** SR - 25 PA CODE 262.23(d)(e)(f)
***Violation Short Description:*** Generators - Manifest
***Violation Type:*** 262.B
***Violation Determined Date:*** 19950705
***Scheduled Compliance Date:***
***Return to Compliance:*** Observed
***Actual Return to Compl:*** 19950705
***Violation Responsible Agency:*** State

***Violation Details***

***Citation:***
***Violation Short Description:*** Generators - General
***Violation Type:*** 262.A
***Violation Determined Date:*** 19871028
***Scheduled Compliance Date:*** 19880117
***Return to Compliance:*** Observed
***Actual Return to Compl:*** 19891115
***Violation Responsible Agency:*** State

***Enforcement Details***

***Enforcement Type:*** 120
***Enforcement Type Description:*** WRITTEN INFORMAL
***Enforcement Action Date:*** 19871117
***Enf Disposition Status:***
***Disposition Status Date:***
***Enforcement Lead Agency:*** State
***Proposed Penalty Amount:***
***Final Amount:***
***Paid Amount:***

***Evaluation Details***

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD IS-Container Use and Management
***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD - Container Use and Management
***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20170627
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** TSD IS-Tank System Standards
***Return to Compliance Date:*** 20171106
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20030815
***Evaluation Type Description:*** FOCUSED COMPLIANCE INSPECTION
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 20010108
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - Records/Reporting
***Return to Compliance Date:*** 20010123
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19990331
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19970401
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19960814
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19950705
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - Manifest
***Return to Compliance Date:*** 19950705
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19940509
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19920821
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19910808
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19891115
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:***
***Return to Compliance Date:***
***Evaluation Agency:*** State

***Evaluation Start Date:*** 19871028
***Evaluation Type Description:*** COMPLIANCE EVALUATION INSPECTION ON-SITE
***Violation Short Description:*** Generators - General
***Return to Compliance Date:*** 19891115
***Evaluation Agency:*** State

***Handler Summary***

***Importer Activity:*** No
***Mixed Waste Generator:*** No
***Transporter Activity:*** No
***Transfer Facility:*** No
***Onsite Burner Exemption:*** No
***Smelting, Melting and Refining:*** No
***Underground Injection Control:*** No
***Commercial TSD:*** No
***Used Oil Transporter:*** No
***Used Oil Transfer Facility:*** No
***Used Oil Processor:*** No
***Used Oil Refiner:*** No
***Used Oil Burner:*** No
***Used Oil Market Burner:*** No
***Used Oil Spec Marketer:*** No

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 19800818
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Notification

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 19900227
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 2
***Receive Date:*** 19920226
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 3
***Receive Date:*** 19940225
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 4
***Receive Date:*** 19960216
***Handler Name:*** REPUBLIC ENGINEERED STEELS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 5
***Receive Date:*** 19980212
***Handler Name:*** REPUBLIC ENGINEERED STEELS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 6
***Receive Date:*** 20010322
***Handler Name:*** REPUBLIC TECHNOLOGIES BEAVER FALLS
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Hazardous Waste Handler Details***

***Sequence No:*** 7
***Receive Date:*** 20020416
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL
***Federal Waste Generator Code:*** 1

**Generator Code Description:** Large Quantity Generator
**Source Type:** Annual/Biennial Report

***Hazardous Waste Handler Details***

**Sequence No:** 2
**Receive Date:** 20030707
**Handler Name:** KEYSTONE PROFILES LTD
**Federal Waste Generator Code:** 1
**Generator Code Description:** Large Quantity Generator
**Source Type:** Notification

***Waste Code Details***

**Hazardous Waste Code:** D001
**Waste Code Description:** IGNITABLE WASTE

**Hazardous Waste Code:** D002
**Waste Code Description:** CORROSIVE WASTE

**Hazardous Waste Code:** D007
**Waste Code Description:** CHROMIUM

**Hazardous Waste Code:** D008
**Waste Code Description:** LEAD

**Hazardous Waste Code:** D009
**Waste Code Description:** MERCURY

**Hazardous Waste Code:** D039
**Waste Code Description:** TETRACHLOROETHYLENE

**Hazardous Waste Code:** K062
**Waste Code Description:** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

**Sequence No:** 8
**Receive Date:** 20041122
**Handler Name:** KEYSTONE PROFILES LTD
**Federal Waste Generator Code:** 1
**Generator Code Description:** Large Quantity Generator
**Source Type:** Annual/Biennial Report

***Waste Code Details***

**Hazardous Waste Code:** D002
**Waste Code Description:** CORROSIVE WASTE

**Hazardous Waste Code:** D007
**Waste Code Description:** CHROMIUM

**Hazardous Waste Code:** D010
**Waste Code Description:** SELENIUM

***Hazardous Waste Handler Details***

**Sequence No:** 9
**Receive Date:** 20060228
**Handler Name:** KEYSTONE PROFILES LTD
**Federal Waste Generator Code:** 1
**Generator Code Description:** Large Quantity Generator

***Source Type:*** Annual/Biennial Report

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 3
***Receive Date:*** 20071102
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Implementer

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** D008
***Waste Code Description:*** LEAD

***Hazardous Waste Code:*** D009
***Waste Code Description:*** MERCURY

***Hazardous Waste Code:*** D039
***Waste Code Description:*** TETRACHLOROETHYLENE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 10
***Receive Date:*** 20080229
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 20100219
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 2
***Receive Date:*** 20120229
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 3
***Receive Date:*** 20140310
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K062

***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 4
***Receive Date:*** 20160317
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 5
***Receive Date:*** 20180321
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Hazardous Waste Handler Details***

***Sequence No:*** 6
***Receive Date:*** 20200330
***Handler Name:*** KEYSTONE PROFILES LTD
***Federal Waste Generator Code:*** 1
***Generator Code Description:*** Large Quantity Generator
***Source Type:*** Annual/Biennial Report update with Notification

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K062
***Waste Code Description:*** SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

***Owner/Operator Details***

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | 220 7TH AVE |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20030627 | ***City:*** | BEAVER FALLS |
| ***Date Ended Current:*** | | ***State:*** | PA |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | 15010 |

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|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20030627 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | 220 SEVENTH AVE |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040701 | ***City:*** | BEAVER FALLS |
| ***Date Ended Current:*** | | ***State:*** | PA |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | 15010 |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040101 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | |
| ***Source Type:*** | Annual/Biennial Report update with Notification | ***Zip Code:*** | |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | 220 |
| ***Type:*** | Private | ***Street 1:*** | SEVENTH AVE |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040101 | ***City:*** | BEAVER FALLS |
| ***Date Ended Current:*** | | ***State:*** | PA |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report update with Notification | ***Zip Code:*** | 15010 |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | 3770 EMBASSY PKWY |
| ***Name:*** | REPUBLIC TECHNOLOGIES INTL | ***Street 2:*** | |
| ***Date Became Current:*** | | ***City:*** | AKRON |
| ***Date Ended Current:*** | | ***State:*** | OH |
| ***Phone:*** | 330-670-3000 | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | 44333-8367 |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | REPUBLIC TECHNOLOGIES INTL | ***Street 2:*** | |
| ***Date Became Current:*** | 19990813 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | |
| ***Name:*** | KEYSTONE PROFILES LTD | ***Street 2:*** | |
| ***Date Became Current:*** | 20040101 | ***City:*** | |
| ***Date Ended Current:*** | | ***State:*** | |
| ***Phone:*** | | ***Country:*** | US |
| ***Source Type:*** | Annual/Biennial Report | ***Zip Code:*** | |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |

| | | | |
|---|---|---|---|
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report update with Notification | **Zip Code:** | |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Owner | **Street No:** | 220 |
| **Type:** | Private | **Street 1:** | SEVENTH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | 15010 |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Owner | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | REPUBLIC TECHNOLOGIES INTL | **Street 2:** | |
| **Date Became Current:** | 19990813 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20030627 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | 220 |
| **Type:** | Private | **Street 1:** | SEVENTH AVE |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040101 | **City:** | BEAVER FALLS |
| **Date Ended Current:** | | **State:** | PA |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report update with Notification | **Zip Code:** | 15010 |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | OPERSTREET |
| **Name:** | OPERNAME | **Street 2:** | |
| **Date Became Current:** | | **City:** | OPERCITY |
| **Date Ended Current:** | | **State:** | AK |
| **Phone:** | 215-555-1212 | **Country:** | |
| **Source Type:** | Notification | **Zip Code:** | 99999 |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20030627 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | |
| **Source Type:** | Notification | **Zip Code:** | |

| | | | |
|---|---|---|---|
| **Owner/Operator Ind:** | Current Operator | **Street No:** | |
| **Type:** | Private | **Street 1:** | |
| **Name:** | KEYSTONE PROFILES LTD | **Street 2:** | |
| **Date Became Current:** | 20040701 | **City:** | |
| **Date Ended Current:** | | **State:** | |
| **Phone:** | | **Country:** | US |
| **Source Type:** | Annual/Biennial Report | **Zip Code:** | |

***Historical Handler Details***

| | |
|---|---|
| **Receive Dt:** | 20180321 |
| **Generator Code Description:** | Large Quantity Generator |
| **Handler Name:** | KEYSTONE PROFILES LTD |

***Receive Dt:*** 20160317
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20140310
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20120229
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20100219
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20080229
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20071102
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20060228
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20041122
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20030707
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** KEYSTONE PROFILES LTD

***Receive Dt:*** 20020416
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL

***Receive Dt:*** 20010322
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES BEAVER FALLS

***Receive Dt:*** 19980212
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS

***Receive Dt:*** 19960216
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS

***Receive Dt:*** 19940225
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19920226
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19900227
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC ENGINEERED STEELS BEAVER FALLS

***Receive Dt:*** 19800818
***Generator Code Description:*** Large Quantity Generator
***Handler Name:*** REPUBLIC TECHNOLOGIES INTL

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 2 | 1 of 1 | NNW | 0.07 / 365.39 | 724.86 / 1 | MORROW LINCOLN MERCURY<br>201 7TH AVE<br>BEAVER FALLS` PA 15010 | RCRA SQG |

**EPA Handler ID:** PAD013849674
**Gen Status Universe:** Small Quantity Generator
**Contact Name:**
**Contact Address:** US
**Contact Phone No and Ext:**
**Contact Email:**
**Contact Country:** US
**County Name:** BEAVER
**EPA Region:** 03
**Land Type:** Other
**Receive Date:** 20120814
**Location Latitude:** 40.743632
**Location Longitude:** -80.320111

***Violation/Evaluation Summary***

**Note:** NO RECORDS: As of Jan 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

***Handler Summary***

**Importer Activity:** No
**Mixed Waste Generator:** No
**Transporter Activity:** No
**Transfer Facility:** No
**Onsite Burner Exemption:** No
**Furnace Exemption:** No
**Underground Injection Activity:** No
**Commercial TSD:** No
**Used Oil Transporter:** No
**Used Oil Transfer Facility:** No
**Used Oil Processor:** No
**Used Oil Refiner:** No
**Used Oil Burner:** No
**Used Oil Market Burner:** No
**Used Oil Spec Marketer:** No

***Hazardous Waste Handler Details***

**Sequence No:** 1
**Receive Date:** 19890706
**Handler Name:** MORROW MOTORS INC
**Federal Waste Generator Code:** 2
**Generator Code Description:** Small Quantity Generator
**Source Type:** Notification

***Waste Code Details***

**Hazardous Waste Code:** D000
**Waste Code Description:** DESCRIPTION

**Hazardous Waste Code:** D001
**Waste Code Description:** IGNITABLE WASTE

**Hazardous Waste Code:** F002
**Waste Code Description:** THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR

THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Hazardous Waste Code:*** F004
***Waste Code Description:*** THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Hazardous Waste Handler Details***

***Sequence No:*** 150
***Receive Date:*** 20120814
***Handler Name:*** MORROW LINCOLN MERCURY
***Federal Waste Generator Code:*** 2
***Generator Code Description:*** Small Quantity Generator
***Source Type:*** Implementer

***Waste Code Details***

***Hazardous Waste Code:*** D001
***Waste Code Description:*** IGNITABLE WASTE

***Hazardous Waste Code:*** D035
***Waste Code Description:*** METHYL ETHYL KETONE

***Hazardous Waste Code:*** F003
***Waste Code Description:*** THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Hazardous Waste Code:*** F005
***Waste Code Description:*** THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Owner/Operator Details***

***Owner/Operator Ind:*** Current Owner
***Type:*** Private
***Name:*** LEWIS, RON
***Date Became Current:***
***Date Ended Current:***
***Phone:*** 215-555-1212
***Source Type:*** Notification
***Street No:***
***Street 1:*** OWNERSTREET
***Street 2:***
***City:*** OWNERCITY
***State:*** AK
***Country:***
***Zip Code:*** 99999

***Owner/Operator Ind:*** Current Operator
***Type:*** Private
***Name:*** OPERNAME
***Date Became Current:***
***Date Ended Current:***
***Phone:*** 215-555-1212
***Source Type:*** Notification
***Street No:***
***Street 1:*** OPERSTREET
***Street 2:***
***City:*** OPERCITY
***State:*** AK
***Country:***
***Zip Code:*** 99999

***Historical Handler Details***

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Receive Dt:** 19890706
**Generator Code Description:** Small Quantity Generator
**Handler Name:** MORROW MOTORS INC

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | 1 of 3 | N | 0.09 / 498.53 | 727.93 / 4 | REPUBLIC TECHNOLOGIES INTL FAC<br>220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | ENG |

**Primary Facility ID:** 646208
**Land Designation Code:** ENGC
**County:** Beaver
**Region:** SW-5
**Municipality:** Beaver Falls

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | 2 of 3 | N | 0.09 / 498.53 | 727.93 / 4 | REPUBLIC TECHNOLOGIES INTL FAC<br>220 SEVENTH AVE<br>BEAVER FALLS PA 15010 | INST |

**Primary Facility ID:** 646208
**Primary Facility Name:** REPUBLIC TECHNOLOGIES INTL FAC
**Land Designation Code:** DEEDR
**Region:** SW-5
**County Name:** Beaver
**Municipality Name:** Beaver Falls

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | 3 of 3 | N | 0.09 / 498.53 | 727.93 / 4 | 220 SEVENTH AVENUE<br>BEAVER FALLS PA | HMIRS |

**Incident County:** BEAVER

***HMIR Incident Reports***

**Report No:** I-2019070104
**Report Type:** A hazardous material incident
**Date of Incident:** 2019-05-10
**Time of Incident:** 1030
**Haz Class Code:**
**Hazardous Class:** 8
**Commodity Short Nm:** SULFURIC ACID, SPENT
**Commodity Long Nm:** SULFURIC ACID, SPENT
**Trade Name:**
**ID No:** UN1832
**Haz Waste Ind:** Yes
**Haz Waste EPA No:** 19,749,343.00
**HMIS Tox Inhalation?:** No
**TIH Hazard Zone:**
**Qty Released:** 400
**Unit of Measure:** Liquid - Gallon
**What Failed:**
**What Failed Desc:**
**How Failed Code:**
**How Failed Desc:**
**Failure Cause Code:**
**Failure Cause Desc:**
**Ident. Markings:** MC 312 SS
**Cont1 Pkging Type:**
**Cont1 Const Mat:**
**Cont1 Head Type:**
**Cont1 Pkg Capacity:** 5500

**Fed DOT Agency Nm:**
**Fed DOT Report No:**
**Report Submit Src:** Paper
**Inc Multiple Rows:** No
**Inc Non US State:**
**Mode Transport:** Highway
**Transport Phase:** Loading
**Incident Occrrnce:**
**Mat Ship Approval?:** No
**Mat Ship Approv No:**
**Undecl Hazmat Ship?:** No
**Packaging Type:** Cargo Tank Motor Vehicle (CTMV)
**Packing Group:** II
**Carrier Reporter:** EAP INDUSTRIES, INC.
**CR Street Name:** 1567 SMITH TWP STATE RD
**CR City:** ATLASBURG
**CR State:** PA
**CR Postal Code:** 15004
**CR Non US State:**
**CR Fed DOT ID:** 876278
**CR Hazmat Reg ID:**
**CR Country:** US
**Shipper Name:** KEYSTONE PROFILES LTD
**Shipper Street Name:** 220 SEVENTH AVE
**Shipper City:** BEAVER FALLS
**Shipper State:** PA
**Shipper Postal:** 15010

| | | | |
|---|---|---|---|
| **C1 Capacity UOM:** | LGA | **Shipper Non US St:** | |
| **Cont1 Pkg Amt:** | 4300 | **Shipper Country:** | US |
| **C1 Pkg Amt UOM:** | LGA | **Shipper Waybill:** | |
| **Cont1 Pkg No:** | 1 | **Ship Hazmat Reg ID:** | |
| **C1 Pkg NO Failed:** | 0 | **Origin City:** | |
| **Cont1 Pkg Mnfctr:** | ITTI | **Origin State:** | |
| **Cont1 Pkg Mnfct Dt:** | 1994-07-01 00:00:00 | **Origin Postal:** | |
| **Cont1 Pkg Serial NO:** | 1T9V0422RS060172 | **Origin Non US St:** | |
| **C1 Pkg Last Test Dt:** | 2018-07-27 00:00:00 | **Origin Country:** | US |
| **C1 Test Const Mat:** | | **Destination City:** | VICKERY |
| **C1 Pkg Dsign Pres.:** | 35 | **Destination State:** | OHIO |
| **C1 Dsign Press UOM:** | PSI | **Destination Postal:** | 43464 |
| **C1 Pkg Shell Thick:** | 0.188 | **Destination Non US:** | |
| **C1 Shell Thick UOM:** | INCH | **Destination Country:** | US |
| **C1 Head Thickness:** | 0.25 | **Cont2 Package Type:** | |
| **C1 Head Thick UOM:** | INCH | **Cont2 Const Mat:** | |
| **C1 Pkg Srvc Pres.:** | 0 | **Cont2 Pkg Capacity:** | 0 |
| **C1 Srvc Press UOM:** | | **Cont2 Capacity UOM:** | |
| **C1 Valve/Device Fail?:** | No | **Cont2 Pkg Amount:** | 0 |
| **C1 Device Type:** | | **Cont2 Pkg Amt UOM:** | |
| **C1 Device Mnfctr:** | | **Cont2 Pkg No:** | 0 |
| **C1 Device Model:** | | **Cont2 Pkg No Failed:** | 0 |
| **NRC No:** | 1245222 | | |

| | | | |
|---|---|---|---|
| **RAM Pkg Category:** | | **Haz NonHosp Public:** | 0 |
| **RAM Pkg Cert.:** | FALSE | **Haz NonHosp Old:** | |
| **RAM Pkg Cert. NBR:** | | **Tot Haz Non Hosp Inj:** | |
| **RAM Nuclide S:** | | **Total Hazmat Injuries:** | 0 |
| **RAM Transport Index:** | | **Evacuation Indicator:** | No |
| **RAM UOM:** | | **Public Evacuated:** | 0 |
| **RAM Activity Rpted:** | 0 | **Employees Evac:** | 0 |
| **RAM UOM Rpted:** | | **Total Evacuated:** | 0 |
| **RAM Activity:** | 0 | **Total Evacuation Hrs:** | 0 |
| **RAM Activity UOM:** | | **Major Artery Closed:** | No |
| **RAM Mat Safety:** | | **Mjr Artery Hrs Closed:** | 0 |
| **Spillage Result:** | Yes | **Material Involved:** | No |
| **Fire Result:** | No | **Estimated Speed:** | 0 |
| **Explosion Result:** | No | **Weather Conditions:** | |
| **Water Sewer Result:** | No | **Vehicle Overturn:** | No |
| **Gas Dispersion:** | No | **Vehicle Left Roadway:** | No |
| **Environment Damage:** | No | **Passenger Aircraft:** | No |
| **No Release Result:** | No | **Cargo Baggage:** | |
| **Fire EMS Report:** | No | **Ship Non Transport:** | No |
| **Fire EMS EMS Report:** | | **Ship Air First Flight:** | No |
| **Police Report:** | No | **Ship Air Subflight:** | No |
| **Police Report No:** | | **Ship Init Transport:** | No |
| **In House Cleanup:** | Yes | **Ship Phase Transfer:** | No |
| **Other Cleanup:** | No | **Contact Name:** | JASON GAHAN |
| **Damage > 500:** | Yes | **Contact Title:** | DIRECTOR OF ENGINEERING |
| **Material Loss:** | 0 | **Contact Business:** | KEYSTONE PROFILES |
| **Carrier Damage:** | 0 | **Contact Street:** | 220 SEVENTH AVENUE |
| **Property Damage:** | 0 | **Contact City:** | BEAVER FALLS |
| **Response Cost:** | 2500 | **Contact State:** | PA |
| **Remediation Cost:** | 2500 | **Contact Postal:** | 15010 |
| **Damage Old Form:** | 0 | **Contact Non US St:** | |
| **Total Damages Amt:** | 5000 | **Contact Country:** | US |
| **Hazmat Fatality:** | No | **Inc. Report Prepared:** | Shipper |
| **Haz Fatal Employees:** | 0 | **HMIS Serious Incidnt:** | Yes |
| **Haz Fatal Respndrs:** | 0 | **HMIS Serious Fatality:** | No |
| **Haz Fatal Gen Public:** | 0 | **HMIS Serious Injury:** | No |
| **Tot Hazmat Fatalities:** | 0 | **HMIS Flight Plan:** | No |
| **Non Hazmat Fatality:** | No | **HMIS Serious Evacs:** | No |
| **Non Hazmat Fatals:** | 0 | **HMIS Major Artery:** | No |
| **Hazmat Injury:** | No | **HMIS Bulk Release:** | Yes |
| **Haz Hospital Empl:** | 0 | **HMIS Marine Pollutnt:** | No |
| **Haz Hospital Resp:** | 0 | **HMIS Radioactive:** | No |
| **Haz Hosp Gen Public:** | 0 | **HMIS Gen Pkg Type:** | TANK |
| **Haz Hosp Old Form:** | 0 | **HMIS Container Code:** | MC312 |
| **Total Haz Hosp Inj:** | 0 | **HMIS Container Desc:** | Cargo tanks |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Haz Non Hosp Empl:** | 0 | **HMIS Bulk Incident:** | Yes |
| **Haz Non Hosp Resp:** | 0 | **Undeclared Shipment:** | No |
| **Description of Events:** | NO COMMENTS PROVIDED | | |
| **Recommend Actions Taken:** | WE SUGGEST THE TRANSPORTER PROVIDE ADDITIONAL TRAINING ON TRUCK GAUGES AND MONITORING EQUIPMENT. DUE TO THE ERROR OF MISREADING THE WEIGHT, THIS OFFLOADING WOULD HAVE NOT HAVE BEEN REQUIRED | | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 4 | 1 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | KEYSTONE PROFILES<br>220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | AST |

| | | | |
|---|---|---|---|
| **Facility Name (Reg):** | KEYSTONE PROFILES | **Address 2 (Reg):** | |
| **City (Reg):** | BEAVER FALLS | **Address 1 (Reg):** | 220 7TH AVE |
| **Zip (Reg):** | 15010-3274 | **Site ID:** | 247661 |
| **Municipality (Reg):** | Beaver Falls | **Other ID:** | 04-04263 |
| **County (Reg):** | Beaver | **AST:** | Yes |
| **Latitude (Map):** | 40.7435439997839 | **Active AST(s):** | Yes |
| **Longitude (Map):** | -80.3200199999502 | **Inactive AST(s):** | Yes |
| **Facility Name (Map):** | KEYSTONE PROFILES | | |
| **Address 1 (Map):** | 220 7TH AVE | | |
| **Address 2 (Map):** | | | |
| **City (Map):** | BEAVER FALLS | | |
| **Municipality (Map):** | Beaver Falls City | | |
| **County (Map):** | Beaver | | |
| **Zip (Map):** | 15010-3274 | | |
| **Facility Name (Search):** | KEYSTONE PROFILES | | |
| **Address (Search):** | 220 7TH AVE | | |
| **Address2 (Search):** | | | |
| **City (Search):** | BEAVER FALLS | | |
| **Municipality (Search):** | Beaver Falls City | | |
| **County (Search):** | Beaver | | |
| **Zip (Search):** | 15010-3274 | | |
| **Source(s):** | DEP Storage Tank Data By Region; DEP Map of Storage Tanks - Active; DEP Map of Storage Tanks - Inactive; DEP Storage Tanks Search - Active; DEP Storage Tanks Search - Inactive | | |

***DEP Facility Information***

| | | | |
|---|---|---|---|
| **PF Name:** | KEYSTONE PROFILES | **Client ID:** | 213328 |
| **PF Address 1:** | 220 7TH AVE | **Client Name:** | KEYSTONE PROFILES |
| **PF Address 2:** | | **Client Address 1:** | 220 7TH AVE |
| **PF City:** | BEAVER FALLS | **Client Address 2:** | |
| **PF State:** | PA | **Client City:** | BEAVER FALLS |
| **PF Zip:** | 15010-3274 | **Client State:** | PA |
| **County:** | Beaver | **Client Zip:** | 15010-3274 |
| **Municipality:** | Beaver Falls City | | |
| **Detail Source(s):** | Active Tanks / Inactive Tanks | | |

***eMap Active Facility Information***

| | | | |
|---|---|---|---|
| **Facility Name:** | KEYSTONE PROFILES | **Tank Owner ID:** | 213328 |
| **Facility Address1:** | 220 7TH AVE | **Tank Owner Name:** | KEYSTONE PROFILES |
| **Facility Address2:** | | **Tank Owner Addr1:** | 220 7TH AVE |
| **Facility City:** | BEAVER FALLS | **Tank Owner Addr2:** | |
| **Facility State:** | PA | **Tank Owner City:** | BEAVER FALLS |
| **Facility Zip:** | 15010-3274 | **Tank Owner State:** | PA |
| **County ID:** | 2411 | **Tank Owner Zip:** | 15010-3274 |
| **Facility County:** | Beaver | **Primary Facility ID:** | 578749 |
| **Municipality ID:** | 212 | **Longitude:** | -80.3200199999502 |
| **Facility Municipality:** | Beaver Falls City | **Latitude:** | 40.7435439997839 |
| **Reg Expiration Date:** | 10/04/2021 | | |
| **Tank Information:** | http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx?/Public/DEP/Tanks/SSRS/TANKS&P_OTHER_ID=04-04263&P_ZIP=% | | |

***eMap Inactive Facility Information***

| | | | |
|---|---|---|---|
| **Facility Name:** | KEYSTONE PROFILES | **Tank Owner ID:** | 213328 |
| **Facility Address1:** | 220 7TH AVE | **Tank Owner Name:** | KEYSTONE PROFILES |
| **Facility Address2:** | | **Tank Owner Addr1:** | 220 7TH AVE |
| **Facility County:** | Beaver | **Tank Owner Addr2:** | |
| **Facility State:** | PA | **Tank Owner City:** | BEAVER FALLS |
| **Facility Zip:** | 15010-3274 | **Tank Owner State:** | PA |
| **County ID:** | 2411 | **Tank Owner Zip:** | 15010-3274 |
| **Facility City:** | BEAVER FALLS | **Primary Facility ID:** | 578749 |
| **Municipality ID:** | 212 | **Longitude:** | -80.3200199999501 |
| **Facility Municipality:** | Beaver Falls City | **Latitude:** | 40.7435439997839 |

**Tank Information:** http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx?/Public/DEP/Tanks/SSRS/TANKS_INACTIVE&P_OTHER_ID=04-04263&P_ZIP=%

***External Public Region Fac Information***

| | | | |
|---|---|---|---|
| **PF Name:** | KEYSTONE PROFILES | **Mailing Name:** | KEYSTONE PROFILES |
| **Locad PF Addr 1:** | 220 7TH AVE | **Mailing Address 1:** | 220 7TH AVE |
| **Locad PF Addr 2:** | | **Mailing Address 2:** | |
| **Locad PF City:** | BEAVER FALLS | **Mailing City:** | BEAVER FALLS |
| **Locad PF State:** | PA | **Mailing State:** | PA |
| **Locad PF Zip Code:** | 15010-3274 | **Mailing Zip:** | 15010-3274 |
| **PF County Name:** | Beaver | **Region ICS Code Nm:** | EP SW Rgnl Off Pittsburgh |
| **PF Municipal Nm:** | Beaver Falls | **Region ICS Code:** | 4500 |
| **Client ID:** | 213328 | **Reg Exp Date:** | 10/4/2021 12:00:00 AM |

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593966 - 006A | **Capacity:** | 310 |
| **Sequence No:** | 006A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593963 - 003A | **Capacity:** | 310 |
| **Sequence No:** | 003A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593964 - 004A | **Capacity:** | 310 |
| **Sequence No:** | 004A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |

| | | | |
|---|---|---|---|
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593968 - 008A | **Capacity:** | 310 |
| **Sequence No:** | 008A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593970 - 010A | **Capacity:** | 310 |
| **Sequence No:** | 010A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593965 - 005A | **Capacity:** | 310 |
| **Sequence No:** | 005A | **Substance Code:** | OTHER |
| **Status Code:** | C | **Substance:** | OTHER |
| **Status:** | Currently In Use | **Subst Date End:** | |
| **Status Cd Date End:** | | **Inspection Code:** | |
| **Tank Code:** | AST | **Inspection:** | |
| **Permit Type:** | OPR | **Last Dt Inspect:** | No Inspection Date |
| **Permit Type Desc:** | Operating Permit | **Third Party Inspect:** | |
| **Permit Status:** | APPR | **Next Inspection Due:** | |
| **Permit Status Desc:** | Approved | **Next Inspect Due Dt:** | |
| **Date Installed:** | | | |

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

**Full Seq No:** 593967 - 007A
**Sequence No:** 007A
**Status Code:** C
**Status:** Currently In Use
**Status Cd Date End:**
**Tank Code:** AST
**Permit Type:** OPR
**Permit Type Desc:** Operating Permit
**Permit Status:** APPR
**Permit Status Desc:** Approved
**Date Installed:**

**Capacity:** 310
**Substance Code:** OTHER
**Substance:** OTHER
**Subst Date End:**
**Inspection Code:**
**Inspection:**
**Last Dt Inspect:** No Inspection Date
**Third Party Inspect:**
**Next Inspection Due:**
**Next Inspect Due Dt:**

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

**Full Seq No:** 593972 - 012A
**Sequence No:** 012A
**Status Code:** C
**Status:** Currently In Use
**Status Cd Date End:**
**Tank Code:** AST
**Permit Type:** OPR
**Permit Type Desc:** Operating Permit
**Permit Status:** APPR
**Permit Status Desc:** Approved
**Date Installed:** 09/15/2000

**Capacity:** 10000
**Substance Code:** HZSUB
**Substance:** Hazardous Substance
**Subst Date End:**
**Inspection Code:** IS
**Inspection:** In Service
**Last Dt Inspect:** 08/15/2011
**Third Party Inspect:**
**Next Inspection Due:** IS
**Next Inspect Due Dt:** 08/15/2021

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Active AST Information***

**Full Seq No:** 593969 - 009A
**Sequence No:** 009A
**Status Code:** C
**Status:** Currently In Use
**Status Cd Date End:**
**Tank Code:** AST
**Permit Type:** OPR
**Permit Type Desc:** Operating Permit
**Permit Status:** APPR
**Permit Status Desc:** Approved
**Date Installed:**

**Capacity:** 310
**Substance Code:** OTHER
**Substance:** OTHER
**Subst Date End:**
**Inspection Code:**
**Inspection:**
**Last Dt Inspect:** No Inspection Date
**Third Party Inspect:**
**Next Inspection Due:**
**Next Inspect Due Dt:**

**Expiration Date(s):** 10/04/2021
**Source:** DEP - Active Storage Tank Search; DEP regions

***Inactive AST Information***

**Full Seq No:** 593961 - 002A
**Sequence No:**
**Tank Code:** AST
**Status:** E
**Status Desc:** Exempt From State Law
**Status Date:** 12/01/1988
**Status Cd Date End:**
**Date Installed:** 12/01/1988

**Capacity:** 250
**Substance Code:** GAS
**Substance:** Gasoline
**Substance Date End:**
**Inspection Code:**
**Inspection:**
**Third Party Inspect:**

***Inactive AST Information***

**Full Seq No:** 593971 - 011A

**Capacity:** 500

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Sequence No:** | | **Substance Code:** | DIESL |
| **Tank Code:** | AST | **Substance:** | Diesel Fuel |
| **Status:** | E | **Substance Date End:** | |
| **Status Desc:** | Exempt From State Law | **Inspection Code:** | |
| **Status Date:** | 01/01/1995 | **Inspection:** | |
| **Status Cd Date End:** | | **Third Party Inspect:** | |
| **Date Installed:** | 06/01/1992 | | |

***Inactive AST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 593959 - 001A | **Capacity:** | 10000 |
| **Sequence No:** | | **Substance Code:** | HZSUB |
| **Tank Code:** | AST | **Substance:** | Hazardous Substance |
| **Status:** | R | **Substance Date End:** | |
| **Status Desc:** | Removed | **Inspection Code:** | |
| **Status Date:** | 09/15/2000 | **Inspection:** | |
| **Status Cd Date End:** | | **Third Party Inspect:** | |
| **Date Installed:** | 01/01/1970 | | |

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| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 4 | 2 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | REPUBLIC TECHNOLOGIES INTL FAC<br>220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | VCP |

| | | | |
|---|---|---|---|
| **Primary Facility ID:** | 646208 | **County:** | Beaver |
| **Site Name:** | REPUBLIC TECHNOLOGIES INTL FAC | **Municipality:** | Beaver Falls City |
| **Address1:** | 220 7TH AVE | **Region:** | Southwest Region |
| **Address2:** | | **Latitude:** | 40.743888 |
| **City:** | BEAVER FALLS | **Longitude:** | -80.319166 |
| **Zip Code:** | 15010-3274 | **State:** | PA |
| **Primary Facility ID (Aquifer):** | | | |
| **Primary Fac Name (Aquifer):** | | | |
| **Address (Aquifer):** | | | |
| **City (Aquifer):** | | | |
| **County (Aquifer):** | | | |
| **Source:** | Sites Completed; Land Recycling Cleanup Locations - Groundwater Media; Land Recycling Cleanup Locations - Soil Media | | |

***VCP Detail***

| | | | |
|---|---|---|---|
| **LRP Activity ID:** | 32848 | **NIR Received Date:** | |
| **Approval Date:** | | **Media:** | Groundwater |
| **Remediation Standard:** | Special Industrial Area | | |
| **Contamination Category:** | Other Organics | | |
| **Activity & Use Limitation:** | YES | | |
| **Source:** | Sites Completed | | |

| | | | |
|---|---|---|---|
| **LRP Activity ID:** | 32848 | **NIR Received Date:** | |
| **Approval Date:** | | **Media:** | Groundwater |
| **Remediation Standard:** | Special Industrial Area | | |
| **Contamination Category:** | Inorganics | | |
| **Activity & Use Limitation:** | YES | | |
| **Source:** | Sites Completed | | |

| | | | |
|---|---|---|---|
| **LRP Activity ID:** | 32848 | **NIR Received Date:** | |
| **Approval Date:** | | **Media:** | Soil |
| **Remediation Standard:** | Special Industrial Area | | |
| **Contamination Category:** | PCB | | |
| **Activity & Use Limitation:** | YES | | |
| **Source:** | Sites Completed | | |

| | | | |
|---|---|---|---|
| **LRP Activity ID:** | 32848 | **NIR Received Date:** | |
| **Approval Date:** | | **Media:** | Soil |
| **Remediation Standard:** | Special Industrial Area | | |
| **Contamination Category:** | Other Organics | | |
| **Activity & Use Limitation:** | YES | | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Source:** Sites Completed

**LRP Activity ID:** 32848
**Approval Date:**
**Remediation Standard:** Special Industrial Area
**Contamination Category:** PCB
**Activity & Use Limitation:** YES
**Source:** Sites Completed
**NIR Received Date:**
**Media:** Groundwater

**LRP Activity ID:** 32848
**Approval Date:**
**Remediation Standard:** Special Industrial Area
**Contamination Category:** Inorganics
**Activity & Use Limitation:** YES
**Source:** Sites Completed
**NIR Received Date:**
**Media:** Soil

***Groundwater Media***

**Primary Fac Status:** ACTIVE
**Sub Facility ID:** 788880
**Sub Facility Status:** ACTIVE
**Sub Facility Type:** GROUNDWATER MEDIA
**Sub Facility Name:** GROUNDWATER
**Other Facility ID:** 5-4-3-18816
**Sub Other FID:** 788880
**Compliance:** YES
**Organization Name:** REPUBLIC TECH INTL LLC
**Primary Facility Type:** LAND RECYCLING CLEANUP LOCATION
**Primary Facility Kind:** Unavailable
**Site ID:** 247661
**Site Status:** ACTIVE
**Site Name:** KEYSTONE PROFILES LTD BEAVER FALLS PLANT
**Client ID:** 146265
**Client Name:** REPUBLIC TECH INTL LLC
**Client Relationship:** Owner
**X:** -80.3191666642106
**Y:** 40.7438888866196
**Shape FID:** 4442001

***Soil Media***

**Primary Fac Status:** ACTIVE
**Sub Facility ID:** 788879
**Sub Facility Status:** ACTIVE
**Sub Facility Type:** SOIL MEDIA
**Sub Facility Name:** SOILS
**Other Facility ID:** 5-4-3-18816
**Sub Other FID:** 788879
**Compliance:** YES
**Organization Name:** REPUBLIC TECH INTL LLC
**Primary Facility Type:** LAND RECYCLING CLEANUP LOCATION
**Primary Facility Kind:** Unavailable
**Site ID:** 247661
**Site Status:** ACTIVE
**Site Name:** KEYSTONE PROFILES LTD BEAVER FALLS PLANT
**Client ID:** 146265
**Client Name:** REPUBLIC TECH INTL LLC
**Client Relationship:** Owner
**X:** -80.3191666642106
**Y:** 40.7438888866196
**Shape FID:** 4336527

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| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 4 | 3 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | KEYSTONE PROFILES<br>220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | LUST |

**Facility ID:** 578749
**Prgm Other ID:** 04-04263
**Client ID:** 213328
**Region:** EP SW Rgnl Off Pittsburgh
**County:** Beaver
**Municipality:** Beaver Falls City
**Client Owner:** KEYSTONE PROFILES
**Latitude:** 40.743544
**Longitude:** -80.320020
**Hor Ref Datum:** WGS84
**Altitude Datum:**

***Incident Information***

**Incident ID:** 23311
**Incident Description:** REPUBLIC TECH INTL **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source.
**Status Code:** 4
**Status Description:** Cleanup Completed
**Source Cause Rel:**
**Source Cause Desc:**
**Src of Notification:**
**Source of Not Desc:**

| | | | |
|---|---|---|---|
| **Status Date:** | 10/24/2011 | **Release Discovered:** | |
| **Suspect Date:** | | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 07/26/1994 | **Tank:** | |
| **Incident Type:** | USTPT | | |
| **Incident Type Desc:** | Underground storage tank system containing petroleum | | |
| **Comment:** | | | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 23949 | **Source Cause Rel:** | |
| **Incident Description:** | REPUBLIC TECH INTL **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source. | **Source Cause Desc:** | |
| **Status Code:** | 4 | **Src of Notification:** | |
| **Status Description:** | Cleanup Completed | **Source of Not Desc:** | |
| **Status Date:** | 10/24/2011 | **Release Discovered:** | |
| **Suspect Date:** | | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 04/08/1999 | **Tank:** | |
| **Incident Type:** | USTPT | | |
| **Incident Type Desc:** | Underground storage tank system containing petroleum | | |
| **Comment:** | | | |

---

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 4 | 4 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | KEYSTONE PROFILES<br>220 7TH AVE<br>BEAVER FALLS PA 15010-3274 | UNREG TANK |

| | | | |
|---|---|---|---|
| **Other ID:** | 04-04263 | **Client Addr Line 1:** | 220 7TH AVE |
| **Site ID:** | 247661 | **Client Addr Line 2:** | |
| **County Name:** | Beaver | **Client City:** | BEAVER FALLS |
| **Municipality:** | Beaver Falls City | **Client State:** | PA |
| **Client ID:** | 213328 | **Client Zip:** | 15010-3274 |
| **Client:** | KEYSTONE PROFILES | | |

***Tank Information***

| | | | |
|---|---|---|---|
| **Tank Seq No:** | 593959 - 001A | **Tank Code:** | AST |
| **Status Code:** | R | **Installed Date:** | 01/01/1970 |
| **Status Desc:** | Removed | **Capacity:** | 10000 |
| **Status Date:** | 09/15/2000 | | |

***Substances***

| | |
|---|---|
| **Substance Code:** | HZSUB |
| **Substance Desc:** | Hazardous Substance |

***Tank Information***

| | | | |
|---|---|---|---|
| **Tank Seq No:** | 593960 - 002 | **Tank Code:** | UST |
| **Status Code:** | W | **Installed Date:** | 01/01/1974 |
| **Status Desc:** | Closed | **Capacity:** | 20000 |
| **Status Date:** | 07/15/1994 | | |

***Substances***

| | |
|---|---|
| **Substance Code:** | HO |
| **Substance Desc:** | Heating Oil |

***Tank Information***

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Tank Seq No:** 593971 - 011A
**Status Code:** E
**Status Desc:** Exempt From State Law
**Status Date:** 01/01/1995
**Tank Code:** AST
**Installed Date:** 06/01/1992
**Capacity:** 500

***Substances***

**Substance Code:** DIESL
**Substance Desc:** Diesel Fuel

***Tank Information***

**Tank Seq No:** 593958 - 001
**Status Code:** W
**Status Desc:** Closed
**Status Date:** 07/15/1994
**Tank Code:** UST
**Installed Date:** 01/01/1972
**Capacity:** 15000

***Substances***

**Substance Code:** HO
**Substance Desc:** Heating Oil

***Tank Information***

**Tank Seq No:** 593962 - 003
**Status Code:** W
**Status Desc:** Closed
**Status Date:** 07/15/1994
**Tank Code:** UST
**Installed Date:** 01/01/1977
**Capacity:** 30000

***Substances***

**Substance Code:** HO
**Substance Desc:** Heating Oil

***Tank Information***

**Tank Seq No:** 593961 - 002A
**Status Code:** E
**Status Desc:** Exempt From State Law
**Status Date:** 12/01/1988
**Tank Code:** AST
**Installed Date:** 12/01/1988
**Capacity:** 250

***Substances***

**Substance Code:** GAS
**Substance Desc:** Gasoline

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| 4 | 5 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | KEYSTONE PROFILES<br>220 7TH AVE<br>BEAVER FALLS PA | CLEANUP<br>EFACTS |
|---|---|---|---|---|---|---|

**Facility ID:** 578749
**Status:** Active
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578749
**Facility Name:** KEYSTONE PROFILES
**Program:** Environmental Cleanup & Brownfields

***Sub-Facility Details***

**Sub Facility Name:** 004A
**Type:** Storage Tank
**EMAP PA URL:**
**Status:** Currently in Use

***Sub Facility Name:*** 008A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 012A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 009A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 010A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 003A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 007A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 006A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Sub Facility Name:*** 005A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Facility Search Results***

***Other ID:*** 04-04263 ***Address1:*** 220 7TH AVE
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** KEYSTONE PROFILES ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010-3274
***Municipality Name:*** Beaver Falls City

***Tank Remediation***

***Type:*** UST (Petroleum) ***Cleanup Status:*** Cleanup Completed
***Confirm Release Dt:*** 04/08/1999 ***Cleanup Status Dt:*** 10/24/2011
***Incident Name:*** REPUBLIC TECH INTL (23949)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23949

***Type:*** UST (Petroleum) ***Cleanup Status:*** Cleanup Completed
***Confirm Release Dt:*** 07/26/1994 ***Cleanup Status Dt:*** 10/24/2011
***Incident Name:*** REPUBLIC TECH INTL (23311)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23311

***Permit Details***

***Permit No:*** 04-04263 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (397275)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397275

***Permit No:*** 04-04263 ***Date Received:*** 08/25/2003
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (517966)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=517966

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

***Inspection Details***

***Inspection Type:*** Compliance Evaluation (1995973)
***Inspection Date:*** 08/15/2011
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Administrative/File Review (1974943)
***Inspection Date:*** 04/18/2011
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1974943

***Inspection Type:*** Integrity In-Service (2001023)
***Inspection Date:*** 08/15/2011
***Result:*** Repairs or Upgrade Required
***Result URL:***

***Inspection Type:*** Follow-up Inspection (1940526)
***Inspection Date:*** 01/03/2011
***Result:*** In Compliance with Schedule
***Result URL:***

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| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | 6 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | ***REPUBLIC TECHNOLOGIES INTL FAC***<br>***220 7TH AVE***<br>***BEAVER FALLS PA*** | ***CLEANUP EFACTS*** |

***Facility ID:*** 646208 ***Facility Name:*** REPUBLIC TECHNOLOGIES INTL FAC
***Status:*** Active ***Program:*** Environmental Cleanup & Brownfields
***Facility URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=646208

***Sub-Facility Details***

***Sub Facility Name:*** GROUNDWATER ***Status:*** Active
***Type:*** Groundwater Media
***EMAP PA URL:*** https://gis.dep.pa.gov/emappa_external/?cid=146265&sid=247661&pid=646208&subid=788880

***Sub Facility Name:*** SOILS ***Status:*** Active
***Type:*** Soil Media
***EMAP PA URL:*** https://gis.dep.pa.gov/emappa_external/?cid=146265&sid=247661&pid=646208&subid=788879

***Facility Search Results***

***Other ID:*** 5-4-3-18816 ***Address1:*** 220 7TH AVE
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** REPUBLIC TECHNOLOGIES INTL FAC ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010-3274
***Municipality Name:*** Beaver Falls City

***Land Recycling Information***

***NIR Type:*** NIR (54207)
***NIR Received Date:*** 06/19/2003
***NIR Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleLandInfo.aspx?LRPFACDETID=54207
***Preparer of NIR:*** CIVIL & ENVIRONMENTAL CONSULTANTS INC
333 BALDWIN RD
PITTSBURGH, PA 15205

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| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | 7 of 7 | N | 0.11 / 581.71 | 730.75 / 7 | ***KEYSTONE PROFILES***<br>***220 7TH AVE*** | ***UST*** |

***BEAVER FALLS PA 15010-3274***

| | | | |
|---|---|---|---|
| ***Site ID:*** | 247661 | ***Latitude (Map):*** | 40.7435439997839 |
| ***Other ID:*** | 04-04263 | ***Longitude (Map):*** | -80.3200199999502 |
| ***UST:*** | Yes | ***Facility Name (Map):*** | KEYSTONE PROFILES |
| ***Inactive UST(s):*** | Yes | ***Address 1 (Map):*** | 220 7TH AVE |
| ***Active UST(s):*** | | ***Address 2 (Map):*** | |
| ***Facility Name (Reg):*** | KEYSTONE PROFILES | ***City (Map):*** | BEAVER FALLS |
| ***Address 1 (Reg):*** | 220 7TH AVE | ***Municipality (Map):*** | Beaver Falls City |
| ***Address 2 (Reg):*** | | ***County (Map):*** | Beaver |
| ***City (Reg):*** | BEAVER FALLS | ***Zip (Map):*** | 15010-3274 |
| ***Zip (Reg):*** | 15010-3274 | | |
| ***Municipality (Reg):*** | Beaver Falls | | |
| ***County (Reg):*** | Beaver | | |
| ***Facility Name (Search):*** | KEYSTONE PROFILES | | |
| ***Address (Search):*** | 220 7TH AVE | | |
| ***Address2 (Search):*** | | | |
| ***City (Search):*** | BEAVER FALLS | | |
| ***Municipality (Search):*** | Beaver Falls City | | |
| ***County (Search):*** | Beaver | | |
| ***Zip (Search):*** | 15010-3274 | | |
| ***Source(s):*** | DEP Storage Tank Data By Region; DEP Map of Storage Tanks - Active; DEP Map of Storage Tanks - Inactive; DEP Storage Tanks Search - Active; DEP Storage Tanks Search - Inactive | | |

***DEP Facility Information***

| | | | |
|---|---|---|---|
| ***PF Name:*** | KEYSTONE PROFILES | ***Client ID:*** | 213328 |
| ***PF Address 1:*** | 220 7TH AVE | ***Client Name:*** | KEYSTONE PROFILES |
| ***PF Address 2:*** | | ***Client Address 1:*** | 220 7TH AVE |
| ***PF City:*** | BEAVER FALLS | ***Client Address 2:*** | |
| ***PF State:*** | PA | ***Client City:*** | BEAVER FALLS |
| ***PF Zip:*** | 15010-3274 | ***Client State:*** | PA |
| ***County:*** | Beaver | ***Client Zip:*** | 15010-3274 |
| ***Municipality:*** | Beaver Falls City | | |
| ***Detail Source(s):*** | Active Tanks / Inactive Tanks | | |

***eMap Active Facility Information***

| | | | |
|---|---|---|---|
| ***Facility Name:*** | KEYSTONE PROFILES | ***Tank Owner ID:*** | 213328 |
| ***Facility Address1:*** | 220 7TH AVE | ***Tank Owner Name:*** | KEYSTONE PROFILES |
| ***Facility Address2:*** | | ***Tank Owner Addr1:*** | 220 7TH AVE |
| ***Facility City:*** | BEAVER FALLS | ***Tank Owner Addr2:*** | |
| ***Facility State:*** | PA | ***Tank Owner City:*** | BEAVER FALLS |
| ***Facility Zip:*** | 15010-3274 | ***Tank Owner State:*** | PA |
| ***County ID:*** | 2411 | ***Tank Owner Zip:*** | 15010-3274 |
| ***Facility County:*** | Beaver | ***Primary Facility ID:*** | 578749 |
| ***Municipality ID:*** | 212 | ***Longitude:*** | -80.3200199999502 |
| ***Facility Municipality:*** | Beaver Falls City | ***Latitude:*** | 40.7435439997839 |
| ***Reg Expiration Date:*** | 10/04/2021 | | |
| ***Tank Information:*** | http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx?/Public/DEP/Tanks/SSRS/TANKS&P_OTHER_ID=04-04263&P_ZIP=% | | |

***eMap Inactive Facility Information***

| | | | |
|---|---|---|---|
| ***Facility Name:*** | KEYSTONE PROFILES | ***Tank Owner:*** | 213328 |
| ***Facility Address:*** | 220 7TH AVE | ***Tank Own 1:*** | KEYSTONE PROFILES |
| ***Facility Address 2:*** | | ***Tank Own 2:*** | 220 7TH AVE |
| ***Facility County:*** | Beaver | ***Tank Own 3:*** | |
| ***Facility State:*** | PA | ***Tank Own 4:*** | BEAVER FALLS |
| ***Facility Zip:*** | 15010-3274 | ***Tank Own 5:*** | PA |
| ***County ID:*** | 2411 | ***Tank Own 6:*** | 15010-3274 |
| ***Facility City:*** | BEAVER FALLS | ***Primary FA:*** | 578749 |
| ***Municipality ID:*** | 212 | ***Longitude:*** | -80.3200199999501 |
| ***Fac Municipality:*** | Beaver Falls City | ***Latitude:*** | 40.7435439997839 |
| ***Tank Information URL:*** | http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx? | | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

/Public/DEP/Tanks/SSRS/TANKS_INACTIVE&P_OTHER_ID=04-04263&P_ZIP=%

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 593960 - 002 | ***Capacity:*** | 20000 |
| ***Sequence No:*** | | ***Substance Code:*** | HO |
| ***Tank Code:*** | UST | ***Substance:*** | Heating Oil |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 07/15/1994 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1974 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 593962 - 003 | ***Capacity:*** | 30000 |
| ***Sequence No:*** | | ***Substance Code:*** | HO |
| ***Tank Code:*** | UST | ***Substance:*** | Heating Oil |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 07/15/1994 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1977 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 593958 - 001 | ***Capacity:*** | 15000 |
| ***Sequence No:*** | | ***Substance Code:*** | HO |
| ***Tank Code:*** | UST | ***Substance:*** | Heating Oil |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 07/15/1994 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1972 | | |

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**5** ***1 of 1*** ***S*** ***0.12 / 655.13*** ***702.79 / -21*** ***PA*** ***SPL***

| | | | |
|---|---|---|---|
| ***Complaint ID:*** | 233010 | ***ICS Desc:*** | EP SW Rgnl Off Pittsburgh |
| ***Date Received:*** | 10/24/2006 | ***Type Desc:*** | Water Contamination |
| ***Resolution Date:*** | 10/24/2006 | ***Latitude:*** | 40.7397219999034 |
| ***ER Related Incident:*** | Yes | ***Longitude:*** | -80.3194440001899 |
| ***County:*** | Beaver | | |

***Spill Report Until Aug 2017***

| | | | |
|---|---|---|---|
| ***ID1:*** | | ***Municipality:*** | New Brighton Borough |
| ***Responsible Party:*** | | ***Address1:*** | |
| ***Material Involved:*** | Hazardous Wastes / Materials | ***Address2:*** | |
| ***Material Source:*** | | ***City:*** | |
| ***Substance:*** | | ***State:*** | |
| ***ICS Orig:*** | | ***Zip Code:*** | |
| ***Short Description:*** | Train derailment - ethanol spill/fire | | |

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**6** ***1 of 1*** ***NW*** ***0.17 / 876.98*** ***746.12 / 22*** ***SAHLI MOTOR INC 300 9TH AVE BEAVER FALLS PA 15010-4711*** ***UST***

| | | | |
|---|---|---|---|
| ***Site ID:*** | 514148 | ***Latitude (Map):*** | 40.744612000311 |
| ***Other ID:*** | 04-28079 | ***Longitude (Map):*** | -80.3215759997016 |
| ***UST:*** | Yes | ***Facility Name (Map):*** | SAHLI MOTOR INC |
| ***Inactive UST(s):*** | Yes | ***Address 1 (Map):*** | 300 9TH AVE |

| | | | |
|---|---|---|---|
| ***Active UST(s):*** | | ***Address 2 (Map):*** | |
| ***Facility Name (Reg):*** | | ***City (Map):*** | BEAVER FALLS |
| ***Address 1 (Reg):*** | | ***Municipality (Map):*** | Beaver Falls City |
| ***Address 2 (Reg):*** | | ***County (Map):*** | Beaver |
| ***City (Reg):*** | | ***Zip (Map):*** | 15010-4711 |
| ***Zip (Reg):*** | | | |
| ***Municipality (Reg):*** | | | |
| ***County (Reg):*** | | | |
| ***Facility Name (Search):*** | SAHLI MOTOR INC | | |
| ***Address (Search):*** | 300 9TH AVE | | |
| ***Address2 (Search):*** | | | |
| ***City (Search):*** | BEAVER FALLS | | |
| ***Municipality (Search):*** | Beaver Falls City | | |
| ***County (Search):*** | Beaver | | |
| ***Zip (Search):*** | 15010-4711 | | |
| ***Source(s):*** | DEP Map of Storage Tanks - Inactive; DEP Storage Tanks Search - Inactive | | |

***DEP Facility Information***

| | | | |
|---|---|---|---|
| ***PF Name:*** | SAHLI MOTOR INC | ***Client ID:*** | 189887 |
| ***PF Address 1:*** | 300 9TH AVE | ***Client Name:*** | SAHLI MOTOR INC |
| ***PF Address 2:*** | | ***Client Address 1:*** | 241 MCKINLEY RD |
| ***PF City:*** | BEAVER FALLS | ***Client Address 2:*** | |
| ***PF State:*** | PA | ***Client City:*** | BEAVER FALLS |
| ***PF Zip:*** | 15010-4711 | ***Client State:*** | PA |
| ***County:*** | Beaver | ***Client Zip:*** | 15010-1150 |
| ***Municipality:*** | Beaver Falls City | | |
| ***Detail Source(s):*** | Inactive Tanks | | |

***eMap Inactive Facility Information***

| | | | |
|---|---|---|---|
| ***Facility Name:*** | SAHLI MOTOR INC | ***Tank Owner:*** | 189887 |
| ***Facility Address:*** | 300 9TH AVE | ***Tank Own 1:*** | SAHLI MOTOR INC |
| ***Facility Address 2:*** | | ***Tank Own 2:*** | 241 MCKINLEY RD |
| ***Facility County:*** | Beaver | ***Tank Own 3:*** | |
| ***Facility State:*** | PA | ***Tank Own 4:*** | BEAVER FALLS |
| ***Facility Zip:*** | 15010-4711 | ***Tank Own 5:*** | PA |
| ***County ID:*** | 2411 | ***Tank Own 6:*** | 15010-1150 |
| ***Facility City:*** | BEAVER FALLS | ***Primary FA:*** | 578919 |
| ***Municipality ID:*** | 212 | ***Longitude:*** | -80.3215759997016 |
| ***Fac Municipality:*** | Beaver Falls City | ***Latitude:*** | 40.744612000311 |
| ***Tank Information URL:*** | http://www.depreportingservices.state.pa.us/ReportServer/Pages/ReportViewer.aspx?%2fTanks%2fTanks_Inactive&rs:Command=Render&P_OTHER_ID=04-28079&P_ZIP=% | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 594955 - 001 | ***Capacity:*** | 2000 |
| ***Sequence No:*** | | ***Substance Code:*** | GAS |
| ***Tank Code:*** | UST | ***Substance:*** | Gasoline |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 01/30/1992 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1969 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 594956 - 002 | ***Capacity:*** | 550 |
| ***Sequence No:*** | | ***Substance Code:*** | USDOL |
| ***Tank Code:*** | UST | ***Substance:*** | Used Oil |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 01/30/1992 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |

**Date Installed:** 01/01/1969

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| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 7 | 1 of 3 | NW | 0.19 / 980.58 | 747.23 / 23 | SAHLI MOTOR INC<br>300 NINTH AVE<br>BEAVER FALLS PA 15010 | RCRA SQG |

**EPA Handler ID:** PAD013850268
**Gen Status Universe:** Small Quantity Generator
**Contact Name:** EDWARD SAHLI JR
**Contact Address:** 300 NINTH AVE , , BEAVER FALLS , PA, 15010 , US
**Contact Phone No and Ext:** 412-846-1440
**Contact Email:**
**Contact Country:** US
**County Name:** BEAVER
**EPA Region:** 03
**Land Type:**
**Receive Date:** 19861118
**Location Latitude:** 40.744936
**Location Longitude:** -80.321699

***Violation/Evaluation Summary***

**Note:** NO RECORDS: As of Jan 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

***Handler Summary***

**Importer Activity:** No
**Mixed Waste Generator:** No
**Transporter Activity:** No
**Transfer Facility:** No
**Onsite Burner Exemption:** No
**Furnace Exemption:** No
**Underground Injection Activity:** No
**Commercial TSD:** No
**Used Oil Transporter:** No
**Used Oil Transfer Facility:** No
**Used Oil Processor:** No
**Used Oil Refiner:** No
**Used Oil Burner:** No
**Used Oil Market Burner:** No
**Used Oil Spec Marketer:** No

***Hazardous Waste Handler Details***

**Sequence No:** 1
**Receive Date:** 19861118
**Handler Name:** SAHLI MOTOR INC
**Federal Waste Generator Code:** 2
**Generator Code Description:** Small Quantity Generator
**Source Type:** Notification

***Waste Code Details***

**Hazardous Waste Code:** D000
**Waste Code Description:** DESCRIPTION

**Hazardous Waste Code:** D001
**Waste Code Description:** IGNITABLE WASTE

**Hazardous Waste Code:** F003
**Waste Code Description:** THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE

SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Hazardous Waste Code:*** F005
***Waste Code Description:*** THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

***Owner/Operator Details***

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | OWNERSTREET |
| ***Name:*** | SAHLI, EDWARD JR | ***Street 2:*** | |
| ***Date Became Current:*** | | ***City:*** | OWNERCITY |
| ***Date Ended Current:*** | | ***State:*** | AK |
| ***Phone:*** | 215-555-1212 | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | 99999 |

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Operator | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | OPERSTREET |
| ***Name:*** | OPERNAME | ***Street 2:*** | |
| ***Date Became Current:*** | | ***City:*** | OPERCITY |
| ***Date Ended Current:*** | | ***State:*** | AK |
| ***Phone:*** | 215-555-1212 | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | 99999 |

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**7** | ***2 of 3*** | ***NW*** | ***0.19 / 980.58*** | ***747.23 / 23*** | ***SAHLI MOTOR INC***
***300 9TH AVE***
***BEAVER FALLS PA 15010-4711*** | ***UNREG TANK***

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-28079 | ***Client Addr Line 1:*** | 241 MCKINLEY RD |
| ***Site ID:*** | 514148 | ***Client Addr Line 2:*** | |
| ***County Name:*** | Beaver | ***Client City:*** | BEAVER FALLS |
| ***Municipality:*** | Beaver Falls City | ***Client State:*** | PA |
| ***Client ID:*** | 189887 | ***Client Zip:*** | 15010-1150 |
| ***Client:*** | SAHLI MOTOR INC | | |

***Tank Information***

| | | | |
|---|---|---|---|
| ***Tank Seq No:*** | 594955 - 001 | ***Tank Code:*** | UST |
| ***Status Code:*** | W | ***Installed Date:*** | 01/01/1969 |
| ***Status Desc:*** | Closed | ***Capacity:*** | 2000 |
| ***Status Date:*** | 01/30/1992 | | |

***Substances***

| | |
|---|---|
| ***Substance Code:*** | GAS |
| ***Substance Desc:*** | Gasoline |

***Tank Information***

| | | | |
|---|---|---|---|
| ***Tank Seq No:*** | 594956 - 002 | ***Tank Code:*** | UST |
| ***Status Code:*** | W | ***Installed Date:*** | 01/01/1969 |
| ***Status Desc:*** | Closed | ***Capacity:*** | 550 |
| ***Status Date:*** | 01/30/1992 | | |

***Substances***

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Substance Code:** USDOL
**Substance Desc:** Used Oil (all forms)

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**7** | **3 of 3** | **NW** | **0.19 / 980.58** | **747.23 / 23** | **SAHLI MOTOR INC**
**300 9TH AVE**
**BEAVER FALLS PA** | **CLEANUP EFACTS**

**Facility ID:** 578919
**Status:** Inactive
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578919
**Facility Name:** SAHLI MOTOR INC
**Program:** Environmental Cleanup & Brownfields

***Facility Search Results***

**Other ID:** 04-28079
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** SAHLI MOTOR INC
**County Name:** Beaver
**Municipality Name:** Beaver Falls City
**Address1:** 241 MCKINLEY RD
**Address2:**
**City:** BEAVER FALLS
**State Code:** PA
**Zip Code:** 15010-1150

**Other ID:** 04-28079
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** SAHLI MOTOR INC
**County Name:** Beaver
**Municipality Name:** Beaver Falls City
**Address1:** 300 9TH AVE
**Address2:**
**City:** BEAVER FALLS
**State Code:** PA
**Zip Code:** 15010-4711

***Permit Details***

**Permit No:** 04-28079
**Status:** Issued
**Authorization:** Storage Tank Registration/Permitting (424880)
**Authorization Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=424880
**Date Received:** 08/05/1989

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**8** | **1 of 1** | **NNW** | **0.19 / 996.55** | **732.15 / 8** | **MCCARLS SHEETMETAL SHOP**
**711 4TH ST**
**BEAVER FALLS PA 15010-4726** | **UST**

**Site ID:** 564024
**Other ID:** 04-81238
**UST:** Yes
**Inactive UST(s):** Yes
**Active UST(s):**
**Facility Name (Reg):**
**Address 1 (Reg):**
**Address 2 (Reg):**
**City (Reg):**
**Zip (Reg):**
**Municipality (Reg):**
**County (Reg):**
**Latitude (Map):** 40.7456680000976
**Longitude (Map):** -80.3180850000821
**Facility Name (Map):** MCCARLS SHEETMETAL SHOP
**Address 1 (Map):** 711 4TH ST
**Address 2 (Map):**
**City (Map):** BEAVER FALLS
**Municipality (Map):**
**County (Map):** Beaver
**Zip (Map):** 15010-4726
**Facility Name (Search):** MCCARLS SHEETMETAL SHOP
**Address (Search):** 711 4TH ST
**Address2 (Search):**
**City (Search):** BEAVER FALLS
**Municipality (Search):**
**County (Search):** Beaver
**Zip (Search):** 15010-4726
**Source(s):** DEP Map of Storage Tanks - Inactive; DEP Storage Tanks Search - Inactive

***DEP Facility Information***

**PF Name:** MCCARLS SHEETMETAL SHOP
**PF Address 1:** 711 4TH ST
**Client ID:** 133877
**Client Name:** MCCARLS LLC

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**PF Address 2:**
**PF City:** BEAVER FALLS
**PF State:** PA
**PF Zip:** 15010-4726
**County:** Beaver
**Municipality:**
**Detail Source(s):** Inactive Tanks

**Client Address 1:** 1413 9TH AVE
**Client Address 2:**
**Client City:** BEAVER FALLS
**Client State:** PA
**Client Zip:** 15010-4106

***eMap Inactive Facility Information***

**Facility Name:** MCCARLS SHEETMETAL SHOP
**Facility Address:** 711 4TH ST
**Facility Address 2:**
**Facility County:** Beaver
**Facility State:** PA
**Facility Zip:** 15010-4726
**County ID:** 2411
**Facility City:** BEAVER FALLS
**Municipality ID:** 0
**Fac Municipality:**
**Tank Information URL:** http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx?/Public/DEP/Tanks/SSRS/TANKS_INACTIVE&P_OTHER_ID=04-81238&P_ZIP=%

**Tank Owner:** 133877
**Tank Own 1:** MCCARLS LLC
**Tank Own 2:** 1413 9TH AVE
**Tank Own 3:**
**Tank Own 4:** BEAVER FALLS
**Tank Own 5:** PA
**Tank Own 6:** 15010-4106
**Primary FA:** 579092
**Longitude:** -80.3180850000821
**Latitude:** 40.7456680000976

***Inactive UST Information***

**Full Seq No:** 595879 - 001
**Sequence No:**
**Tank Code:** UST
**Status:** W
**Status Desc:** Closed
**Status Date:** 10/12/1990
**Status Cd Date End:**
**Date Installed:**

**Capacity:** 1800
**Substance Code:** GAS
**Substance:** Gasoline
**Substance Date End:**
**Inspection Code:**
**Inspection:**
**Third Party Inspect:**

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| 9 | 1 of 1 | NNW | 0.20 / 1,067.39 | 731.65 / 8 | MCCARLS SHEETMETAL SHOP<br>711 4TH ST<br>BEAVER FALLS PA 15010-4726 | UNREG TANK |
|---|---|---|---|---|---|---|

**Other ID:** 04-81238
**Site ID:** 564024
**County Name:** Beaver
**Municipality:**
**Client ID:** 133877
**Client:** MCCARLS LLC

**Client Addr Line 1:** 1413 9TH AVE
**Client Addr Line 2:**
**Client City:** BEAVER FALLS
**Client State:** PA
**Client Zip:** 15010-4106

***Tank Information***

**Tank Seq No:** 595879 - 001
**Status Code:** W
**Status Desc:** Closed
**Status Date:** 10/12/1990

**Tank Code:** UST
**Installed Date:**
**Capacity:** 1800

***Substances***

**Substance Code:** GAS
**Substance Desc:** Gasoline

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| 10 | 1 of 1 | SSE | 0.22 / 1,144.06 | 739.97 / 16 | NEW BRIGHTON BORO GARAGE<br>600 THIRD AVE<br>NEW BRIGHTON PA 15066 | UST |
|---|---|---|---|---|---|---|

**Site ID:** 564049
**Other ID:** 04-80725

**Latitude (Map):** 40.7370540003273
**Longitude (Map):** -80.3162120001383

| | | | |
|---|---|---|---|
| **UST:** | Yes | **Facility Name (Map):** | NEW BRIGHTON BORO GARAGE |
| **Inactive UST(s):** | Yes | **Address 1 (Map):** | 600 THIRD AVE |
| **Active UST(s):** | | **Address 2 (Map):** | |
| **Facility Name (Reg):** | | **City (Map):** | NEW BRIGHTON |
| **Address 1 (Reg):** | | **Municipality (Map):** | New Brighton Boro |
| **Address 2 (Reg):** | | **County (Map):** | Beaver |
| **City (Reg):** | | **Zip (Map):** | 15066 |
| **Zip (Reg):** | | | |
| **Municipality (Reg):** | | | |
| **County (Reg):** | | | |

**Facility Name (Search):** NEW BRIGHTON BORO GARAGE
**Address (Search):** 600 THIRD AVE
**Address2 (Search):**
**City (Search):** NEW BRIGHTON
**Municipality (Search):** New Brighton Boro
**County (Search):** Beaver
**Zip (Search):** 15066
**Source(s):** DEP Map of Storage Tanks - Inactive; DEP Storage Tanks Search - Inactive

***DEP Facility Information***

| | | | |
|---|---|---|---|
| **PF Name:** | NEW BRIGHTON BORO GARAGE | **Client ID:** | 110525 |
| **PF Address 1:** | 600 THIRD AVE | **Client Name:** | NEW BRIGHTON BORO BEAVER CNTY |
| **PF Address 2:** | | **Client Address 1:** | 610 3RD AVE |
| **PF City:** | NEW BRIGHTON | **Client Address 2:** | |
| **PF State:** | PA | **Client City:** | NEW BRIGHTON |
| **PF Zip:** | 15066 | **Client State:** | PA |
| **County:** | Beaver | **Client Zip:** | 15066-1851 |
| **Municipality:** | New Brighton Boro | | |

**Detail Source(s):** Inactive Tanks

***eMap Inactive Facility Information***

| | | | |
|---|---|---|---|
| **Facility Name:** | NEW BRIGHTON BORO GARAGE | **Tank Owner:** | 110525 |
| **Facility Address:** | 600 THIRD AVE | **Tank Own 1:** | NEW BRIGHTON BORO BEAVER CNTY |
| **Facility Address 2:** | | **Tank Own 2:** | 610 3RD AVE |
| **Facility County:** | Beaver | **Tank Own 3:** | |
| **Facility State:** | PA | **Tank Own 4:** | NEW BRIGHTON |
| **Facility Zip:** | 15066 | **Tank Own 5:** | PA |
| **County ID:** | 2411 | **Tank Own 6:** | 15066-1851 |
| **Facility City:** | NEW BRIGHTON | **Primary FA:** | 579069 |
| **Municipality ID:** | 222 | **Longitude:** | -80.3162120001383 |
| **Fac Municipality:** | New Brighton Boro | **Latitude:** | 40.7370540003273 |

**Tank Information URL:** http://cedatareporting.pa.gov/Reportserver/Pages/ReportViewer.aspx?/Public/DEP/Tanks/SSRS/TANKS_INACTIVE&P_OTHER_ID=04-80725&P_ZIP=%

***Inactive UST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 595709 - 002 | **Capacity:** | 3000 |
| **Sequence No:** | | **Substance Code:** | GAS |
| **Tank Code:** | UST | **Substance:** | Gasoline |
| **Status:** | R | **Substance Date End:** | |
| **Status Desc:** | Removed | **Inspection Code:** | |
| **Status Date:** | 02/02/1999 | **Inspection:** | |
| **Status Cd Date End:** | | **Third Party Inspect:** | |
| **Date Installed:** | 07/01/1978 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| **Full Seq No:** | 595710 - 003 | **Capacity:** | 3000 |
| **Sequence No:** | | **Substance Code:** | DIESL |
| **Tank Code:** | UST | **Substance:** | Diesel Fuel |
| **Status:** | R | **Substance Date End:** | |
| **Status Desc:** | Removed | **Inspection Code:** | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Status Date:** 02/02/1999
**Status Cd Date End:**
**Date Installed:** 07/01/1978
**Inspection:**
**Third Party Inspect:**

***Inactive UST Information***

**Full Seq No:** 595708 - 001
**Sequence No:**
**Tank Code:** UST
**Status:** W
**Status Desc:** Closed
**Status Date:** 08/26/1993
**Status Cd Date End:**
**Date Installed:** 07/01/1978
**Capacity:** 3000
**Substance Code:** GAS
**Substance:** Gasoline
**Substance Date End:**
**Inspection Code:**
**Inspection:**
**Third Party Inspect:**

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11 | 1 of 1 | SE | 0.26 / 1,393.31 | 747.36 / 23 | SPEEDWAY 2928, 410 5TH ST, NEW BRIGHTON PA | CLEANUP EFACTS

**Facility ID:** 828029
**Status:** Active
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=828029
**Facility Name:** SPEEDWAY 2928
**Program:** Environmental Cleanup & Brownfields

***Sub-Facility Details***

**Sub Facility Name:** 004
**Type:** Storage Tank
**EMAP PA URL:** https://gis.dep.pa.gov/emappa_external/?cid=133896&sid=830948&pid=828029&subid=1263123
**Status:** Currently in Use

**Sub Facility Name:** 002
**Type:** Storage Tank
**EMAP PA URL:** https://gis.dep.pa.gov/emappa_external/?cid=133896&sid=830948&pid=828029&subid=1263120
**Status:** Currently in Use

**Sub Facility Name:** 001
**Type:** Storage Tank
**EMAP PA URL:** https://gis.dep.pa.gov/emappa_external/?cid=133896&sid=830948&pid=828029&subid=1263117
**Status:** Currently in Use

**Sub Facility Name:** 003
**Type:** Storage Tank
**EMAP PA URL:** https://gis.dep.pa.gov/emappa_external/?cid=133896&sid=830948&pid=828029&subid=1263122
**Status:** Currently in Use

***Facility Search Results***

**Other ID:** 04-55262
**Status:** Active
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** SPEEDWAY 2928
**County Name:** Beaver
**Municipality Name:** New Brighton Borough
**Address1:** 500 SPEEDWAY DR
**Address2:**
**City:** ENON
**State Code:** OH
**Zip Code:** 45323

**Other ID:** 04-55262
**Status:** Active
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** SPEEDWAY 2928
**County Name:** Beaver
**Municipality Name:** New Brighton Borough
**Address1:** 500 SPEEDWAY DR
**Address2:**
**City:** ENON
**State Code:** OH
**Zip Code:** 45323-1056

**Other ID:** 04-55262
**Status:** Active
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** SPEEDWAY 2928
**County Name:** Beaver
**Municipality Name:** New Brighton Borough
**Address1:** 410 5TH ST
**Address2:**
**City:** NEW BRIGHTON
**State Code:** PA
**Zip Code:** 15066

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

***Permit Details***

***Permit No:*** 04-55262 ***Date Received:*** 09/25/2018
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (1247053)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1247053

***Permit No:*** 04-55262 ***Date Received:*** 07/24/2018
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (1237850)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1237850

***Permit No:*** 04-55262 ***Date Received:*** 09/25/2018
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (1247182)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1247182

***Inspection Details***

***Inspection Type:*** Follow-up Inspection (2761797)
***Inspection Date:*** 08/03/2018
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2916463)
***Inspection Date:*** 08/07/2019
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (2899185)
***Inspection Date:*** 03/26/2019
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2759091)
***Inspection Date:*** 05/07/2018
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2759095)
***Inspection Date:*** 07/19/2018
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2771863)
***Inspection Date:*** 09/05/2018
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2759094)
***Inspection Date:*** 05/10/2018
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2842066)
***Inspection Date:*** 02/20/2019
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2842066

| | | | | | | |
|---|---|---|---|---|---|---|
| 12 | *1 of 2* | *ESE* | *0.29 / 1,513.83* | *747.13 / 23* | ***NEW BRIGHTON IR WORK CTR***<br>***SEVENTH AVE & FIFTH ST***<br>***NEW BRIGHTON PA 15066*** | ***LUST*** |

***Facility ID:*** 578935 ***Client Owner:*** VERIZON PENNSYLVANIA LLC
***Prgm Other ID:*** 04-30055 ***Latitude:*** 40.739541
***Client ID:*** 87568 ***Longitude:*** -80.314648
***Region:*** EP SW Rgnl Off Pittsburgh ***Hor Ref Datum:*** WGS84

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**County:** Beaver
**Municipality:** New Brighton Boro
**Altitude Datum:**

***Incident Information***

**Incident ID:** 20247
**Incident Description:** NEW BRIGHTON IR WORK CENTER **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source.
**Status Code:** 5
**Status Description:** Inactive
**Status Date:** 04/21/2017
**Suspect Date:** 08/05/1989
**Confirmed Date:** 08/05/1989
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

**Source Cause Rel:** OTHR
**Source Cause Desc:** Other (Specify)
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.

***Incident Impact Information***

**Impact Code:** GW
**Substance Code:**
**CASRN:**

**Impact Description:** Ground Water
**Substance:**
**Chemical:**

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**12** | **2 of 2** | **ESE** | **0.29 / 1,513.83** | **747.13 / 23** | **NEW BRIGHTON IR WORK CTR**
**SEVENTH AVE & FIFTH ST**
**NEW BRIGHTON PA** | **CLEANUP EFACTS**

**Facility ID:** 578935
**Status:** Inactive
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578935

**Facility Name:** NEW BRIGHTON IR WORK CTR
**Program:** Environmental Cleanup & Brownfields

***Facility Search Results***

**Other ID:** 04-30055
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** NEW BRIGHTON IR WORK CTR
**County Name:** Beaver
**Municipality Name:** New Brighton Borough

**Address1:** 966 S MATLACK ST
**Address2:**
**City:** WEST CHESTER
**State Code:** PA
**Zip Code:** 19382-7517

**Other ID:** 04-30055
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** NEW BRIGHTON IR WORK CTR
**County Name:** Beaver
**Municipality Name:** New Brighton Borough

**Address1:** 966 S MATLACK ST
**Address2:**
**City:** WEST CHESTER
**State Code:** PA
**Zip Code:** 19380

**Other ID:** 04-30055
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** NEW BRIGHTON IR WORK CTR
**County Name:** Beaver
**Municipality Name:** New Brighton Borough

**Address1:** SEVENTH AVE & FIFTH ST
**Address2:**
**City:** NEW BRIGHTON
**State Code:** PA
**Zip Code:** 15066

***Tank Remediation***

**Type:** UST (Petroleum)
**Confirm Release Dt:** 08/05/1989
**Incident Name:** NEW BRIGHTON IR WORK CENTER (20247)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20247

**Cleanup Status:** Inactive
**Cleanup Status Dt:** 04/21/2017

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

***Permit Details***

***Permit No:*** 04-30055 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (397168)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397168

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| | | | | | | |
|---|---|---|---|---|---|---|
| 13 | 1 of 1 | N | 0.29 / 1,539.58 | 740.55 / 16 | BEAVER FALLS CTL OFC<br>620 6TH ST<br>BEAVER FALLS PA | CLEANUP EFACTS |

***Facility ID:*** 579207 ***Facility Name:*** BEAVER FALLS CTL OFC
***Status:*** Active ***Program:*** Environmental Cleanup & Brownfields
***Facility URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579207

***Sub-Facility Details***

***Sub Facility Name:*** 003A ***Status:*** Currently in Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Facility Search Results***

***Other ID:*** 04-83413 ***Address1:*** 620 6TH ST
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** BEAVER FALLS CTL OFC ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010-4625
***Municipality Name:*** Beaver Falls City

***Other ID:*** 04-83413 ***Address1:*** 1500 MACCORKLE AVE SE
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** CHARLESTON
***Facility Name:*** BEAVER FALLS CTL OFC ***State Code:*** WV
***County Name:*** Beaver ***Zip Code:*** 25396-0001
***Municipality Name:*** Beaver Falls City

***Other ID:*** 04-83413 ***Address1:*** 401 S HIGH ST
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** WEST CHESTER
***Facility Name:*** BEAVER FALLS CTL OFC ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 19382-3338
***Municipality Name:*** Beaver Falls City

***Permit Details***

***Permit No:*** 04-83413 ***Date Received:*** 06/26/2019
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (1278416)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1278416

***Permit No:*** 04-83413 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (424984)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=424984

***Permit No:*** 04-83413 ***Date Received:*** 01/28/2019
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (1261843)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1261843

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| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 14 | 1 of 1 | WSW | 0.30 / 1,559.13 | 1,042.41 / 318 | MCCARLS INC SHEET METAL SHOP<br>400 4TH ST<br>BEAVER FALLS PA | CLEANUP<br>EFACTS |

**Facility ID:** 579028 **Facility Name:** MCCARLS INC SHEET METAL SHOP
**Status:** Inactive **Program:** Environmental Cleanup & Brownfields
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579028

***Facility Search Results***

**Other ID:** 04-80083 **Address1:** 400 4TH ST
**Status:** Inactive **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** BEAVER FALLS
**Facility Name:** MCCARLS INC SHEET METAL SHOP **State Code:** PA
**County Name:** Beaver **Zip Code:** 15010-3202
**Municipality Name:** Beaver Falls City

**Other ID:** 04-80083 **Address1:** 1413 9TH AVE
**Status:** Inactive **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** BEAVER FALLS
**Facility Name:** MCCARLS INC SHEET METAL SHOP **State Code:** PA
**County Name:** Beaver **Zip Code:** 15010-4106
**Municipality Name:** Beaver Falls City

***Permit Details***

**Permit No:** 04-80083 **Date Received:** 08/05/1989
**Status:** Issued
**Authorization:** Storage Tank Registration/Permitting (397028)
**Authorization Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397028

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 15 | 1 of 1 | NNE | 0.31 / 1,620.19 | 733.25 / 9 | RAM ACOUSTICAL<br>608 2ND AVE<br>BEAVER FALLS PA | CLEANUP<br>EFACTS |

**Facility ID:** 579237 **Facility Name:** RAM ACOUSTICAL
**Status:** Active **Program:** Environmental Cleanup & Brownfields
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579237

***Sub-Facility Details***

**Sub Facility Name:** 002 **Status:** Currently in Use
**Type:** Storage Tank
**EMAP PA URL:**

***Facility Search Results***

**Other ID:** 04-83824 **Address1:** 608 2ND AVE
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** BEAVER FALLS
**Facility Name:** RAM ACOUSTICAL **State Code:** PA
**County Name:** Beaver **Zip Code:** 15010-4606
**Municipality Name:** Beaver Falls City

**Other ID:** 04-83824 **Address1:** PO BOX 908
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** BEAVER FALLS
**Facility Name:** RAM ACOUSTICAL **State Code:** PA
**County Name:** Beaver **Zip Code:** 15010-0908
**Municipality Name:** Beaver Falls City

***Permit Details***

***Permit No:*** 04-83824 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (424998)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=424998

***Inspection Details***

***Inspection Type:*** Follow-up Inspection (2202861)
***Inspection Date:*** 09/09/2013
***Result:*** In Compliance with Schedule
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (2947512)
***Inspection Date:*** 08/19/2019
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2947512

***Inspection Type:*** Facility Operations Inspection (2520790)
***Inspection Date:*** 09/15/2016
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2216701)
***Inspection Date:*** 10/28/2013
***Result:*** In Compliance with Schedule
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (1197636)
***Inspection Date:*** 07/19/2002
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1197636

***Inspection Type:*** Facility Operations Inspection (2212565)
***Inspection Date:*** 09/15/2013
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2212565

***Inspection Type:*** Facility Operations Inspection (1921414)
***Inspection Date:*** 08/16/2010
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1921414

***Inspection Type:*** Facility Operations Inspection (1659261)
***Inspection Date:*** 09/10/2007
***Result:*** No Violations Noted
***Result URL:***

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 1 of 1 | NNW | 0.32 / 1,671.10 | 746.89 / 23 | VESUVIUS MCDANEL CO<br>510 9TH AVE<br>BEAVER FALLS PA | CLEANUP EFACTS |

***Facility ID:*** 579038 ***Facility Name:*** VESUVIUS MCDANEL CO
***Status:*** Inactive ***Program:*** Environmental Cleanup & Brownfields
***Facility URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579038

***Facility Search Results***

***Other ID:*** 04-80270 ***Address1:*** PO BOX 560
***Status:*** Inactive ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** VESUVIUS MCDANEL CO ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010
***Municipality Name:*** Beaver Falls City

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Other ID:** | 04-80270 | **Address1:** | 510 9TH AVE |
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | BEAVER FALLS |
| **Facility Name:** | VESUVIUS MCDANEL CO | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15010-4700 |
| **Municipality Name:** | Beaver Falls City | | |

***Permit Details***

| | | | |
|---|---|---|---|
| **Permit No:** | 04-80270 | **Date Received:** | 08/05/1989 |
| **Status:** | Issued | | |
| **Authorization:** | Storage Tank Registration/Permitting (397065) | | |
| **Authorization Link:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397065 | | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|
| 17 | 1 of 2 | SE | 0.35 / 1,830.23 | 746.38 / 22 | KWIK FILL S 27<br>FIFTH & SIXTH ST<br>NEW BRIGHTON PA 15066 | LUST |

| | | | |
|---|---|---|---|
| **Facility ID:** | 578724 | **Client Owner:** | UNITED REF CO OF PA |
| **Prgm Other ID:** | 04-00740 | **Latitude:** | 40.737860 |
| **Client ID:** | 189857 | **Longitude:** | -80.314992 |
| **Region:** | EP SW Rgnl Off Pittsburgh | **Hor Ref Datum:** | WGS84 |
| **County:** | Beaver | **Altitude Datum:** | |
| **Municipality:** | New Brighton Boro | | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 20246 | **Source Cause Rel:** | |
| **Incident Description:** | KWIK FILL S 27 **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source. | **Source Cause Desc:** | |
| **Status Code:** | 4 | **Src of Notification:** | |
| **Status Description:** | Cleanup Completed | **Source of Not Desc:** | |
| **Status Date:** | 05/20/2010 | **Release Discovered:** | |
| **Suspect Date:** | 03/19/1998 | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 03/19/1998 | **Tank:** | 003 |
| **Incident Type:** | USTPT | | |
| **Incident Type Desc:** | Underground storage tank system containing petroleum | | |
| **Comment:** | | | |

***Incident Impact Information***

| | | | |
|---|---|---|---|
| **Impact Code:** | GW | **Impact Description:** | Ground Water |
| **Substance Code:** | | **Substance:** | |
| **CASRN:** | | **Chemical:** | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 23718 | **Source Cause Rel:** | |
| **Incident Description:** | | **Source Cause Desc:** | |
| **Status Code:** | 4 | **Src of Notification:** | |
| **Status Description:** | Cleanup Completed | **Source of Not Desc:** | |
| **Status Date:** | 05/20/2010 | **Release Discovered:** | |
| **Suspect Date:** | 04/07/1998 | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 04/07/1998 | **Tank:** | |
| **Incident Type:** | USTPT | | |
| **Incident Type Desc:** | Underground storage tank system containing petroleum | | |
| **Comment:** | | | |

***Incident Information***

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Incident ID:** 41524
**Incident Description:**
**Status Code:** 4
**Status Description:** Cleanup Completed
**Status Date:** 03/10/2015
**Suspect Date:** 08/02/2010
**Confirmed Date:** 08/04/2010
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**
**Source Cause Rel:** OTHR
**Source Cause Desc:** Other (Specify)
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

***Incident Information***

**Incident ID:** 41572
**Incident Description:**
**Status Code:** 4
**Status Description:** Cleanup Completed
**Status Date:** 03/10/2015
**Suspect Date:** 07/29/2010
**Confirmed Date:** 07/30/2010
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**
**Source Cause Rel:** OTHR, TANK
**Source Cause Desc:** Other (Specify), Tank
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

***Incident Impact Information***

**Impact Code:** SOIL
**Substance Code:** ULGAS
**CASRN:**
**Impact Description:** Soil
**Substance:** Unleaded Gasoline
**Chemical:**

***Incident Information***

**Incident ID:** 23835
**Incident Description:**
**Status Code:** 4
**Status Description:** Cleanup Completed
**Status Date:** 10/21/2009
**Suspect Date:** 11/25/1998
**Confirmed Date:** 11/25/1998
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**
**Source Cause Rel:**
**Source Cause Desc:**
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

***Incident Impact Information***

**Impact Code:** SOIL
**Substance Code:** ULGAS
**CASRN:**
**Impact Description:** Soil
**Substance:** Unleaded Gasoline
**Chemical:**

| | | | | | | |
|---|---|---|---|---|---|---|
| 17 | 2 of 2 | SE | 0.35 / 1,830.23 | 746.38 / 22 | KWIK FILL S 27<br>FIFTH & SIXTH ST<br>NEW BRIGHTON PA | CLEANUP EFACTS |

**Facility ID:** 578724
**Status:** Active
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578724
**Facility Name:** KWIK FILL S 27
**Program:** Environmental Cleanup & Brownfields

***Sub-Facility Details***

**Sub Facility Name:** 003 **Status:** Currently in Use
**Type:** Storage Tank
**EMAP PA URL:**

**Sub Facility Name:** 001 **Status:** Currently in Use
**Type:** Storage Tank
**EMAP PA URL:**

***Facility Search Results***

**Other ID:** 04-00740 **Address1:** PO BOX 688
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** WARREN
**Facility Name:** KWIK FILL S 27 **State Code:** PA
**County Name:** Beaver **Zip Code:** 16365-0688
**Municipality Name:** New Brighton Borough

**Other ID:** 04-00740 **Address1:** FIFTH & SIXTH ST
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** NEW BRIGHTON
**Facility Name:** KWIK FILL S 27 **State Code:** PA
**County Name:** Beaver **Zip Code:** 15066
**Municipality Name:** New Brighton Borough

**Other ID:** 04-00740 **Address1:** 15 BRADLEY ST
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** WARREN
**Facility Name:** KWIK FILL S 27 **State Code:** PA
**County Name:** Beaver **Zip Code:** 16365-3224
**Municipality Name:** New Brighton Borough

**Other ID:** 04-00740 **Address1:** 530 5TH AVE
**Status:** Active **Address2:**
**Program:** Environmental Cleanup & Brownfields **City:** BEAVER
**Facility Name:** KWIK FILL S 27 **State Code:** PA
**County Name:** Beaver **Zip Code:** 16365
**Municipality Name:** New Brighton Borough

***Tank Remediation***

**Type:** UST (Petroleum) **Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 11/25/1998 **Cleanup Status Dt:** 10/21/2009
**Incident Name:** (23835)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23835

**Type:** UST (Petroleum) **Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 07/30/2010 **Cleanup Status Dt:** 03/10/2015
**Incident Name:** (41572)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=41572

**Type:** UST (Petroleum) **Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 08/04/2010 **Cleanup Status Dt:** 03/10/2015
**Incident Name:** (41524)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=41524

**Type:** UST (Petroleum) **Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 04/07/1998 **Cleanup Status Dt:** 05/20/2010
**Incident Name:** (23718)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23718

**Type:** UST (Petroleum) **Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 03/19/1998 **Cleanup Status Dt:** 05/20/2010
**Incident Name:** KWIK FILL S 27 (20246)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20246

***Permit Details***

***Permit No:*** 04-00740 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (397075)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397075

***Permit No:*** 04-00740 ***Date Received:*** 06/15/2011
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (883231)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=883231

***Inspection Details***

***Inspection Type:*** Facility Operations Inspection (2477536)
***Inspection Date:*** 02/15/2016
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2477536

***Inspection Type:*** Follow-up Inspection (2184012)
***Inspection Date:*** 07/12/2013
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Administrative/File Review (2396176)
***Inspection Date:*** 08/07/2015
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2396176

***Inspection Type:*** Facility Operations Inspection (2890083)
***Inspection Date:*** 02/08/2019
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2908276)
***Inspection Date:*** 07/09/2019
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (1131186)
***Inspection Date:*** 05/16/1997
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (1872215)
***Inspection Date:*** 01/19/2010
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (2157485)
***Inspection Date:*** 02/11/2013
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (1382055)
***Inspection Date:*** 06/29/2004
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2234580)
***Inspection Date:*** 01/08/2014
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Routine/Partial Inspection (2566738)
***Inspection Date:*** 03/02/2017
***Result:*** Violation(s) Noted

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2566738

**Inspection Type:** Facility Operations Inspection (1602046)
**Inspection Date:** 01/16/2007
**Result:** No Violations Noted
**Result URL:**

**Inspection Type:** Routine/Partial Inspection (2528259)
**Inspection Date:** 10/17/2016
**Result:** No Violations Noted
**Result URL:**

**Inspection Type:** Facility Operations Inspection (1131187)
**Inspection Date:** 11/18/1999
**Result:** No Violations Noted
**Result URL:**

**Inspection Type:** Follow-up Inspection (2571951)
**Inspection Date:** 03/16/2017
**Result:** No Violations Noted
**Result URL:**

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| 18 | 1 of 2 | SSE | 0.35 / 1,852.67 | 741.22 / 17 | NEW BRIGHTON BORO GARAGE<br>600 THIRD AVE<br>NEW BRIGHTON PA 15066 | LUST |
|---|---|---|---|---|---|---|

**Facility ID:** 579069
**Prgm Other ID:** 04-80725
**Client ID:** 110525
**Region:** EP SW Rgnl Off Pittsburgh
**County:** Beaver
**Municipality:** New Brighton Boro

**Client Owner:** NEW BRIGHTON BORO BEAVER CNTY
**Latitude:** 40.737054
**Longitude:** -80.316212
**Hor Ref Datum:** WGS84
**Altitude Datum:**

***Incident Information***

**Incident ID:** 23856
**Incident Description:**
**Status Code:** 4
**Status Description:** Cleanup Completed
**Status Date:** 06/03/2008
**Suspect Date:** 01/29/1999
**Confirmed Date:** 02/01/1999
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

**Source Cause Rel:**
**Source Cause Desc:**
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

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| 18 | 2 of 2 | SSE | 0.35 / 1,852.67 | 741.22 / 17 | NEW BRIGHTON BORO GARAGE<br>600 THIRD AVE<br>NEW BRIGHTON PA | CLEANUP EFACTS |
|---|---|---|---|---|---|---|

**Facility ID:** 579069
**Status:** Inactive
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579069

**Facility Name:** NEW BRIGHTON BORO GARAGE
**Program:** Environmental Cleanup & Brownfields

***Facility Search Results***

**Other ID:** 04-80725
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** NEW BRIGHTON BORO GARAGE
**County Name:** Beaver
**Municipality Name:** New Brighton Borough

**Address1:** 600 THIRD AVE
**Address2:**
**City:** NEW BRIGHTON
**State Code:** PA
**Zip Code:** 15066

**Other ID:** 04-80725

**Address1:** 610 THIRD AVE

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | NEW BRIGHTON |
| **Facility Name:** | NEW BRIGHTON BORO GARAGE | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15066 |
| **Municipality Name:** | New Brighton Borough | | |

***Tank Remediation***

| | | | |
|---|---|---|---|
| **Type:** | UST (Petroleum) | **Cleanup Status:** | Cleanup Completed |
| **Confirm Release Dt:** | 02/01/1999 | **Cleanup Status Dt:** | 06/03/2008 |
| **Incident Name:** | (23856) | | |
| **Incident Link:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23856 | | |

***Permit Details***

| | | | |
|---|---|---|---|
| **Permit No:** | 04-80725 | **Date Received:** | 08/05/1989 |
| **Status:** | Issued | | |
| **Authorization:** | Storage Tank Registration/Permitting (397140) | | |
| **Authorization Link:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397140 | | |

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**19** | ***1 of 2*** | ***SE*** | ***0.41 / 2,173.07*** | ***745.31 / 21*** | ***JIMS SUNOCO SVC INC***
***620 5TH AVE***
***NEW BRIGHTON PA 15066-1852*** | ***LUST***

| | | | |
|---|---|---|---|
| **Facility ID:** | 579027 | **Client Owner:** | JIMS TEXACO SVC |
| **Prgm Other ID:** | 04-80073 | **Latitude:** | 40.737282 |
| **Client ID:** | 190740 | **Longitude:** | -80.314470 |
| **Region:** | EP SW Rgnl Off Pittsburgh | **Hor Ref Datum:** | WGS84 |
| **County:** | Beaver | **Altitude Datum:** | |
| **Municipality:** | New Brighton Boro | | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 20243 | **Source Cause Rel:** | OTHR |
| **Incident Description:** | JIMS TEXACO SERVICE **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source. | **Source Cause Desc:** | Other (Specify) |
| **Status Code:** | 4 | **Src of Notification:** | |
| **Status Description:** | Cleanup Completed | **Source of Not Desc:** | |
| **Status Date:** | 09/11/2013 | **Release Discovered:** | |
| **Suspect Date:** | 11/30/1999 | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 11/30/1999 | **Tank:** | 003, 004, 005, 006 |
| **Incident Type:** | USTPT | | |
| **Incident Type Desc:** | Underground storage tank system containing petroleum | | |
| **Comment:** | | | |

***Incident Impact Information***

| | | | |
|---|---|---|---|
| **Impact Code:** | GW | **Impact Description:** | Ground Water |
| **Substance Code:** | | **Substance:** | |
| **CASRN:** | | **Chemical:** | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 20244 | **Source Cause Rel:** | TANK |
| **Incident Description:** | JIMS TEXACO SERVICE **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source. | **Source Cause Desc:** | Tank |
| **Status Code:** | 8 | **Src of Notification:** | |
| **Status Description:** | Administrative Close Out (ACO) | **Source of Not Desc:** | |
| **Status Date:** | 01/21/2011 | **Release Discovered:** | |
| **Suspect Date:** | 05/14/1999 | **Rel Discovered Desc:** | |

**Confirmed Date:** 05/14/1999 **Tank:**
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

***Incident Impact Information***

**Impact Code:** GW **Impact Description:** Ground Water
**Substance Code:** **Substance:**
**CASRN:** **Chemical:**

***Incident Information***

**Incident ID:** 41763 **Source Cause Rel:** OTHR, PUST
**Incident Description:** **Source Cause Desc:** Other (Specify), Piping System UG Regulated
**Status Code:** 4 **Src of Notification:**
**Status Description:** Cleanup Completed **Source of Not Desc:**
**Status Date:** 08/26/2013 **Release Discovered:**
**Suspect Date:** 10/21/2010 **Rel Discovered Desc:**
**Confirmed Date:** 10/21/2010 **Tank:**
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

***Incident Information***

**Incident ID:** 23817 **Source Cause Rel:** OTHR
**Incident Description:** **Source Cause Desc:** Other (Specify)
**Status Code:** 4 **Src of Notification:**
**Status Description:** Cleanup Completed **Source of Not Desc:**
**Status Date:** 08/26/2013 **Release Discovered:**
**Suspect Date:** 11/28/1998 **Rel Discovered Desc:**
**Confirmed Date:** 11/28/1998 **Tank:**
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

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| | | | | | | |
|---|---|---|---|---|---|---|
| 19 | 2 of 2 | SE | 0.41 / 2,173.07 | 745.31 / 21 | JIMS SUNOCO SVC INC<br>620 5TH AVE<br>NEW BRIGHTON PA | CLEANUP<br>EFACTS |

**Facility ID:** 579027 **Facility Name:** JIMS SUNOCO SVC INC
**Status:** Active **Program:** Environmental Cleanup & Brownfields
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579027

***Sub-Facility Details***

**Sub Facility Name:** 007 **Status:** Temporarily Out of Use
**Type:** Storage Tank
**EMAP PA URL:**

**Sub Facility Name:** 008 **Status:** Temporarily Out of Use
**Type:** Storage Tank
**EMAP PA URL:**

**Sub Facility Name:** 009 **Status:** Temporarily Out of Use
**Type:** Storage Tank
**EMAP PA URL:**

**Sub Facility Name:** 001 **Status:** Temporarily Out of Use
**Type:** Storage Tank

***EMAP PA URL:***

***Sub Facility Name:*** 002 ***Status:*** Temporarily Out of Use
***Type:*** Storage Tank
***EMAP PA URL:***

***Facility Search Results***

***Other ID:*** 04-80073 ***Address1:*** 620 5TH AVE
***Status:*** Active ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** NEW BRIGHTON
***Facility Name:*** JIMS SUNOCO SVC INC ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15066-1852
***Municipality Name:*** New Brighton Borough

***Tank Remediation***

***Type:*** UST (Petroleum) ***Cleanup Status:*** Cleanup Completed
***Confirm Release Dt:*** 10/21/2010 ***Cleanup Status Dt:*** 08/26/2013
***Incident Name:*** (41763)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=41763

***Type:*** UST (Petroleum) ***Cleanup Status:*** Cleanup Completed
***Confirm Release Dt:*** 11/30/1999 ***Cleanup Status Dt:*** 09/11/2013
***Incident Name:*** JIMS TEXACO SERVICE (20243)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20243

***Type:*** UST (Petroleum) ***Cleanup Status:***
***Confirm Release Dt:*** 05/14/1999 ***Cleanup Status Dt:*** 01/21/2011
***Incident Name:*** JIMS TEXACO SERVICE (20244)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20244

***Type:*** UST (Petroleum) ***Cleanup Status:*** Cleanup Completed
***Confirm Release Dt:*** 11/28/1998 ***Cleanup Status Dt:*** 08/26/2013
***Incident Name:*** (23817)
***Incident Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=23817

***Permit Details***

***Permit No:*** 04-80073 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (424909)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=424909

***Inspection Details***

***Inspection Type:*** Administrative/File Review (2341277)
***Inspection Date:*** 12/30/2014
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2341277

***Inspection Type:*** Compliance Evaluation (2901427)
***Inspection Date:*** 07/02/2019
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2901427

***Inspection Type:*** Facility Operations Inspection (1131318)
***Inspection Date:*** 10/05/1995
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Facility Operations Inspection (1602545)
***Inspection Date:*** 12/30/2006
***Result:*** No Violations Noted

**Result URL:**

**Inspection Type:** Follow-up Inspection (1863554)
**Inspection Date:** 02/16/2010
**Result:** Outstanding Violations - No Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1863554

**Inspection Type:** Follow-up Inspection (1889784)
**Inspection Date:** 06/07/2010
**Result:** Recurring Violations
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1889784

**Inspection Type:** Facility Operations Inspection (2097033)
**Inspection Date:** 06/29/2012
**Result:** Violation(s) Noted
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2097033

**Inspection Type:** Compliance Schedule Evaluation (2178833)
**Inspection Date:** 06/26/2013
**Result:** Recurring Violations
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2178833

**Inspection Type:** Follow-up Inspection (2209547)
**Inspection Date:** 10/02/2013
**Result:** No Viols - Fac Inactive for Inspection
**Result URL:**

**Inspection Type:** Follow-up Inspection (1584355)
**Inspection Date:** 12/06/2006
**Result:** No Violations Noted
**Result URL:**

**Inspection Type:** Follow-up Inspection (2044352)
**Inspection Date:** 02/16/2012
**Result:** Outstanding Violations - No Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2044352

**Inspection Type:** Follow-up Inspection (2915961)
**Inspection Date:** 08/06/2019
**Result:** Outstanding Violations - Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2915961

**Inspection Type:** Follow-up Inspection (1766568)
**Inspection Date:** 02/02/2009
**Result:** In Compliance with Schedule
**Result URL:**

**Inspection Type:** Facility Operations Inspection (1862528)
**Inspection Date:** 01/11/2010
**Result:** Violation(s) Noted
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1862528

**Inspection Type:** Follow-up Inspection (1894275)
**Inspection Date:** 06/28/2010
**Result:** In Compliance with Policy
**Result URL:**

**Inspection Type:** Follow-up Inspection (1999595)
**Inspection Date:** 08/31/2011
**Result:** Outstanding Violations - No Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1999595

**Inspection Type:** Follow-up Inspection (2053140)
**Inspection Date:** 03/20/2012
**Result:** Outstanding Violations - No Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2053140

**Inspection Type:** Follow-up Inspection (2055720)
**Inspection Date:** 04/02/2012

***Result:*** Outstanding Violations - No Viols Req'd
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2055720

***Inspection Type:*** Follow-up Inspection (2209548)
***Inspection Date:*** 10/03/2013
***Result:*** In Compliance with Policy
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2234582)
***Inspection Date:*** 01/08/2014
***Result:*** No Viols - Fac Inactive for Inspection
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2005142)
***Inspection Date:*** 09/21/2011
***Result:*** Outstanding Violations - No Viols Req'd
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2005142

***Inspection Type:*** Follow-up Inspection (2075527)
***Inspection Date:*** 06/13/2012
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2075527

***Inspection Type:*** Follow-up Inspection (2161047)
***Inspection Date:*** 04/24/2013
***Result:*** In Compliance with Schedule
***Result URL:***

***Inspection Type:*** Follow-up Inspection (2186920)
***Inspection Date:*** 07/24/2013
***Result:*** Recurring Violations
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2186920

***Inspection Type:*** Follow-up Inspection (2211422)
***Inspection Date:*** 10/09/2013
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2211422

***Inspection Type:*** Facility Operations Inspection (1131319)
***Inspection Date:*** 09/24/2001
***Result:*** No Violations Noted
***Result URL:***

***Inspection Type:*** Follow-up Inspection (1994165)
***Inspection Date:*** 08/09/2011
***Result:*** De minimus Violations Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=1994165

***Inspection Type:*** Follow-up Inspection (2097855)
***Inspection Date:*** 09/06/2012
***Result:*** Outstanding Violations - No Viols Req'd
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2097855

***Inspection Type:*** Compliance Evaluation (2142616)
***Inspection Date:*** 02/25/2013
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2142616

***Inspection Type:*** Follow-up Inspection (2169900)
***Inspection Date:*** 05/28/2013
***Result:*** In Compliance with Policy
***Result URL:***

***Inspection Type:*** Administrative/File Review (2040764)
***Inspection Date:*** 01/31/2012
***Result:*** Violation(s) Noted
***Result URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2040764

***Inspection Type:*** Routine/Partial Inspection (2322311)

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Inspection Date:** 11/19/2014
**Result:** No Viols - Fac Inactive for Inspection
**Result URL:**

**Inspection Type:** Compliance Evaluation (2468509)
**Inspection Date:** 03/23/2016
**Result:** Outstanding Violations - No Viols Req'd
**Result URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=2468509

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| | | | | | | |
|---|---|---|---|---|---|---|
| 20 | 1 of 2 | NE | 0.45 / 2,376.70 | 732.12 / 8 | MCCARLS FABRICATION<br>800 1ST AVE<br>BEAVER FALLS PA 15010-4630 | LUST |

**Facility ID:** 579218
**Prgm Other ID:** 04-83557
**Client ID:** 133877
**Region:** EP SW Rgnl Off Pittsburgh
**County:** Beaver
**Municipality:** Beaver Falls City

**Client Owner:** MCCARLS LLC
**Latitude:** 40.770141
**Longitude:** -80.315966
**Hor Ref Datum:** WGS84
**Altitude Datum:**

***Incident Information***

**Incident ID:** 20162
**Incident Description:** MCCARLS FABRICATION **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source.
**Status Code:** 5
**Status Description:** Inactive
**Status Date:** 03/22/2000
**Suspect Date:**
**Confirmed Date:** 08/05/1989
**Incident Type:** USTPT
**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

**Source Cause Rel:**
**Source Cause Desc:**
**Src of Notification:**
**Source of Not Desc:**
**Release Discovered:**
**Rel Discovered Desc:**
**Tank:**

Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.

***Incident Impact Information***

**Impact Code:** GW
**Substance Code:**
**CASRN:**

**Impact Description:** Ground Water
**Substance:**
**Chemical:**

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|---|---|---|---|---|---|---|
| 20 | 2 of 2 | NE | 0.45 / 2,376.70 | 732.12 / 8 | MCCARLS FABRICATION<br>800 1ST AVE<br>BEAVER FALLS PA | CLEANUP EFACTS |

**Facility ID:** 579218
**Status:** Inactive
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579218

**Facility Name:** MCCARLS FABRICATION
**Program:** Environmental Cleanup & Brownfields

***Facility Search Results***

**Other ID:** 04-83557
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility Name:** MCCARLS FABRICATION
**County Name:** Beaver
**Municipality Name:** Beaver Falls City

**Address1:** 1413 9TH AVE
**Address2:**
**City:** BEAVER FALLS
**State Code:** PA
**Zip Code:** 15010-4106

**Other ID:** 04-83557
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields

**Address1:** 800 1ST AVE
**Address2:**
**City:** BEAVER FALLS

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Facility Name:** MCCARLS FABRICATION
**State Code:** PA
**County Name:** Beaver
**Zip Code:** 15010-4630
**Municipality Name:** Beaver Falls City

***Tank Remediation***

**Type:** UST (Petroleum)
**Cleanup Status:** Inactive
**Confirm Release Dt:** 08/05/1989
**Cleanup Status Dt:** 03/22/2000
**Incident Name:** MCCARLS FABRICATION (20162)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20162

***Permit Details***

**Permit No:** 04-83557
**Date Received:** 08/05/1989
**Status:** Issued
**Authorization:** Storage Tank Registration/Permitting (397466)
**Authorization Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397466

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|---|---|---|---|---|---|---|
| 21 | 1 of 3 | SE | 0.46 / 2,447.15 | 746.07 / 22 | TOWNSEND TEXTRON PA | VCP |

**Primary Facility ID:** 624960
**Site Name:** TOWNSEND TEXTRON
**Address1:**
**Address2:**
**City:**
**Zip Code:**
**Primary Facility ID (Aquifer):**
**Primary Fac Name (Aquifer):**
**Address (Aquifer):**
**City (Aquifer):**
**County (Aquifer):**
**Source:** Land Recycling Cleanup Locations - Soil Media
**County:**
**Municipality:**
**Region:**
**Latitude:**
**Longitude:**
**State:**

***Soil Media***

**Primary Fac Status:** ACTIVE
**Sub Facility ID:** 746979
**Sub Facility Status:** Active
**Sub Facility Type:** SOIL MEDIA
**Sub Facility Name:** TOWNSEND TEXTRON-SOIL
**Other Facility ID:** 5-4-928-1801
**Sub Other FID:** 746979
**Compliance:** YES
**Organization Name:** COL FIN SPECIALTY STEEL CORP
**Primary Facility Type:** LAND RECYCLING CLEANUP LOCATION
**Primary Facility Kind:** Unavailable
**Site ID:** 236409
**Site Status:** ACTIVE
**Site Name:** COL FIN SPECIALTY STEEL CORP
**Client ID:** 24006
**Client Name:** COL FIN SPECIALTY STEEL CORP
**Client Relationship:** Owner
**X:** -80.313333330844
**Y:** 40.7366666649212
**Shape FID:** 4361442

**Primary Fac Status:** ACTIVE
**Sub Facility ID:** 746979
**Sub Facility Status:** Active
**Sub Facility Type:** SOIL MEDIA
**Sub Facility Name:** TOWNSEND TEXTRON-SOIL
**Other Facility ID:** 5-4-928-1801
**Sub Other FID:** 746979
**Compliance:** YES
**Organization Name:** COL FIN SPECIALITY STEEL CORP
**Primary Facility Type:** LAND RECYCLING CLEANUP LOCATION
**Primary Facility Kind:** Unavailable
**Site ID:** 236409
**Site Status:** ACTIVE
**Site Name:** COL FIN SPECIALTY STEEL CORP
**Client ID:** 171473
**Client Name:** COL FIN SPECIALITY STEEL CORP
**Client Relationship:** Owner
**X:** -80.313333330844
**Y:** 40.7366666649212
**Shape FID:** 4434033

**Primary Fac Status:** ACTIVE
**Sub Facility ID:** 746979
**Sub Facility Status:** Active
**Sub Facility Type:** SOIL MEDIA
**Site ID:** 236409
**Site Status:** ACTIVE
**Site Name:** COL FIN SPECIALTY STEEL CORP
**Client ID:** 43990

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Sub Facility Name:** | TOWNSEND TEXTRON-SOIL | **Client Name:** | FALLSTON BORO BEAVER CNTY |
| **Other Facility ID:** | 5-4-928-1801 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746979 | **X:** | -80.313333330844 |
| **Compliance:** | YES | **Y:** | 40.7366666649212 |
| **Organization Name:** | FALLSTON BORO BEAVER CNTY | **Shape FID:** | 4386521 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

| | | | |
|---|---|---|---|
| **Primary Fac Status:** | ACTIVE | **Site ID:** | 236409 |
| **Sub Facility ID:** | 746979 | **Site Status:** | ACTIVE |
| **Sub Facility Status:** | Active | **Site Name:** | COL FIN SPECIALTY STEEL CORP |
| **Sub Facility Type:** | SOIL MEDIA | **Client ID:** | 319862 |
| **Sub Facility Name:** | TOWNSEND TEXTRON-SOIL | **Client Name:** | COL FIN SPECIALTY STEEL II LLC |
| **Other Facility ID:** | 5-4-928-1801 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746979 | **X:** | -80.3133333335389 |
| **Compliance:** | YES | **Y:** | 40.7366666669632 |
| **Organization Name:** | COL FIN SPECIALTY STEEL II LLC | **Shape FID:** | 4443711 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

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|---|---|---|---|---|---|---|
| 21 | 2 of 3 | SE | 0.46 / 2,447.15 | 746.07 / 22 | IND WASTE NEW BRIGHTON PA | VCP |

| | | | |
|---|---|---|---|
| **Primary Facility ID:** | 624942 | **County:** | |
| **Site Name:** | IND WASTE NEW BRIGHTON | **Municipality:** | |
| **Address1:** | | **Region:** | |
| **Address2:** | | **Latitude:** | |
| **City:** | | **Longitude:** | |
| **Zip Code:** | | **State:** | |
| **Primary Facility ID (Aquifer):** | | | |
| **Primary Fac Name (Aquifer):** | | | |
| **Address (Aquifer):** | | | |
| **City (Aquifer):** | | | |
| **County (Aquifer):** | | | |
| **Source:** | Land Recycling Cleanup Locations - Soil Media | | |

***Soil Media***

| | | | |
|---|---|---|---|
| **Primary Fac Status:** | ACTIVE | **Site ID:** | 3446 |
| **Sub Facility ID:** | 746955 | **Site Status:** | ACTIVE |
| **Sub Facility Status:** | Active | **Site Name:** | IND WASTES LLC DARLINGTON PLT |
| **Sub Facility Type:** | SOIL MEDIA | **Client ID:** | 80047 |
| **Sub Facility Name:** | INDUSTRIAL WASTE INC - NEW BRIGHTON-SOIL | **Client Name:** | CENCO INC IND WASTES |
| **Other Facility ID:** | 5-4-813-2135 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746955 | **X:** | -80.313333330844 |
| **Compliance:** | YES | **Y:** | 40.7366666649212 |
| **Organization Name:** | CENCO INC IND WASTES | **Shape FID:** | 4382964 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

| | | | |
|---|---|---|---|
| **Primary Fac Status:** | ACTIVE | **Site ID:** | 3446 |
| **Sub Facility ID:** | 746955 | **Site Status:** | ACTIVE |
| **Sub Facility Status:** | Active | **Site Name:** | IND WASTES LLC DARLINGTON PLT |
| **Sub Facility Type:** | SOIL MEDIA | **Client ID:** | 221434 |
| **Sub Facility Name:** | INDUSTRIAL WASTE INC - NEW BRIGHTON-SOIL | **Client Name:** | MCLAUGHLIN THOMAS W |
| **Other Facility ID:** | 5-4-813-2135 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746955 | **X:** | -80.313333330844 |
| **Compliance:** | YES | **Y:** | 40.7366666649212 |
| **Organization Name:** | Unavailable | **Shape FID:** | 4318669 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

| | | | |
|---|---|---|---|
| **Primary Fac Status:** | ACTIVE | **Site ID:** | 3446 |
| **Sub Facility ID:** | 746955 | **Site Status:** | ACTIVE |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **Sub Facility Status:** | Active | **Site Name:** | IND WASTES LLC DARLINGTON PLT |
| **Sub Facility Type:** | SOIL MEDIA | **Client ID:** | 84799 |
| **Sub Facility Name:** | INDUSTRIAL WASTE INC - NEW BRIGHTON-SOIL | **Client Name:** | IND WASTES LLC |
| **Other Facility ID:** | 5-4-813-2135 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746955 | **X:** | -80.313333330844 |
| **Compliance:** | YES | **Y:** | 40.7366666649212 |
| **Organization Name:** | IND WASTES LLC | **Shape FID:** | 4157588 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

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|---|---|---|---|---|---|---|
| 21 | 3 of 3 | SE | 0.46 / 2,447.15 | 746.07 / 22 | **TATKOS AUTO WRECKING**<br>**PA** | VCP |

| | | | |
|---|---|---|---|
| **Primary Facility ID:** | 624939 | **County:** | |
| **Site Name:** | TATKOS AUTO WRECKING | **Municipality:** | |
| **Address1:** | | **Region:** | |
| **Address2:** | | **Latitude:** | |
| **City:** | | **Longitude:** | |
| **Zip Code:** | | **State:** | |
| **Primary Facility ID (Aquifer):** | | | |
| **Primary Fac Name (Aquifer):** | | | |
| **Address (Aquifer):** | | | |
| **City (Aquifer):** | | | |
| **County (Aquifer):** | | | |
| **Source:** | Land Recycling Cleanup Locations - Soil Media | | |

***Soil Media***

| | | | |
|---|---|---|---|
| **Primary Fac Status:** | ACTIVE | **Site ID:** | 563973 |
| **Sub Facility ID:** | 746952 | **Site Status:** | INACTIVE |
| **Sub Facility Status:** | Active | **Site Name:** | TATKO AUTO SALVAGE |
| **Sub Facility Type:** | SOIL MEDIA | **Client ID:** | 167276 |
| **Sub Facility Name:** | TATKO'S AUTO WRECKING-SOIL | **Client Name:** | ROBERT TATKO |
| **Other Facility ID:** | 5-4-813-1836 | **Client Relationship:** | Owner |
| **Sub Other FID:** | 746952 | **X:** | -80.313333330844 |
| **Compliance:** | YES | **Y:** | 40.7366666649212 |
| **Organization Name:** | ROBERT TATKO | **Shape FID:** | 4169584 |
| **Primary Facility Type:** | LAND RECYCLING CLEANUP LOCATION | | |
| **Primary Facility Kind:** | Unavailable | | |

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|---|---|---|---|---|---|---|
| 22 | 1 of 2 | N | 0.47 / 2,467.25 | 784.11 / 60 | **FAST N FRIENDLY STORE**<br>**7TH AVE & 9TH ST**<br>**BEAVER FALLS PA 15010** | LUST |

| | | | |
|---|---|---|---|
| **Facility ID:** | 579247 | **Client Owner:** | FRANCIS CHIAPPETTA |
| **Prgm Other ID:** | 04-84096 | **Latitude:** | 40.750025 |
| **Client ID:** | 186602 | **Longitude:** | -80.319567 |
| **Region:** | EP SW Rgnl Off Pittsburgh | **Hor Ref Datum:** | WGS84 |
| **County:** | Beaver | **Altitude Datum:** | |
| **Municipality:** | Beaver Falls City | | |

***Incident Information***

| | | | |
|---|---|---|---|
| **Incident ID:** | 20144 | **Source Cause Rel:** | |
| **Incident Description:** | FAST N FRIENDLY **Note: data in the [INCIDENT_DESCRIPTION] field for some records is truncated from the source. | **Source Cause Desc:** | |
| **Status Code:** | 4 | **Src of Notification:** | |
| **Status Description:** | Cleanup Completed | **Source of Not Desc:** | |
| **Status Date:** | 09/29/2011 | **Release Discovered:** | |
| **Suspect Date:** | 01/14/1999 | **Rel Discovered Desc:** | |
| **Confirmed Date:** | 01/14/1999 | **Tank:** | 001, 002 |
| **Incident Type:** | USTPT | | |

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

**Incident Type Desc:** Underground storage tank system containing petroleum
**Comment:**

***Incident Impact Information***

**Impact Code:** GW
**Impact Description:** Ground Water
**Substance Code:**
**Substance:**
**CASRN:**
**Chemical:**

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**22** **2 of 2** **N** **0.47 / 2,467.25** **784.11 / 60**

**FAST N FRIENDLY STORE**
**7TH AVE & 9TH ST**
**BEAVER FALLS PA**

**CLEANUP EFACTS**

**Facility ID:** 579247
**Facility Name:** FAST N FRIENDLY STORE
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579247

***Facility Search Results***

**Other ID:** 04-84096
**Address1:** 1225 8TH AVE
**Status:** Inactive
**Address2:** PO BOX 439
**Program:** Environmental Cleanup & Brownfields
**City:** BEAVER FALLS
**Facility Name:** FAST N FRIENDLY STORE
**State Code:** PA
**County Name:** Beaver
**Zip Code:** 15010-4403
**Municipality Name:** Beaver Falls City

**Other ID:** 04-84096
**Address1:** 7TH AVE & 9TH ST
**Status:** Inactive
**Address2:**
**Program:** Environmental Cleanup & Brownfields
**City:** BEAVER FALLS
**Facility Name:** FAST N FRIENDLY STORE
**State Code:** PA
**County Name:** Beaver
**Zip Code:** 15010
**Municipality Name:** Beaver Falls City

***Tank Remediation***

**Type:** UST (Petroleum)
**Cleanup Status:** Cleanup Completed
**Confirm Release Dt:** 01/14/1999
**Cleanup Status Dt:** 09/29/2011
**Incident Name:** FAST N FRIENDLY (20144)
**Incident Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleTankRemediation.aspx?LRPACT_ID=20144

***Permit Details***

**Permit No:** 04-84096
**Date Received:** 08/05/1989
**Status:** Issued
**Authorization:** Storage Tank Registration/Permitting (397727)
**Authorization Link:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397727

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**23** **1 of 1** **W** **0.48 / 2,513.81** **1,053.12 / 329**

**PATTERSON TWP STREET DEPT**
**1505 3RD ST**
**BEAVER FALLS PA**

**CLEANUP EFACTS**

**Facility ID:** 578847
**Facility Name:** PATTERSON TWP STREET DEPT
**Status:** Inactive
**Program:** Environmental Cleanup & Brownfields
**Facility URL:** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578847

***Facility Search Results***

**Other ID:** 04-16604
**Address1:** 1800 DIXON WAY
**Status:** Inactive
**Address2:**
**Program:** Environmental Cleanup & Brownfields
**City:** BEAVER FALLS
**Facility Name:** PATTERSON TWP STREET DEPT
**State Code:** PA

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| **County Name:** | Beaver | **Zip Code:** | 15010-2868 |
| **Municipality Name:** | Patterson Township | | |
| **Other ID:** | 04-16604 | **Address1:** | 1505 3RD ST |
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | BEAVER FALLS |
| **Facility Name:** | PATTERSON TWP STREET DEPT | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15010-3005 |
| **Municipality Name:** | Patterson Township | | |

***Permit Details***

| | | | |
|---|---|---|---|
| **Permit No:** | 04-16604 | **Date Received:** | 08/05/1989 |
| **Status:** | Issued | | |
| **Authorization:** | Storage Tank Registration/Permitting (397148) | | |
| **Authorization Link:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397148 | | |

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|---|---|---|---|---|---|---|
| 24 | 1 of 2 | SE | 0.49 / 2,589.88 | 745.56 / 22 | MCCARLS NEW BRIGHTON WHSE<br>700 5TH AVE<br>NEW BRIGHTON PA | CLEANUP<br>EFACTS |

| | | | |
|---|---|---|---|
| **Facility ID:** | 578760 | **Facility Name:** | MCCARLS NEW BRIGHTON WHSE |
| **Status:** | Inactive | **Program:** | Environmental Cleanup & Brownfields |
| **Facility URL:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578760 | | |

***Facility Search Results***

| | | | |
|---|---|---|---|
| **Other ID:** | 04-06305 | **Address1:** | 1413 9TH AVE |
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | BEAVER FALLS |
| **Facility Name:** | MCCARLS NEW BRIGHTON WHSE | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15010-4106 |
| **Municipality Name:** | New Brighton Borough | | |
| **Other ID:** | 04-06305 | **Address1:** | PO BOX 191 |
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | BEAVER FALLS |
| **Facility Name:** | MCCARLS NEW BRIGHTON WHSE | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15010-0191 |
| **Municipality Name:** | New Brighton Borough | | |
| **Other ID:** | 04-06305 | **Address1:** | 700 5TH AVE |
| **Status:** | Inactive | **Address2:** | |
| **Program:** | Environmental Cleanup & Brownfields | **City:** | NEW BRIGHTON |
| **Facility Name:** | MCCARLS NEW BRIGHTON WHSE | **State Code:** | PA |
| **County Name:** | Beaver | **Zip Code:** | 15066-1837 |
| **Municipality Name:** | New Brighton Borough | | |

***Permit Details***

| | | | |
|---|---|---|---|
| **Permit No:** | 04-06305 | **Date Received:** | 08/05/1989 |
| **Status:** | Issued | | |
| **Authorization:** | Storage Tank Registration/Permitting (397083) | | |
| **Authorization Link:** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397083 | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 24 | 2 of 2 | SE | 0.49 / 2,589.88 | 745.56 / 22 | PGH MINERAL<br>700 5TH AVE<br>NEW BRIGHTON PA 15060 | RCRA TSD |

| | |
|---|---|
| **EPA Handler ID:** | PAD987366432 |
| **Gen Status Universe:** | No Report |
| **Contact Name:** | |
| **Contact Address:** | US |
| **Contact Phone No and Ext:** | |

***Contact Email:***
***Contact Country:*** US
***Land Type:*** Other
***County Name:*** BEAVER
***EPA Region:*** 03
***Receive Date:*** 20091023
***Location Latitude:***
***Location Longitude:***

***Violation/Evaluation Summary***

***Note:*** NO RECORDS: As of Jan 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

***Handler Summary***

***Importer Activity:*** No
***Mixed Waste Generator:*** No
***Transporter Activity:*** No
***Transfer Facility:*** No
***Onsite Burner Exemption:*** No
***Smelting, Melting and Refining:*** No
***Underground Injection Control:*** No
***Commercial TSD:*** No
***Used Oil Transporter:*** No
***Used Oil Transfer Facility:*** No
***Used Oil Processor:*** No
***Used Oil Refiner:*** No
***Used Oil Burner:*** No
***Used Oil Market Burner:*** No
***Used Oil Spec Marketer:*** No

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 19920213
***Handler Name:*** PGH MINERAL & ENVIRON TECH INC
***Federal Waste Generator Code:*** 2
***Generator Code Description:*** Small Quantity Generator
***Source Type:*** Notification

***Waste Code Details***

***Hazardous Waste Code:*** D000
***Waste Code Description:*** DESCRIPTION

***Hazardous Waste Code:*** D007
***Waste Code Description:*** CHROMIUM

***Hazardous Waste Code:*** D008
***Waste Code Description:*** LEAD

***Hazardous Waste Code:*** D009
***Waste Code Description:*** MERCURY

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 20091023
***Handler Name:*** PGH MINERAL
***Federal Waste Generator Code:***
***Generator Code Description:***
***Source Type:*** Implementer

| Map Key | Number of Records | Direction | Distance (mi/ft) | Elev/Diff (ft) | Site | DB |
|---|---|---|---|---|---|---|

***Owner/Operator Details***

| | | | |
|---|---|---|---|
| ***Owner/Operator Ind:*** | Current Owner | ***Street No:*** | |
| ***Type:*** | Private | ***Street 1:*** | 1413 9TH AVE |
| ***Name:*** | MCCARLS INC | ***Street 2:*** | |
| ***Date Became Current:*** | | ***City:*** | BEAVER FALLS |
| ***Date Ended Current:*** | | ***State:*** | PA |
| ***Phone:*** | 412-843-5660 | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | 15010 |

***Historical Handler Details***

| | |
|---|---|
| ***Receive Dt:*** | 19920213 |
| ***Generator Code Description:*** | Small Quantity Generator |
| ***Handler Name:*** | PGH MINERAL & ENVIRON TECH INC |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 25 | *1 of 1* | *N* | *0.95 / 5,029.76* | *802.69 / 79* | ***BIG BEAVER FALLS AREA SCH DIST LRCL***<br>***820 16TH ST***<br>***BEAVER FALLS PA 15010*** | ***SHWS*** |

| | | | |
|---|---|---|---|
| ***Facility ID:*** | 624901 | ***Site:*** | BIG BEAVER FALLS AREA SCH DIST |
| ***Program Other ID:*** | 5-4-3-11174 | ***Altitude Datum:*** | |
| ***Site ID:*** | 599833 | ***Hor Ref Datum:*** | NAD27 |
| ***Client ID:*** | | ***Region:*** | EP SW Rgnl Off Pittsburgh |
| ***Client Owner:*** | | ***County:*** | Beaver |
| ***Latitude:*** | 40.756428 | ***Municipality:*** | Beaver Falls City |
| ***Longitude:*** | -80.323136 | | |
| ***Address Remarks:*** | | | |

***Activities Details***

| | | | |
|---|---|---|---|
| ***Activity ID:*** | 30092 | ***Start Date:*** | 12/08/2000 |
| ***Initiation ID:*** | 29245 | ***Finish Date:*** | 06/01/2003 |
| ***Initiation Type:*** | HSCA | ***Media ID:*** | 761782 |
| ***Notice Date:*** | | ***Media Name:*** | BIG BEAVER FALLS AREA SCH DIST GROUNDWATER |
| ***List Date:*** | | ***Media Type:*** | Groundwater Media |
| ***Delist Date:*** | | ***Substance Code:*** | INORG |
| ***RJD Date:*** | 12/08/2000 | ***Substance:*** | Inorganics |
| ***CASRN:*** | | ***Chemical:*** | |
| ***Response Action Code:*** | HSFI - HSCA Further Investigation - Site Study | | |
| ***Response Action:*** | INVESTIGATION | | |

***Activities Details***

| | | | |
|---|---|---|---|
| ***Activity ID:*** | 30092 | ***Start Date:*** | 12/08/2000 |
| ***Initiation ID:*** | 29245 | ***Finish Date:*** | 06/01/2003 |
| ***Initiation Type:*** | HSCA | ***Media ID:*** | 746891 |
| ***Notice Date:*** | | ***Media Name:*** | BIG BEAVER FALLS AREA SCH DIST WASTE |
| ***List Date:*** | | ***Media Type:*** | Waste Media |
| ***Delist Date:*** | | ***Substance Code:*** | INORG |
| ***RJD Date:*** | 12/08/2000 | ***Substance:*** | Inorganics |
| ***CASRN:*** | | ***Chemical:*** | |
| ***Response Action Code:*** | HSFI - HSCA Further Investigation - Site Study | | |
| ***Response Action:*** | INVESTIGATION | | |

***Activities Details***

| | | | |
|---|---|---|---|
| ***Activity ID:*** | 30092 | ***Start Date:*** | 12/08/2000 |

| | | | |
|---|---|---|---|
| ***Initiation ID:*** | 29245 | ***Finish Date:*** | 06/01/2003 |
| ***Initiation Type:*** | HSCA | ***Media ID:*** | 746889 |
| ***Notice Date:*** | | ***Media Name:*** | BIG BEAVER FALLS AREA SCH DIST SOIL |
| ***List Date:*** | | ***Media Type:*** | Soil Media |
| ***Delist Date:*** | | ***Substance Code:*** | INORG |
| ***RJD Date:*** | 12/08/2000 | ***Substance:*** | Inorganics |
| ***CASRN:*** | | ***Chemical:*** | |
| ***Response Action Code:*** | HSFI - HSCA Further Investigation - Site Study | | |
| ***Response Action:*** | INVESTIGATION | | |

***Activities Details***

| | | | |
|---|---|---|---|
| ***Activity ID:*** | 30092 | ***Start Date:*** | 12/08/2000 |
| ***Initiation ID:*** | 29245 | ***Finish Date:*** | 06/01/2003 |
| ***Initiation Type:*** | HSCA | ***Media ID:*** | 761783 |
| ***Notice Date:*** | | ***Media Name:*** | BIG BEAVER FALLS AREA SCH DIST SURFACE WATER |
| ***List Date:*** | | ***Media Type:*** | Surface Water Media |
| ***Delist Date:*** | | ***Substance Code:*** | |
| ***RJD Date:*** | 12/08/2000 | ***Substance:*** | |
| ***CASRN:*** | | ***Chemical:*** | |
| ***Response Action Code:*** | HSFI - HSCA Further Investigation - Site Study | | |
| ***Response Action:*** | INVESTIGATION | | |

# Unplottable Summary

**Total: 14 Unplottable sites**

| DB | Company Name/Site Name | Address | City | Zip | ERIS ID |
|---|---|---|---|---|---|
| CLEANUP EFACTS | CROWN ENTERPRISES | RTE 18 N<br>***Facility ID:*** 579140 | BEAVER FALLS PA | | 867000082 |
| CLEANUP EFACTS | WIZARDS TRUCK STOP | ROUTE 18 N<br>***Facility ID:*** 579190 | BEAVER FALLS PA | | 866974611 |
| CLEANUP EFACTS | PMAC LTD | RTE 18<br>***Facility ID:*** 578868 | BEAVER FALLS PA | | 866955168 |
| CLEANUP EFACTS | NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA | ADJACENT TO 4TH ST AND 2ND AVE<br>***Facility ID:*** 703264 | NEW BRIGHTON PA | | 866961684 |
| HMIRS | | ROUTE 18 | BEAVER FALLS PA | | 818513303 |
| RCRA NON GEN | BEAVER FALLS WATER POLLUTION CONTROL | LOWER SEVENTH AVE<br>***EPA Handler ID:*** PAD000412551 | BEAVER FALLS PA | 15010 | 810445090 |
| RCRA NON GEN | BEAVER COUNTY TRUCKING INC. | ROUTE 18 N<br>***EPA Handler ID:*** PAD004358255 | BEAVER FALLS PA | 15101 | 810427520 |
| UNREG TANK | PMAC LTD | RTE 18<br>***Other ID:*** 04-20214<br>***Tank Seq No \| Status Desc:*** 594753 - 001 \| Closed | BEAVER FALLS PA | 15010 | 848749141 |
| UNREG TANK | CROWN ENTERPRISES | RTE 18 N<br>***Other ID:*** 04-82093<br>***Tank Seq No \| Status Desc:*** 596054 - 001 \| Closed, 596055 - 002 \| Closed | BEAVER FALLS PA | 15010 | 848738942 |
| UNREG TANK | WIZARDS TRUCK STOP | ROUTE 18 N<br>***Other ID:*** 04-83060<br>***Tank Seq No \| Status Desc:*** 596180 - 003 \| Removed, 596179 - 002 \| Removed, 596178 - 001 \| Removed | BEAVER FALLS PA | 15010 | 848739074 |
| UST | PMAC LTD | RTE 18 | BEAVER FALLS PA | 15010 | 867108838 |

***Site ID:*** 461361
***Full Seq No | Status Desc:*** 594753 - 001 | Closed

| | | | | | |
|---|---|---|---|---|---|
| UST | CROWN ENTERPRISES | RTE 18 N | BEAVER FALLS PA | 15010 | 867105433 |

***Site ID:*** 564102
***Full Seq No | Status Desc:*** 596054 - 001 | Closed, 596055 - 002 | Closed

| | | | | | |
|---|---|---|---|---|---|
| UST | WIZARDS TRUCK STOP | ROUTE 18 N | BEAVER FALLS PA | 15010 | 867123360 |

***Site ID:*** 564144
***Full Seq No | Status Desc:*** 596178 - 001 | Removed, 596179 - 002 | Removed, 596180 - 003 | Removed

| | | | | | |
|---|---|---|---|---|---|
| VCP | NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA | ADJACENT TO 4TH ST AND 2ND AVE | NEW BRIGHTON PA | 15066 | 811772457 |

# Unplottable Report

***Site:*** ***CROWN ENTERPRISES***
***RTE 18 N BEAVER FALLS PA***

CLEANUP EFACTS

| | | | |
|---|---|---|---|
| ***Facility ID:*** | 579140 | ***Facility Name:*** | CROWN ENTERPRISES |
| ***Status:*** | Inactive | ***Program:*** | Environmental Cleanup & Brownfields |
| ***Facility URL:*** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579140 | | |

***Facility Search Results***

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-82093 | ***Address1:*** | CROWN ENTERPRISES |
| ***Status:*** | Inactive | ***Address2:*** | 12225 STEPHENS DR |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | WARREN |
| ***Facility Name:*** | CROWN ENTERPRISES | ***State Code:*** | MI |
| ***County Name:*** | Beaver | ***Zip Code:*** | 48089 |
| ***Municipality Name:*** | Beaver Falls City | | |

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-82093 | ***Address1:*** | RTE 18 N |
| ***Status:*** | Inactive | ***Address2:*** | |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | BEAVER FALLS |
| ***Facility Name:*** | CROWN ENTERPRISES | ***State Code:*** | PA |
| ***County Name:*** | Beaver | ***Zip Code:*** | 15010 |
| ***Municipality Name:*** | Beaver Falls City | | |

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-82093 | ***Address1:*** | 12225 STEPHENS RD |
| ***Status:*** | Inactive | ***Address2:*** | |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | WARREN |
| ***Facility Name:*** | CROWN ENTERPRISES | ***State Code:*** | MI |
| ***County Name:*** | Beaver | ***Zip Code:*** | 48089-2010 |
| ***Municipality Name:*** | Beaver Falls City | | |

***Permit Details***

| | | | |
|---|---|---|---|
| ***Permit No:*** | 04-82093 | ***Date Received:*** | 08/05/1989 |
| ***Status:*** | Issued | | |
| ***Authorization:*** | Storage Tank Registration/Permitting (424956) | | |
| ***Authorization Link:*** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=424956 | | |

***Site:*** ***WIZARDS TRUCK STOP***
***ROUTE 18 N BEAVER FALLS PA***

CLEANUP EFACTS

| | | | |
|---|---|---|---|
| ***Facility ID:*** | 579190 | ***Facility Name:*** | WIZARDS TRUCK STOP |
| ***Status:*** | Inactive | ***Program:*** | Environmental Cleanup & Brownfields |
| ***Facility URL:*** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=579190 | | |

***Facility Search Results***

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-83060 | ***Address1:*** | 1618 ROUTE 65 |
| ***Status:*** | Inactive | ***Address2:*** | |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | ELLWOOD CITY |
| ***Facility Name:*** | WIZARDS TRUCK STOP | ***State Code:*** | PA |
| ***County Name:*** | Beaver | ***Zip Code:*** | 16117-5216 |
| ***Municipality Name:*** | Beaver Falls City | | |

| | | | |
|---|---|---|---|
| ***Other ID:*** | 04-83060 | ***Address1:*** | ROUTE 18 N |
| ***Status:*** | Inactive | ***Address2:*** | |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | BEAVER FALLS |
| ***Facility Name:*** | WIZARDS TRUCK STOP | ***State Code:*** | PA |
| ***County Name:*** | Beaver | ***Zip Code:*** | 15010 |

***Municipality Name:*** Beaver Falls City

***Permit Details***

***Permit No:*** 04-83060 ***Date Received:*** 04/19/2004
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (543113)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=543113

***Permit No:*** 04-83060 ***Date Received:*** 05/10/2004
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (545817)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=545817

***Permit No:*** 04-83060 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (397427)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397427

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***Site:*** ***PMAC LTD***
***RTE 18 BEAVER FALLS PA*** CLEANUP EFACTS

***Facility ID:*** 578868 ***Facility Name:*** PMAC LTD
***Status:*** Inactive ***Program:*** Environmental Cleanup & Brownfields
***Facility URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=578868

***Facility Search Results***

***Other ID:*** 04-20214 ***Address1:*** RTE 18
***Status:*** Inactive ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** PMAC LTD ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010
***Municipality Name:*** Big Beaver Borough

***Other ID:*** 04-20214 ***Address1:*** 4023 4TH AVE
***Status:*** Inactive ***Address2:***
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** PMAC LTD ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010-3355
***Municipality Name:*** Big Beaver Borough

***Other ID:*** 04-20214 ***Address1:*** PMAC LTD
***Status:*** Inactive ***Address2:*** 4023 FOURTH AVE
***Program:*** Environmental Cleanup & Brownfields ***City:*** BEAVER FALLS
***Facility Name:*** PMAC LTD ***State Code:*** PA
***County Name:*** Beaver ***Zip Code:*** 15010
***Municipality Name:*** Big Beaver Borough

***Permit Details***

***Permit No:*** 04-20214 ***Date Received:*** 08/05/1989
***Status:*** Issued
***Authorization:*** Storage Tank Registration/Permitting (397196)
***Authorization Link:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=397196

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***Site:*** ***NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA***
***ADJACENT TO 4TH ST AND 2ND AVE NEW BRIGHTON PA*** CLEANUP EFACTS

***Facility ID:*** 703264 ***Facility Name:*** NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA
***Status:*** Active ***Program:*** Environmental Cleanup & Brownfields
***Facility URL:*** https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleFacility.aspx?FacilityID=703264

***Sub-Facility Details***

| | | | |
|---|---|---|---|
| ***Sub Facility Name:*** | SOIL | ***Status:*** | Active |
| ***Type:*** | Soil Media | | |
| ***EMAP PA URL:*** | https://gis.dep.pa.gov/emappa_external/?cid=&sid=701876&pid=703264&subid=963695 | | |
| ***Sub Facility Name:*** | NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA | ***Status:*** | Active |
| ***Type:*** | Groundwater Media | | |
| ***EMAP PA URL:*** | | | |

***Facility Search Results***

| | | | |
|---|---|---|---|
| ***Other ID:*** | 5-4-813-19159 | ***Address1:*** | ADJACENT TO 4TH ST AND 2ND AVE |
| ***Status:*** | Active | ***Address2:*** | |
| ***Program:*** | Environmental Cleanup & Brownfields | ***City:*** | NEW BRIGHTON |
| ***Facility Name:*** | NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA | ***State Code:*** | PA |
| ***County Name:*** | Beaver | ***Zip Code:*** | 15066 |
| ***Municipality Name:*** | New Brighton Borough | | |

***Land Recycling Information***

| | |
|---|---|
| ***NIR Type:*** | NIR (58683) |
| ***NIR Received Date:*** | 01/18/2007 |
| ***NIR Link:*** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleLandInfo.aspx?LRPFACDETID=58683 |
| ***Preparer of NIR:*** | ENSR<br>444 LIBERTY AVE<br>FOUR GATEWAY CENTER STE 700<br>PITTSBURGH, PA 15222 |
| ***NIR Type:*** | NIR (58683) |
| ***NIR Received Date:*** | 08/03/2016 |
| ***NIR Link:*** | https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleLandInfo.aspx?LRPFACDETID=58683 |
| ***Preparer of NIR:*** | |

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***Site:***

***ROUTE 18 BEAVER FALLS PA*** HMIRS

***Incident County:*** BEAVER

***HMIR Incident Reports***

| | | | |
|---|---|---|---|
| ***Report No:*** | I-1995091334 | ***Fed DOT Agency Nm:*** | |
| ***Report Type:*** | A hazardous material incident | ***Fed DOT Report No:*** | |
| ***Date of Incident:*** | 1995-09-08 | ***Report Submit Src:*** | Paper |
| ***Time of Incident:*** | 1430 | ***Inc Multiple Rows:*** | No |
| ***Haz Class Code:*** | | ***Inc Non US State:*** | |
| ***Hazardous Class:*** | 2.2 | ***Mode Transport:*** | Highway |
| ***Commodity Short Nm:*** | COMPRESSED GAS, N.O.S | ***Transport Phase:*** | In Transit |
| ***Commodity Long Nm:*** | COMPRESSED GAS, N.O.S | ***Incident Occrrnce:*** | |
| ***Trade Name:*** | | ***Mat Ship Approval?:*** | No |
| ***ID No:*** | UN1956 | ***Mat Ship Approv No:*** | |
| ***Haz Waste Ind:*** | No | ***Undecl Hazmat Ship?:*** | No |
| ***Haz Waste EPA No:*** | | ***Packaging Type:*** | Cylinder |
| ***HMIS Tox Inhalation?:*** | No | ***Packing Group:*** | |
| ***TIH Hazard Zone:*** | | ***Carrier Reporter:*** | CONWAY CENTRAL EXPRESS |
| ***Qty Released:*** | 0.0625 | ***CR Street Name:*** | 3275 ROUTE 151 |
| ***Unit of Measure:*** | Liquid - Gallon | ***CR City:*** | ALIQUIPPA |
| ***What Failed:*** | | ***CR State:*** | PA |
| ***What Failed Desc:*** | | ***CR Postal Code:*** | 15001 |
| ***How Failed Code:*** | | ***CR Non US State:*** | |
| ***How Failed Desc:*** | | ***CR Fed DOT ID:*** | 0 |
| ***Failure Cause Code:*** | 526 | ***CR Hazmat Reg ID:*** | |
| ***Failure Cause Desc:*** | Loose Closure, Component, or Device | ***CR Country:*** | US |
| ***Ident. Markings:*** | | ***Shipper Name:*** | M G INDUSTRIES |
| ***Cont1 Pkging Type:*** | | ***Shipper Street Name:*** | 1399 NEW FOND MILL RD |
| ***Cont1 Const Mat:*** | | ***Shipper City:*** | MORRISVILLE |
| ***Cont1 Head Type:*** | | ***Shipper State:*** | PA |
| ***Cont1 Pkg Capacity:*** | 2.5 | ***Shipper Postal:*** | 19067 |

| | | | |
|---|---|---|---|
| ***C1 Capacity UOM:*** | LGA | ***Shipper Non US St:*** | |
| ***Cont1 Pkg Amt:*** | 0 | ***Shipper Country:*** | US |
| ***C1 Pkg Amt UOM:*** | | ***Shipper Waybill:*** | PRO 382672802 |
| ***Cont1 Pkg No:*** | 3 | ***Ship Hazmat Reg ID:*** | |
| ***C1 Pkg NO Failed:*** | 1 | ***Origin City:*** | |
| ***Cont1 Pkg Mnfctr:*** | NOT REPORTED BY CARRIER | ***Origin State:*** | |
| ***Cont1 Pkg Mnfct Dt:*** | 0-00-00 00:00:00 | ***Origin Postal:*** | |
| ***Cont1 Pkg Serial NO:*** | | ***Origin Non US St:*** | |
| ***C1 Pkg Last Test Dt:*** | 0-00-00 00:00:00 | ***Origin Country:*** | US |
| ***C1 Test Const Mat:*** | | ***Destination City:*** | WAMPUM |
| ***C1 Pkg Dsign Pres.:*** | 0 | ***Destination State:*** | PENNSYLVANIA |
| ***C1 Dsign Press UOM:*** | | ***Destination Postal:*** | |
| ***C1 Pkg Shell Thick:*** | 0 | ***Destination Non US:*** | |
| ***C1 Shell Thick UOM:*** | | ***Destination Country:*** | US |
| ***C1 Head Thickness:*** | 0 | ***Cont2 Package Type:*** | |
| ***C1 Head Thick UOM:*** | | ***Cont2 Const Mat:*** | |
| ***C1 Pkg Srvc Pres.:*** | 0 | ***Cont2 Pkg Capacity:*** | 0 |
| ***C1 Srvc Press UOM:*** | | ***Cont2 Capacity UOM:*** | |
| ***C1 Valve/Device Fail?:*** | No | ***Cont2 Pkg Amount:*** | 0 |
| ***C1 Device Type:*** | | ***Cont2 Pkg Amt UOM:*** | |
| ***C1 Device Mnfctr:*** | | ***Cont2 Pkg No:*** | 0 |
| ***C1 Device Model:*** | | ***Cont2 Pkg No Failed:*** | 0 |
| ***NRC No:*** | | | |

| | | | |
|---|---|---|---|
| ***RAM Pkg Category:*** | | ***Haz NonHosp Public:*** | 0 |
| ***RAM Pkg Cert.:*** | FALSE | ***Haz NonHosp Old:*** | |
| ***RAM Pkg Cert. NBR:*** | | ***Tot Haz Non Hosp Inj:*** | |
| ***RAM Nuclide S:*** | | ***Total Hazmat Injuries:*** | 0 |
| ***RAM Transport Index:*** | | ***Evacuation Indicator:*** | No |
| ***RAM UOM:*** | | ***Public Evacuated:*** | 0 |
| ***RAM Activity Rpted:*** | 0 | ***Employees Evac:*** | 0 |
| ***RAM UOM Rpted:*** | | ***Total Evacuated:*** | 0 |
| ***RAM Activity:*** | 0 | ***Total Evacuation Hrs:*** | 0 |
| ***RAM Activity UOM:*** | | ***Major Artery Closed:*** | No |
| ***RAM Mat Safety:*** | | ***Mjr Artery Hrs Closed:*** | 0 |
| ***Spillage Result:*** | Yes | ***Material Involved:*** | No |
| ***Fire Result:*** | No | ***Estimated Speed:*** | 25 |
| ***Explosion Result:*** | No | ***Weather Conditions:*** | |
| ***Water Sewer Result:*** | No | ***Vehicle Overturn:*** | No |
| ***Gas Dispersion:*** | No | ***Vehicle Left Roadway:*** | No |
| ***Environment Damage:*** | No | ***Passenger Aircraft:*** | No |
| ***No Release Result:*** | No | ***Cargo Baggage:*** | |
| ***Fire EMS Report:*** | No | ***Ship Non Transport:*** | No |
| ***Fire EMS EMS Report:*** | | ***Ship Air First Flight:*** | No |
| ***Police Report:*** | No | ***Ship Air Subflight:*** | No |
| ***Police Report No:*** | | ***Ship Init Transport:*** | No |
| ***In House Cleanup:*** | No | ***Ship Phase Transfer:*** | No |
| ***Other Cleanup:*** | No | ***Contact Name:*** | KENNETH O PIER |
| ***Damage > 500:*** | No | ***Contact Title:*** | SUPV |
| ***Material Loss:*** | 0 | ***Contact Business:*** | |
| ***Carrier Damage:*** | 0 | ***Contact Street:*** | |
| ***Property Damage:*** | 0 | ***Contact City:*** | |
| ***Response Cost:*** | 0 | ***Contact State:*** | |
| ***Remediation Cost:*** | 0 | ***Contact Postal:*** | |
| ***Damage Old Form:*** | 0 | ***Contact Non US St:*** | |
| ***Total Damages Amt:*** | 0 | ***Contact Country:*** | US |
| ***Hazmat Fatality:*** | No | ***Inc. Report Prepared:*** | |
| ***Haz Fatal Employees:*** | 0 | ***HMIS Serious Incidnt:*** | No |
| ***Haz Fatal Respndrs:*** | 0 | ***HMIS Serious Fatality:*** | No |
| ***Haz Fatal Gen Public:*** | 0 | ***HMIS Serious Injury:*** | No |
| ***Tot Hazmat Fatalities:*** | 0 | ***HMIS Flight Plan:*** | No |
| ***Non Hazmat Fatality:*** | No | ***HMIS Serious Evacs:*** | No |
| ***Non Hazmat Fatals:*** | 0 | ***HMIS Major Artery:*** | No |
| ***Hazmat Injury:*** | No | ***HMIS Bulk Release:*** | No |
| ***Haz Hospital Empl:*** | 0 | ***HMIS Marine Pollutnt:*** | No |
| ***Haz Hospital Resp:*** | 0 | ***HMIS Radioactive:*** | No |
| ***Haz Hosp Gen Public:*** | 0 | ***HMIS Gen Pkg Type:*** | CYLINDER |
| ***Haz Hosp Old Form:*** | 0 | ***HMIS Container Code:*** | CYL MTL |
| ***Total Haz Hosp Inj:*** | 0 | ***HMIS Container Desc:*** | Cylindrical metal container, not for compressed gases (i. e., not a pressure vessel) |
| ***Haz Non Hosp Empl:*** | 0 | ***HMIS Bulk Incident:*** | No |

***Haz Non Hosp Resp:*** 0 ***Undeclared Shipment:*** No
***Description of Events:*** CYLINDER VALVE ON TOP CAME LOOSE DRIVER TIGHTEN SECURELY.
***Recommend Actions Taken:***

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***Site:*** ***BEAVER FALLS WATER POLLUTION CONTROL***
***LOWER SEVENTH AVE BEAVER FALLS PA 15010***

RCRA NON GEN

***EPA Handler ID:*** PAD000412551
***Gen Status Universe:*** No Report
***Contact Name:*** DARWIN MAIN
***Contact Address:*** LOWER SEVENTH AVE , , BEAVER FALLS , PA, 15010 , US
***Contact Phone No and Ext:*** 412-843-7184
***Contact Email:***
***Contact Country:*** US
***County Name:*** BEAVER
***EPA Region:*** 03
***Land Type:***
***Receive Date:*** 19810730
***Location Latitude:***
***Location Longitude:***

***Violation/Evaluation Summary***

***Note:*** NO RECORDS: As of Jan 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

***Handler Summary***

***Importer Activity:*** No
***Mixed Waste Generator:*** No
***Transporter Activity:*** No
***Transfer Facility:*** No
***Onsite Burner Exemption:*** No
***Furnace Exemption:*** No
***Underground Injection Activity:*** No
***Commercial TSD:*** No
***Used Oil Transporter:*** No
***Used Oil Transfer Facility:*** No
***Used Oil Processor:*** No
***Used Oil Refiner:*** No
***Used Oil Burner:*** No
***Used Oil Market Burner:*** No
***Used Oil Spec Marketer:*** No

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 19810730
***Handler Name:*** BEAVER FALLS WATER POLLUTION CONTROL
***Source Type:*** Notification
***Federal Waste Generator Code:***
***Generator Code Description:***

***Owner/Operator Details***

***Owner/Operator Ind:*** Current Operator
***Type:*** Private
***Name:*** OPERNAME
***Date Became Current:***
***Date Ended Current:***
***Phone:*** 215-555-1212
***Source Type:*** Notification
***Street No:***
***Street 1:*** OPERSTREET
***Street 2:***
***City:*** OPERCITY
***State:*** AK
***Country:***
***Zip Code:*** 99999

***Owner/Operator Ind:*** Current Owner
***Type:*** Private
***Name:*** OWNERNAME
***Date Became Current:***
***Street No:***
***Street 1:*** OWNERSTREET
***Street 2:***
***City:*** OWNERCITY

| | | | |
|---|---|---|---|
| ***Date Ended Current:*** | | ***State:*** | AK |
| ***Phone:*** | 215-555-1212 | ***Country:*** | |
| ***Source Type:*** | Notification | ***Zip Code:*** | 99999 |

***Site:*** ***BEAVER COUNTY TRUCKING INC.***
***ROUTE 18 N BEAVER FALLS PA 15101***

RCRA NON GEN

| | |
|---|---|
| ***EPA Handler ID:*** | PAD004358255 |
| ***Gen Status Universe:*** | No Report |
| ***Contact Name:*** | |
| ***Contact Address:*** | |
| ***Contact Phone No and Ext:*** | |
| ***Contact Email:*** | |
| ***Contact Country:*** | |
| ***County Name:*** | BEAVER |
| ***EPA Region:*** | 03 |
| ***Land Type:*** | Other |
| ***Receive Date:*** | 20161220 |
| ***Location Latitude:*** | |
| ***Location Longitude:*** | |

***Violation/Evaluation Summary***

| | |
|---|---|
| ***Note:*** | NO VIOLATIONS: All of the compliance records associated with this facility (EPA ID) indicate NO VIOLATIONS; Compliance Monitoring and Enforcement table dated Jan, 2021. |

***Evaluation Details***

| | |
|---|---|
| ***Evaluation Start Date:*** | 19950924 |
| ***Evaluation Type Description:*** | COMPLIANCE EVALUATION INSPECTION ON-SITE |
| ***Violation Short Description:*** | |
| ***Return to Compliance Date:*** | |
| ***Evaluation Agency:*** | State |

| | |
|---|---|
| ***Evaluation Start Date:*** | 19871112 |
| ***Evaluation Type Description:*** | COMPLIANCE EVALUATION INSPECTION ON-SITE |
| ***Violation Short Description:*** | |
| ***Return to Compliance Date:*** | |
| ***Evaluation Agency:*** | State |

***Handler Summary***

| | |
|---|---|
| ***Importer Activity:*** | No |
| ***Mixed Waste Generator:*** | No |
| ***Transporter Activity:*** | No |
| ***Transfer Facility:*** | No |
| ***Onsite Burner Exemption:*** | No |
| ***Furnace Exemption:*** | No |
| ***Underground Injection Activity:*** | No |
| ***Commercial TSD:*** | No |
| ***Used Oil Transporter:*** | No |
| ***Used Oil Transfer Facility:*** | No |
| ***Used Oil Processor:*** | No |
| ***Used Oil Refiner:*** | No |
| ***Used Oil Burner:*** | No |
| ***Used Oil Market Burner:*** | No |
| ***Used Oil Spec Marketer:*** | No |

***Hazardous Waste Handler Details***

| | |
|---|---|
| ***Sequence No:*** | 1 |
| ***Receive Date:*** | 19810403 |
| ***Handler Name:*** | BEAVER COUNTY TRUCKING INC |
| ***Source Type:*** | Notification |
| ***Federal Waste Generator Code:*** | N |
| ***Generator Code Description:*** | Not a Generator, Verified |

***Waste Code Details***

***Hazardous Waste Code:*** D002
***Waste Code Description:*** CORROSIVE WASTE

***Hazardous Waste Code:*** K061
***Waste Code Description:*** EMISSION CONTROL DUST/SLUDGE FROM THE PRIMARY PRODUCTION OF STEEL IN ELECTRIC FURNACES.

***Hazardous Waste Handler Details***

***Sequence No:*** 1
***Receive Date:*** 19950928
***Handler Name:*** BEAVER COUNTY TRUCKING INC
***Source Type:*** Implementer
***Federal Waste Generator Code:*** N
***Generator Code Description:*** Not a Generator, Verified

***Waste Code Details***

***Hazardous Waste Code:*** NONE
***Waste Code Description:*** DESCRIPTION

***Hazardous Waste Handler Details***

***Sequence No:*** 2
***Receive Date:*** 20161220
***Handler Name:*** BEAVER COUNTY TRUCKING INC.
***Source Type:*** Implementer
***Federal Waste Generator Code:*** N
***Generator Code Description:*** Not a Generator, Verified

***Owner/Operator Details***

***Owner/Operator Ind:*** Current Owner
***Type:*** Private
***Name:*** OWNERNAME
***Date Became Current:***
***Date Ended Current:***
***Phone:*** 215-555-1212
***Source Type:*** Notification
***Street No:***
***Street 1:*** OWNERSTREET
***Street 2:***
***City:*** OWNERCITY
***State:*** AK
***Country:***
***Zip Code:*** 99999

***Owner/Operator Ind:*** Current Operator
***Type:*** Private
***Name:*** BEAVER COUNTY TRUCKING INC
***Date Became Current:***
***Date Ended Current:***
***Phone:*** 215-555-1212
***Source Type:*** Implementer
***Street No:***
***Street 1:*** OPERSTREET
***Street 2:***
***City:*** OPERCITY
***State:*** AK
***Country:***
***Zip Code:*** 99999

***Historical Handler Details***

***Receive Dt:*** 19950928
***Generator Code Description:*** Not a Generator, Verified
***Handler Name:*** BEAVER COUNTY TRUCKING INC

***Receive Dt:*** 19810403
***Generator Code Description:*** Not a Generator, Verified
***Handler Name:*** BEAVER COUNTY TRUCKING INC

---

***Site:*** ***PMAC LTD***
***RTE 18 BEAVER FALLS PA 15010***

UNREG TANK

***Other ID:*** 04-20214
***Site ID:*** 461361
***Client Addr Line 1:*** 4023 4TH AVE
***Client Addr Line 2:***

***County Name:*** Beaver
***Municipality:*** Big Beaver Boro
***Client ID:*** 62602
***Client:*** PMAC LTD

***Client City:*** BEAVER FALLS
***Client State:*** PA
***Client Zip:*** 15010-3355

***Tank Information***

***Tank Seq No:*** 594753 - 001
***Status Code:*** W
***Status Desc:*** Closed
***Status Date:*** 03/01/1994

***Tank Code:*** UST
***Installed Date:*** 03/01/1994
***Capacity:*** 10000

***Substances***

***Substance Code:*** GAS
***Substance Desc:*** Gasoline

---

***Site:*** ***CROWN ENTERPRISES***
***RTE 18 N BEAVER FALLS PA 15010***

UNREG TANK

***Other ID:*** 04-82093
***Site ID:*** 564102
***County Name:*** Beaver
***Municipality:*** Beaver Falls City
***Client ID:*** 167052
***Client:*** CENTRAL TRANSPORTS INC

***Client Addr Line 1:*** 12225 STEPHENS RD
***Client Addr Line 2:***
***Client City:*** WARREN
***Client State:*** MI
***Client Zip:*** 48089-2010

***Tank Information***

***Tank Seq No:*** 596054 - 001
***Status Code:*** W
***Status Desc:*** Closed
***Status Date:*** 04/01/1997

***Tank Code:*** UST
***Installed Date:*** 01/01/1956
***Capacity:*** 4000

***Substances***

***Substance Code:*** DIESL
***Substance Desc:*** Diesel Fuel

***Tank Information***

***Tank Seq No:*** 596055 - 002
***Status Code:*** W
***Status Desc:*** Closed
***Status Date:*** 04/01/1997

***Tank Code:*** UST
***Installed Date:*** 01/01/1956
***Capacity:*** 6000

***Substances***

***Substance Code:*** DIESL
***Substance Desc:*** Diesel Fuel

---

***Site:*** ***WIZARDS TRUCK STOP***
***ROUTE 18 N BEAVER FALLS PA 15010***

UNREG TANK

***Other ID:*** 04-83060
***Site ID:*** 564144
***County Name:*** Beaver
***Municipality:*** Beaver Falls City
***Client ID:*** 226141
***Client:*** ALM LEASING LLC

***Client Addr Line 1:*** 1618 ROUTE 65
***Client Addr Line 2:***
***Client City:*** ELLWOOD CITY
***Client State:*** PA
***Client Zip:*** 16117-5216

***Tank Information***

***Tank Seq No:*** 596180 - 003
***Status Code:*** R
***Status Desc:*** Removed
***Status Date:*** 04/29/2004
***Tank Code:*** UST
***Installed Date:*** 08/10/1986
***Capacity:*** 6000

***Substances***

***Substance Code:*** DIESL
***Substance Desc:*** Diesel Fuel

***Tank Information***

***Tank Seq No:*** 596179 - 002
***Status Code:*** R
***Status Desc:*** Removed
***Status Date:*** 04/29/2004
***Tank Code:*** UST
***Installed Date:*** 08/10/1986
***Capacity:*** 6000

***Substances***

***Substance Code:*** DIESL
***Substance Desc:*** Diesel Fuel

***Tank Information***

***Tank Seq No:*** 596178 - 001
***Status Code:*** R
***Status Desc:*** Removed
***Status Date:*** 04/29/2004
***Tank Code:*** UST
***Installed Date:*** 08/10/1986
***Capacity:*** 6000

***Substances***

***Substance Code:*** DIESL
***Substance Desc:*** Diesel Fuel

---

***Site:*** ***PMAC LTD***
***RTE 18 BEAVER FALLS PA 15010***

UST

***Site ID:*** 461361
***Other ID:*** 04-20214
***UST:*** Yes
***Inactive UST(s):*** Yes
***Active UST(s):***
***Facility Name (Reg):***
***Address 1 (Reg):***
***Address 2 (Reg):***
***City (Reg):***
***Zip (Reg):***
***Municipality (Reg):***
***County (Reg):***
***Facility Name (Search):*** PMAC LTD
***Address (Search):*** RTE 18
***Address2 (Search):***
***City (Search):*** BEAVER FALLS
***Municipality (Search):*** Big Beaver Boro
***County (Search):*** Beaver
***Zip (Search):*** 15010
***Source(s):*** DEP Storage Tanks Search - Inactive
***Latitude (Map):***
***Longitude (Map):***
***Facility Name (Map):***
***Address 1 (Map):***
***Address 2 (Map):***
***City (Map):***
***Municipality (Map):***
***County (Map):***
***Zip (Map):***

***DEP Facility Information***

***PF Name:*** PMAC LTD
***PF Address 1:*** RTE 18
***PF Address 2:***
***PF City:*** BEAVER FALLS
***PF State:*** PA
***Client ID:*** 62602
***Client Name:*** PMAC LTD
***Client Address 1:*** 4023 4TH AVE
***Client Address 2:***
***Client City:*** BEAVER FALLS

| | | | |
|---|---|---|---|
| ***PF Zip:*** | 15010 | ***Client State:*** | PA |
| ***County:*** | Beaver | ***Client Zip:*** | 15010-3355 |
| ***Municipality:*** | Big Beaver Boro | | |
| ***Detail Source(s):*** | Inactive Tanks | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 594753 - 001 | ***Capacity:*** | 10000 |
| ***Sequence No:*** | | ***Substance Code:*** | GAS |
| ***Tank Code:*** | UST | ***Substance:*** | Gasoline |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 03/01/1994 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 03/01/1994 | | |

---

***Site:*** ***CROWN ENTERPRISES***
***RTE 18 N BEAVER FALLS PA 15010***

UST

| | | | |
|---|---|---|---|
| ***Site ID:*** | 564102 | ***Latitude (Map):*** | |
| ***Other ID:*** | 04-82093 | ***Longitude (Map):*** | |
| ***UST:*** | Yes | ***Facility Name (Map):*** | |
| ***Inactive UST(s):*** | Yes | ***Address 1 (Map):*** | |
| ***Active UST(s):*** | | ***Address 2 (Map):*** | |
| ***Facility Name (Reg):*** | | ***City (Map):*** | |
| ***Address 1 (Reg):*** | | ***Municipality (Map):*** | |
| ***Address 2 (Reg):*** | | ***County (Map):*** | |
| ***City (Reg):*** | | ***Zip (Map):*** | |
| ***Zip (Reg):*** | | | |
| ***Municipality (Reg):*** | | | |
| ***County (Reg):*** | | | |
| ***Facility Name (Search):*** | CROWN ENTERPRISES | | |
| ***Address (Search):*** | RTE 18 N | | |
| ***Address2 (Search):*** | | | |
| ***City (Search):*** | BEAVER FALLS | | |
| ***Municipality (Search):*** | Beaver Falls City | | |
| ***County (Search):*** | Beaver | | |
| ***Zip (Search):*** | 15010 | | |
| ***Source(s):*** | DEP Storage Tanks Search - Inactive | | |

***DEP Facility Information***

| | | | |
|---|---|---|---|
| ***PF Name:*** | CROWN ENTERPRISES | ***Client ID:*** | 167052 |
| ***PF Address 1:*** | RTE 18 N | ***Client Name:*** | CENTRAL TRANSPORTS INC |
| ***PF Address 2:*** | | ***Client Address 1:*** | 12225 STEPHENS RD |
| ***PF City:*** | BEAVER FALLS | ***Client Address 2:*** | |
| ***PF State:*** | PA | ***Client City:*** | WARREN |
| ***PF Zip:*** | 15010 | ***Client State:*** | MI |
| ***County:*** | Beaver | ***Client Zip:*** | 48089-2010 |
| ***Municipality:*** | Beaver Falls City | | |
| ***Detail Source(s):*** | Inactive Tanks | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 596054 - 001 | ***Capacity:*** | 4000 |
| ***Sequence No:*** | | ***Substance Code:*** | DIESL |
| ***Tank Code:*** | UST | ***Substance:*** | Diesel Fuel |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 04/01/1997 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1956 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 596055 - 002 | ***Capacity:*** | 6000 |
| ***Sequence No:*** | | ***Substance Code:*** | DIESL |

| | | | |
|---|---|---|---|
| ***Tank Code:*** | UST | ***Substance:*** | Diesel Fuel |
| ***Status:*** | W | ***Substance Date End:*** | |
| ***Status Desc:*** | Closed | ***Inspection Code:*** | |
| ***Status Date:*** | 04/01/1997 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 01/01/1956 | | |

---

***Site:*** ***WIZARDS TRUCK STOP***
***ROUTE 18 N BEAVER FALLS PA 15010***

UST

| | | | |
|---|---|---|---|
| ***Site ID:*** | 564144 | ***Latitude (Map):*** | |
| ***Other ID:*** | 04-83060 | ***Longitude (Map):*** | |
| ***UST:*** | Yes | ***Facility Name (Map):*** | |
| ***Inactive UST(s):*** | Yes | ***Address 1 (Map):*** | |
| ***Active UST(s):*** | | ***Address 2 (Map):*** | |
| ***Facility Name (Reg):*** | | ***City (Map):*** | |
| ***Address 1 (Reg):*** | | ***Municipality (Map):*** | |
| ***Address 2 (Reg):*** | | ***County (Map):*** | |
| ***City (Reg):*** | | ***Zip (Map):*** | |
| ***Zip (Reg):*** | | | |
| ***Municipality (Reg):*** | | | |
| ***County (Reg):*** | | | |
| ***Facility Name (Search):*** | WIZARDS TRUCK STOP | | |
| ***Address (Search):*** | ROUTE 18 N | | |
| ***Address2 (Search):*** | | | |
| ***City (Search):*** | BEAVER FALLS | | |
| ***Municipality (Search):*** | Beaver Falls City | | |
| ***County (Search):*** | Beaver | | |
| ***Zip (Search):*** | 15010 | | |
| ***Source(s):*** | DEP Storage Tanks Search - Inactive | | |

***DEP Facility Information***

| | | | |
|---|---|---|---|
| ***PF Name:*** | WIZARDS TRUCK STOP | ***Client ID:*** | 226141 |
| ***PF Address 1:*** | ROUTE 18 N | ***Client Name:*** | ALM LEASING LLC |
| ***PF Address 2:*** | | ***Client Address 1:*** | 1618 ROUTE 65 |
| ***PF City:*** | BEAVER FALLS | ***Client Address 2:*** | |
| ***PF State:*** | PA | ***Client City:*** | ELLWOOD CITY |
| ***PF Zip:*** | 15010 | ***Client State:*** | PA |
| ***County:*** | Beaver | ***Client Zip:*** | 16117-5216 |
| ***Municipality:*** | Beaver Falls City | | |
| ***Detail Source(s):*** | Inactive Tanks | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 596178 - 001 | ***Capacity:*** | 6000 |
| ***Sequence No:*** | | ***Substance Code:*** | DIESL |
| ***Tank Code:*** | UST | ***Substance:*** | Diesel Fuel |
| ***Status:*** | R | ***Substance Date End:*** | |
| ***Status Desc:*** | Removed | ***Inspection Code:*** | |
| ***Status Date:*** | 04/29/2004 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 08/10/1986 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 596179 - 002 | ***Capacity:*** | 6000 |
| ***Sequence No:*** | | ***Substance Code:*** | DIESL |
| ***Tank Code:*** | UST | ***Substance:*** | Diesel Fuel |
| ***Status:*** | R | ***Substance Date End:*** | |
| ***Status Desc:*** | Removed | ***Inspection Code:*** | |
| ***Status Date:*** | 04/29/2004 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 08/10/1986 | | |

***Inactive UST Information***

| | | | |
|---|---|---|---|
| ***Full Seq No:*** | 596180 - 003 | ***Capacity:*** | 6000 |
| ***Sequence No:*** | | ***Substance Code:*** | DIESL |
| ***Tank Code:*** | UST | ***Substance:*** | Diesel Fuel |
| ***Status:*** | R | ***Substance Date End:*** | |
| ***Status Desc:*** | Removed | ***Inspection Code:*** | |
| ***Status Date:*** | 04/29/2004 | ***Inspection:*** | |
| ***Status Cd Date End:*** | | ***Third Party Inspect:*** | |
| ***Date Installed:*** | 08/10/1986 | | |

---

***Site:*** ***NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA***
***ADJACENT TO 4TH ST AND 2ND AVE NEW BRIGHTON PA 15066***

VCP

| | | | |
|---|---|---|---|
| ***Primary Facility ID:*** | 703264 | ***County:*** | Beaver |
| ***Site Name:*** | NORFOLK SOUTHERN DERAILMENT SITE NEW BRIGHTON PA | ***Municipality:*** | New Brighton Boro |
| ***Address1:*** | ADJACENT TO 4TH ST AND 2ND AVE | ***Region:*** | Southwest Region |
| ***Address2:*** | | ***Latitude:*** | 40.738333 |
| ***City:*** | NEW BRIGHTON | ***Longitude:*** | -80.318888 |
| ***Zip Code:*** | 15066 | ***State:*** | PA |
| ***Primary Facility ID (Aquifer):*** | | | |
| ***Primary Fac Name (Aquifer):*** | | | |
| ***Address (Aquifer):*** | | | |
| ***City (Aquifer):*** | | | |
| ***County (Aquifer):*** | | | |
| ***Source:*** | Sites Completed | | |

***VCP Detail***

| | | | |
|---|---|---|---|
| ***LRP Activity ID:*** | 49613 | ***NIR Received Date:*** | |
| ***Approval Date:*** | 09/19/2016 | ***Media:*** | Soil |
| ***Remediation Standard:*** | Statewide Health Standard | | |
| ***Contamination Category:*** | | | |
| ***Activity & Use Limitation:*** | NO | | |
| ***Source:*** | Sites Completed | | |

| | | | |
|---|---|---|---|
| ***LRP Activity ID:*** | 38844 | ***NIR Received Date:*** | |
| ***Approval Date:*** | 01/31/2007 | ***Media:*** | Soil |
| ***Remediation Standard:*** | Statewide Health Standard | | |
| ***Contamination Category:*** | PAH | | |
| ***Activity & Use Limitation:*** | NO | | |
| ***Source:*** | Sites Completed | | |

| | | | |
|---|---|---|---|
| ***LRP Activity ID:*** | 49613 | ***NIR Received Date:*** | |
| ***Approval Date:*** | 09/19/2016 | ***Media:*** | Groundwater |
| ***Remediation Standard:*** | Statewide Health Standard | | |
| ***Contamination Category:*** | | | |
| ***Activity & Use Limitation:*** | NO | | |
| ***Source:*** | Sites Completed | | |

# Appendix: Database Descriptions

*Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:*

*"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."*

## *Standard Environmental Record Sources*

### *Federal*

***Formerly Utilized Sites Remedial Action Program:*** DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

***Government Publication Date: Mar 4, 2017***

***National Priority List:*** NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

***Government Publication Date: Apr 27, 2021***

***National Priority List - Proposed:*** PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

***Government Publication Date: Apr 27, 2021***

***Deleted NPL:*** DELETED NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

***Government Publication Date: Apr 27, 2021***

***SEMS List 8R Active Site Inventory:*** SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

***Government Publication Date: Mar 23, 2021***

***SEMS List 8R Archive Sites:*** SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

***Government Publication Date: Mar 23, 2021***

***Inventory of Open Dumps, June 1985:*** ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

***Government Publication Date: Jun 1985***

***EPA Report on the Status of Open Dumps on Indian Lands:*** IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

***Government Publication Date: Dec 31, 1998***

***Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS:*** CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

***Government Publication Date: Oct 25, 2013***

***CERCLIS - No Further Remedial Action Planned:*** CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

***Government Publication Date: Oct 25, 2013***

***CERCLIS Liens:*** CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

***Government Publication Date: Jan 30, 2014***

***RCRA CORRACTS-Corrective Action:*** RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

***Government Publication Date: Jan 22, 2021***

***RCRA non-CORRACTS TSD Facilities:*** RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

***Government Publication Date: Jan 22, 2021***

***RCRA Generator List:*** RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

***Government Publication Date: Jan 22, 2021***

***RCRA Small Quantity Generators List:*** RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

***Government Publication Date: Jan 22, 2021***

***RCRA Very Small Quantity Generators List:*** RCRA VSQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

***Government Publication Date: Jan 22, 2021***

***RCRA Non-Generators:*** RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

***Government Publication Date: Jan 22, 2021***

***Federal Engineering Controls-ECs:*** FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

***Government Publication Date: Feb 23, 2021***

***Federal Institutional Controls- ICs:*** FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency ) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

***Government Publication Date: Feb 23, 2021***

***Land Use Control Information System:*** LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

***Government Publication Date: Sep 1, 2006***

***Emergency Response Notification System:*** ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

***Government Publication Date: 1982-1986***

***Emergency Response Notification System:*** ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

***Government Publication Date: 1987-1989***

***Emergency Response Notification System:*** ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

***Government Publication Date: Nov 9, 2020***

***The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database:*** FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

***Government Publication Date: Jan 6, 2021***

***FEMA Underground Storage Tank Listing:*** FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

***Government Publication Date: Dec 31, 2017***

***Facility Response Plan:*** FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

***Government Publication Date: Dec 2, 2020***

***Historical Gas Stations:*** HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

***Government Publication Date: Jul 1, 1930***

***Petroleum Refineries:*** REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

***Government Publication Date: Jul 10, 2020***

***Petroleum Product and Crude Oil Rail Terminals:*** BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

***Government Publication Date: Apr 28, 2020***

***LIEN on Property:*** SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

***Government Publication Date: Mar 23, 2021***

***Superfund Decision Documents:*** SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

***Government Publication Date: Feb 23, 2021***

## *State*

***Hazardous Sites Response Actions Site List:*** SHWS

List of hazardous sites response actions that have been taken since the enactment of the Hazardous Sites Cleanup Act (HSCA) on October 18, 1988. The information in this list is derived from the Department of Environmental Protection (DEP)'s Environment, Facility, Application and Compliance Tracking System (eFACTS). This database is state equivalent NPL.

***Government Publication Date: Apr 20, 2021***

***Delisted Hazardous Sites Response Actions Site List:*** DELISTED SHWS

This list contains the records removed from the Pennsylvania Department of Environmental Protection (DEP)'s Environment, Facility, Application and Compliance Tracking System (eFACTS) database.

***Government Publication Date: Apr 20, 2021***

***Delisted Drycleaners:*** DELISTED DRYCLEANERS

List of sites removed from the permitted drycleaners database made available by the Bureau of Air Quality of the Pennsylvania Department of Environmental Protection (DEP).

***Government Publication Date: Apr 26, 2021***

***HSCA Remedial Sites:*** HSCA

List of remedial sites where the Pennsylvania Department of Environmental Protection (DEP) has performed a cleanup under the Hazardous Sites Cleanup Act (HSCA). The Hazardous Sites Cleanup Act (HSCA) provides DEP with the funding and authority to conduct cleanup actions at hazardous substance release sites. This sites are state equivelent of federal Superfund sites. This database is state equivalent NPL.

***Government Publication Date: Apr 20, 2021***

***Solid Waste Facilities:*** SWF

Database includes a listing of active, inactive, and closed municipal waste landfills; construction & demolition waste landfills; waste-to-energy facilities; inactive non-hazardous 10000 series sites; and the historic facility inventory and abandoned landfill inventory, as published by the Pennsylvania Department of Environmental Protection (DEP) Bureau of Waste Management.

***Government Publication Date: Oct 7, 2020***

***Underground Storage Tank Releases:*** LUST

List of confirmed release incidents that have been reported to the Pennsylvania Department of Environmental Protection (DEP) since enactment of the Storage Tank and Spill Prevention Act (Tank Act) in July, 1989. These release incidents represent leaks, spills, and overfills which have occurred from underground storage tank systems regulated by the Tank Act.

***Government Publication Date: Feb 18, 2021***

***Unregulated Storage Tank Releases:*** LST UNREG

List of confirmed release incidents that have been reported to the Pennsylvania Department of Environmental Protection (DEP) since enactment of the Storage Tank and Spill Prevention Act (Tank Act) in July, 1989. These release incidents represent leaks, spills, and overfills which have occurred from unregulated storage tank systems.

***Government Publication Date: May 11, 2021***

***Aboveground Storage Tank Releases:*** LAST

List of confirmed release incidents that have been reported to the Pennsylvania Department of Environmental Protection (DEP) since enactment of the Storage Tank and Spill Prevention Act (Tank Act) in July, 1989. These release incidents represent leaks, spills, and overfills which have occurred from aboveground storage tank systems regulated by the Tank Act.

***Government Publication Date: May 11, 2021***

***Delisted Leaking Storage Tanks:*** DELISTED LST

This database contains a list of leaking storage tank sites that were removed from the Pennsylvania Department of Environmental Protection (DEP) since enactment of the Storage Tank and Spill Prevention Act (Tank Act) in July, 1989.

***Government Publication Date: May 11, 2021***

***Underground Storage Tanks:*** UST

List of underground storage tanks registered with the Pennsylvania Department of Environmental Protection (DEP). Includes records from the DEP's Storage Tank Reports and environmental mapping tool eMapPA.

***Government Publication Date: Mar 26, 2021***

***Aboveground Storage Tanks:*** AST

List of aboveground storage tanks registered with the Pennsylvania Department of Environmental Protection (DEP). Includes records from the DEP's Storage Tank Reports and environmental mapping tool eMapPA. Does not include aboveground tank systems storing highly hazardous substances, or aboveground tank systems with capacities greater than 21,000 gallons.

***Government Publication Date: Mar 26, 2021***

***Storage Tanks:*** TANKS

A list of storage tanks made available on the Pennsylvania Department of Environmental Protection (DEP) mapping tool eMapPA. Does not include aboveground storage tanks with a capacity greater than 21,000 gallons, and aboveground storage tanks that contain highly hazardous substances.

***Government Publication Date: Mar 26, 2021***

***Tank Facilities Not Currently Registered:*** UNREG TANK

List of tanks not currently registered with the Pennsylvania Department of Environmental Protection (PA DEP). Facilities may appear on this list if tanks have been removed, permanently closed in place, closed without a permit, or under other circumstances. This list is made available by PA DEP.

***Government Publication Date: May 11, 2021***

***Delisted Tanks:*** DEL TANK

Locations of closed or removed tanks which are no longer actively registered with the Pennsylvania Department of Environmental Protection (DEP). The Pennsylvania Department of Environmental Protection (DEP)'s eFACTS (Environment, Facility, Application, Compliance Tracking System) database contains records of active, registered aboveground and underground storage tanks. This list represents tanks which have been removed since Oct 9, 2013.

***Government Publication Date: May 11, 2021***

***Engineering Controls:*** ENG

List of sites with engineering controls recorded by the Pennsylvania Department of Environmental Protection (DEP)'s Land Recycling and Environmental Cleanup program prior to the implementation of the Pennsylvania Activity and Use Limitation Registry in 2008. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

***Government Publication Date: May 2008***

***Institutional Controls:*** INST

List of sites with institutional controls recorded by the Pennsylvania Department of Environmental Protection (DEP)'s Land Recycling and Environmental Cleanup program prior to the implementation of the Pennsylvania Activity and Use Limitation Registry in 2008. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

***Government Publication Date: May 2008***

***Environmental Covenants Listing:*** AUL

List of sites where any type of Activity and Use Limitations (AUL) has been imposed and of which the Pennsylvania Department of Environmental Protection (DEP) has been informed. The DEP is required under the Uniform Environmental Covenants Act (UECA) to obtain a registry of environmental covenants.

***Government Publication Date: Apr 27, 2021***

***Voluntary Cleanup Program:*** VCP

The Pennsylvania Department of Environmental Protection (DEP) Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites. The VCP inventory or the Act 2 - Site Lists includes Completed Sites, Sites in Progress and Act 2 Non-Use Aquifer Determination sites recorded by DEP.

***Government Publication Date: Feb 10, 2021***

***Brownfields:*** BROWNFIELDS

Sites included in the Pennsylvania Department of Community & Economic Development Brownfields site search. Brownfields are typically former industrial or commercial properties that have some sort of environmental contamination. Information in the directory is provided voluntarily by property owners and community redevelopment organizations.

***Government Publication Date: Feb 16, 2021***

***eFACTS Environmental Cleanup & Brownfields:*** CLEANUP EFACTS

Environmental Cleanup & Brownfields sites listed in Pennsylvania's Environment Facility Application Compliance Tracking System (eFACTS), made available by the Pennsylvania Department of Environmental Protection (DEP). Includes leaks from unregulated and home heat fuel tanks.

***Government Publication Date: Mar 2, 2021***

***Delisted Environmental Cleanup & Brownfields from eFACTS:*** DELISTED ECBF

Sites which once appeared in - and have since been removed from - Pennsylvania's Environment Facility Application Compliance Tracking System (eFACTS) Environmental Cleanup & Brownfields sites search, made available by the Pennsylvania Department of Environmental Protection (DEP). The Environmental Cleanup & Brownfields sites search includes leaks from unregulated and home heat fuel tanks.

***Government Publication Date: Mar 2, 2021***

### *Tribal*

***Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands:*** INDIAN LUST

Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands in EPA Region 3, which includes Pennsylvania. There are no LUST records in Pennsylvania at this time.

***Government Publication Date: May 4, 2018***

***Underground Storage Tanks (USTs) on Indian Lands:*** INDIAN UST

List of Underground Storage Tanks (USTs) on Tribal/Indian Lands in EPA Region 3, which includes Pennsylvania. There are no UST records in Pennsylvania at this time.

***Government Publication Date: May 4, 2018***

***Delisted Tribal Leaking Storage Tanks:*** DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

***Government Publication Date: Apr 14, 2020***

***Delisted Tribal Underground Storage Tanks:*** DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

***Government Publication Date: Apr 14, 2020***

### *County*

***No County standard environmental record sources available for this State.***

## *Additional Environmental Record Sources*

### *Federal*

***PFOA/PFOS Contaminated Sites:*** PFAS NPL

List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).

***Government Publication Date: Mar 1, 2021***

***Facility Registry Service/Facility Index:*** FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

***Government Publication Date: Nov 2, 2020***

***Toxics Release Inventory (TRI) Program:*** TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

***Government Publication Date: Feb 19, 2020***

***Perfluorinated Alkyl Substances (PFAS) Releases:*** PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

***Government Publication Date: Feb 19, 2020***

***Perfluorinated Alkyl Substances (PFAS) Water Quality:*** PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

***Government Publication Date: Jul 20, 2020***

***Hazardous Materials Information Reporting System:*** HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

***Government Publication Date: Sep 1, 2020***

***National Clandestine Drug Labs:*** NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

***Government Publication Date: Oct 5, 2020***

***Toxic Substances Control Act:*** TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

***Government Publication Date: Apr 11, 2019***

***Hist TSCA:*** HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

***Government Publication Date: Dec 31, 2006***

***FTTS Administrative Case Listing:*** FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

***Government Publication Date: Jan 19, 2007***

***FTTS Inspection Case Listing:*** FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

***Government Publication Date: Jan 19, 2007***

***Potentially Responsible Parties List:*** PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

***Government Publication Date: Feb 23, 2021***

***State Coalition for Remediation of Drycleaners Listing:*** SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

***Government Publication Date: Nov 08, 2017***

***Integrated Compliance Information System (ICIS):*** ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

***Government Publication Date: Mar 24, 2021***

***Drycleaner Facilities:*** FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

***Government Publication Date: Feb 17, 2021***

***Delisted Drycleaner Facilities:*** DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

***Government Publication Date: Feb 17, 2021***

***Formerly Used Defense Sites:*** FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

***Government Publication Date: Jan 28, 2020***

***Former Military Nike Missile Sites:*** FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

***Government Publication Date: Dec 1, 1984***

***PHMSA Pipeline Safety Flagged Incidents:*** PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

***Government Publication Date: Jul 7, 2020***

***Material Licensing Tracking System (MLTS):*** MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

***Government Publication Date: Aug 5, 2020***

***Historic Material Licensing Tracking System (MLTS) sites:*** HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

***Government Publication Date: Jan 31, 2010***

***Mines Master Index File:*** MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

***Government Publication Date: Nov 3, 2020***

***Surface Mining Control and Reclamation Act Sites:*** SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

***Government Publication Date: Dec 18, 2020***

***Mineral Resource Data System:*** MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

***Government Publication Date: Mar 15, 2006***

***Uranium Mill Tailings Radiation Control Act Sites:*** URANIUM

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

***Government Publication Date: Mar 4, 2017***

***Alternative Fueling Stations:*** ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

***Government Publication Date: Jan 18, 2021***

***Registered Pesticide Establishments:*** SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

***Government Publication Date: Apr 13, 2021***

***Polychlorinated Biphenyl (PCB) Notifiers:*** PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

***Government Publication Date: Nov 19, 2020***

## *State*

***Spills:*** SPL

Pennsylvania Department of Environmental Protection (PA DEP) Emergency Response Spills Report: a listing of spills or releases of hazardous materials. The PA DEP provides for emergency response capability for spills, accidents and other releases of hazardous substances and contaminants. In response to emergencies and spills, DEP takes actions that it deems necessary or appropriate to protect the public health, safety or welfare or the environment from releases or threats of releases of hazardous materials. Some records provided by the PA DEP have been redacted to prevent the risk of potentially identifying a complainants identity.

***Government Publication Date: May 11, 2021***

***Dry Cleaning Facilities:*** DRYCLEANERS

Registered dry cleaner facilities tracked by the Bureau of Air Quality of the Department of Environmental Protection (DEP).

***Government Publication Date: Apr 26, 2021***

***PFC Sites Under DEP Investigation:*** PFAS

List of sites being investigated by the Pennsylvania Department of Environmental Protection (PA DEP) for Perfluorinated Chemicals (PFC), Perfluoroalkyl and polyfluoroalkyl substances (PFAS). PA DEP is working closely with public water systems and local governments across the Commonwealth to address these emerging contaminants.

***Government Publication Date: May 11, 2021***

## ***Tribal***

***No Tribal additional environmental record sources available for this State.***

## ***County***

***No County additional environmental record sources available for this State.***

# Definitions

***Database Descriptions:*** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

***Detail Report***: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

***Distance:*** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

***Direction:*** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

***Elevation:*** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

***Executive Summary:*** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

***Map Key:*** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

***Unplottables:*** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

ERIS

# HISTORICAL AERIALS

| | |
|---|---|
| **Project Property:** | Beaver Falls Water Filtration Plant<br>Water Filtration Plant<br>Beaver Falls PA 15010 |
| **Requested By:** | Gannett Fleming, Inc. |
| **Order No:** | 21051700311 |
| **Data Completed:** | May 19,2021 |

**Environmental Risk Information Services**
*A division of Glacier Media Inc.*
1.866.517.5204 | info@erisinfo.com | erisinfo.com

| Date | Source | Scale | Comments |
|---|---|---|---|
| 2019 | National Agriculture Information Program | 1" to 500' | |
| 2017 | National Agriculture Information Program | 1" to 500' | |
| 2015 | National Agriculture Information Program | 1" to 500' | |
| 2013 | National Agriculture Information Program | 1" to 500' | |
| 2010 | National Agriculture Information Program | 1" to 500' | |
| 2006 | National Agriculture Information Program | 1" to 500' | |
| 1993 | US Geological Survey | 1" to 500' | |
| 1982 | National High Altitude Photography | 1" to 500' | |
| 1975 | US Geological Survey | 1" to 500' | |
| 1969 | US Geological Survey | 1" to 500' | |
| 1960 | United States Air Force | 1" to 500' | |
| 1958 | Agriculture and Soil Conservation Service | 1" to 500' | |
| 1952 | US Geological Survey | 1" to 500' | |
| 1947 | Agriculture and Soil Conservation Service | 1" to 500' | |
| 1939 | Agriculture and Soil Conservation Service | 1" to 500' | |




Year: 2019
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 2017
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 2015
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 2013
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 2010
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 2006
Source: NAIP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1993
Source: USGS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1982
Source: NHAP
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1975
Source: USGS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1969
Source: USGS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1960
Source: USAF
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

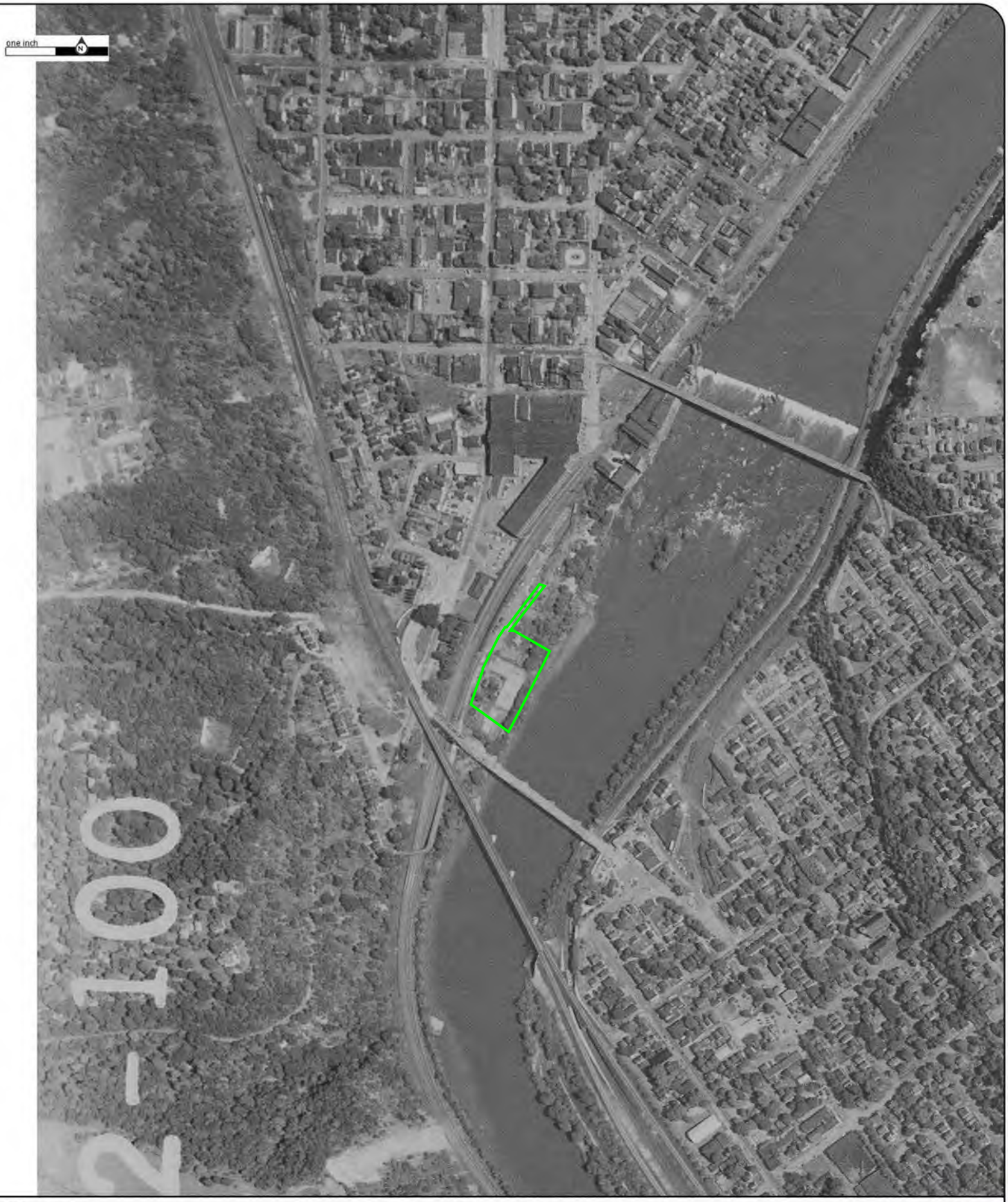
Order No: 21051700311




Year: 1958
Source: ASCS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

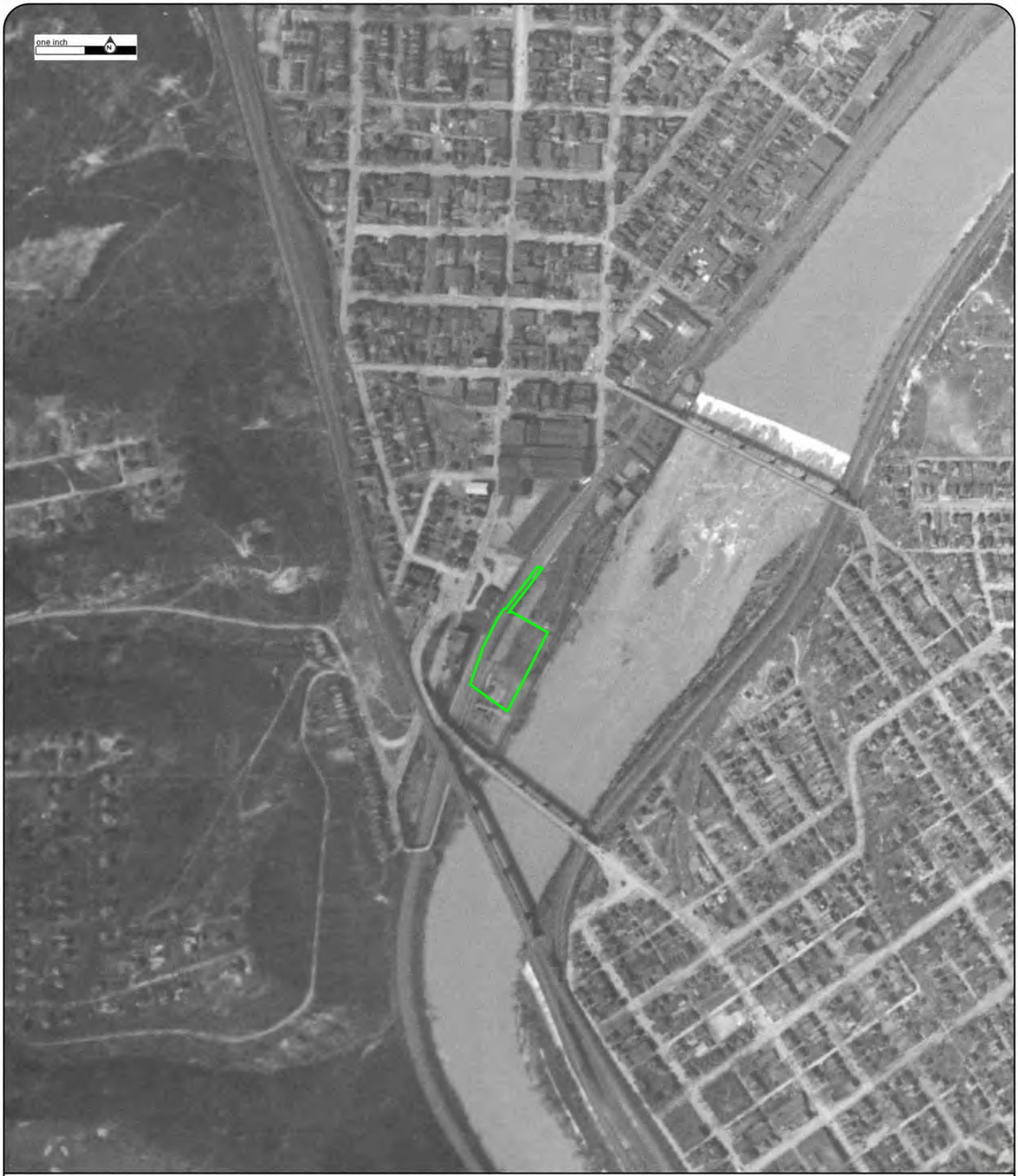
Order No: 21051700311




Year: 1952
Source: USGS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

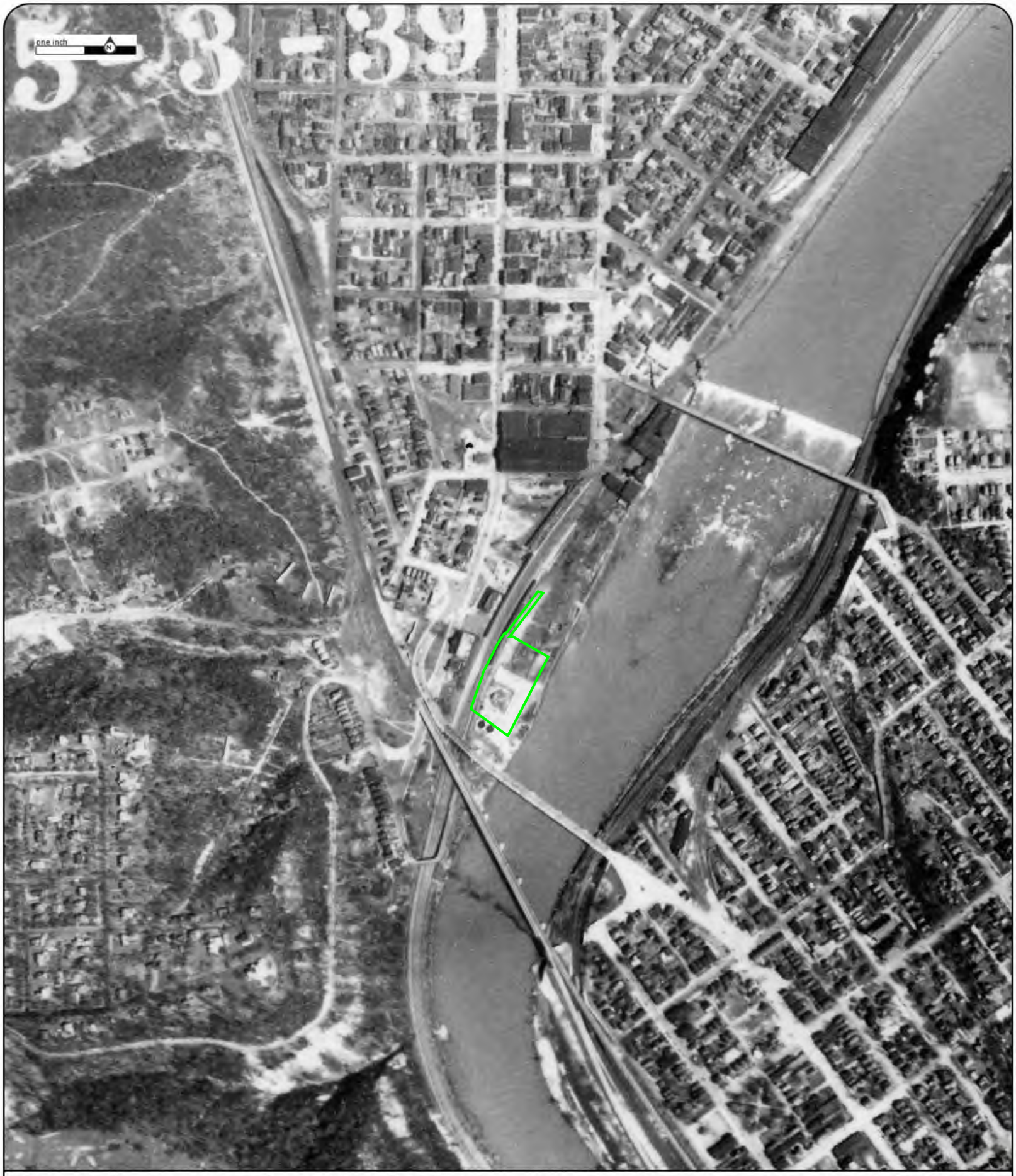
Order No: 21051700311




Year: 1947
Source: ASCS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311




Year: 1939
Source: ASCS
Scale: 1" to 500'
Comment:

Address: Water Filtration Plant, Beaver Falls, PA
Approx Center: 40.74218871/-80.31943329

Order No: 21051700311

ERIS

# FIRE INSURANCE MAPS

| | |
|---|---|
| **Project Property:** | Beaver Falls Water Filtration Plant<br>Water Filtration Plant<br>Beaver Falls PA 15010 |
| **Project No:** | 68417.008 |
| **Requested By:** | Gannett Fleming, Inc. |
| **Order No:** | 21051700311 |
| **Date Completed:** | May 18, 2021 |

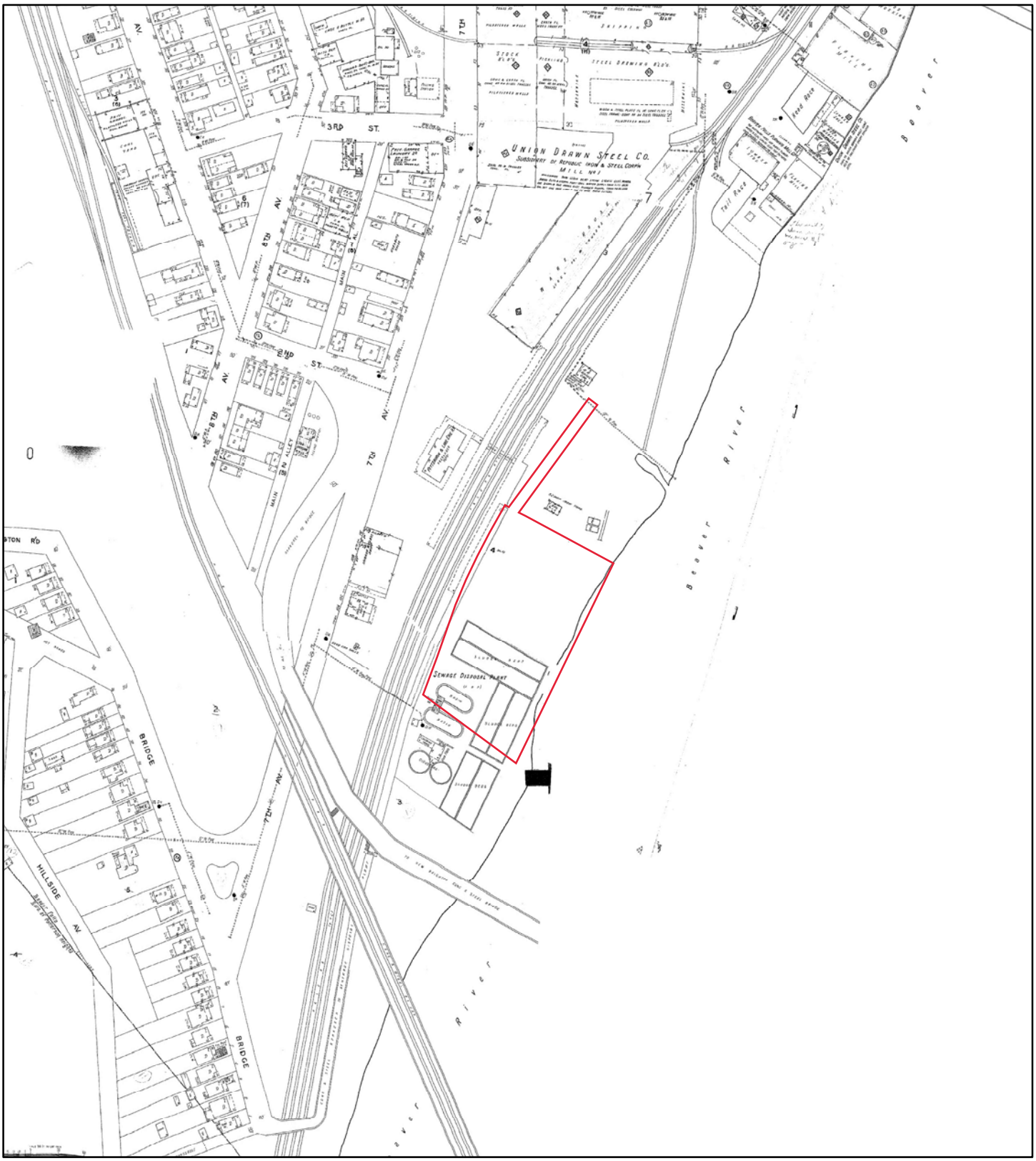
**Environmental Risk Information Services**
*A division of Glacier Media Inc.*
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Listed below, please find the results of our search for historic fire insurance maps from our in-house collection, performed in conjuction with your ERIS report.

| Date | City | State | Volume | Sheet Number(s) |
|---|---|---|---|---|
| 1950 | Beaver Falls | Pennsylvania | | 5, 6, 7, 8 |
| 1931 | Beaver Falls | Pennsylvania | | 5, 6, 7, 8 |
| 1921 | Beaver Falls | Pennsylvania | | 10, 11, 12 |
| 1912 | Beaver Falls | Pennsylvania | | 28, 29, 30 |
| 1907 | Beaver Falls | Pennsylvania | | 2, 3 |
| 1901 | Beaver Falls | Pennsylvania | | 2, 3 |
| 1896 | Beaver Falls | Pennsylvania | | 13, 2, 3 |
| 1891 | Beaver Falls | Pennsylvania | | 13, 2, 3 |
| 1886 | Beaver Falls | Pennsylvania | | 11, 2, 3 |

Individual Fire Insurance Maps for the subject property and/or adjacent sites are included with the ERIS environmental database report to be used for research purposes only and cannot be resold for any other commercial uses other than for use in a Phase I environmental assessment.

# Fire Insurance Map



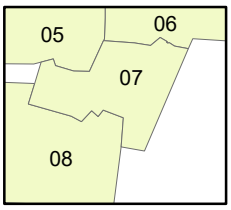

**1950**

N

0 105 210 420 630 840

Feet

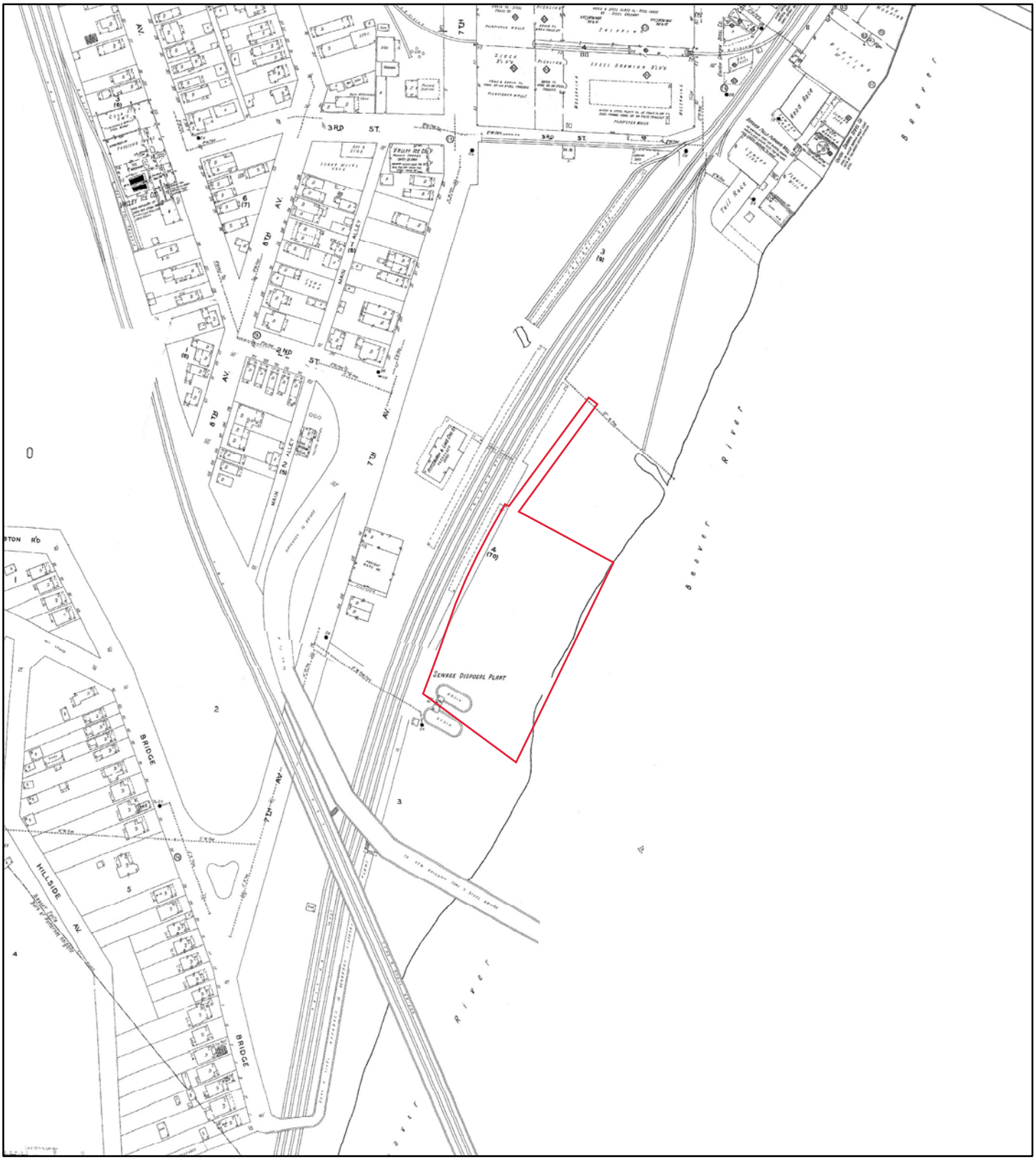
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:5,6,7,8;

Order Number 21051700311

# Fire Insurance Map



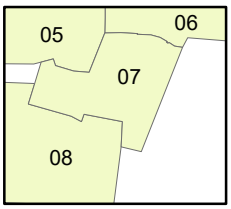

**1931**

N

0 105 210 420 630 840

Feet

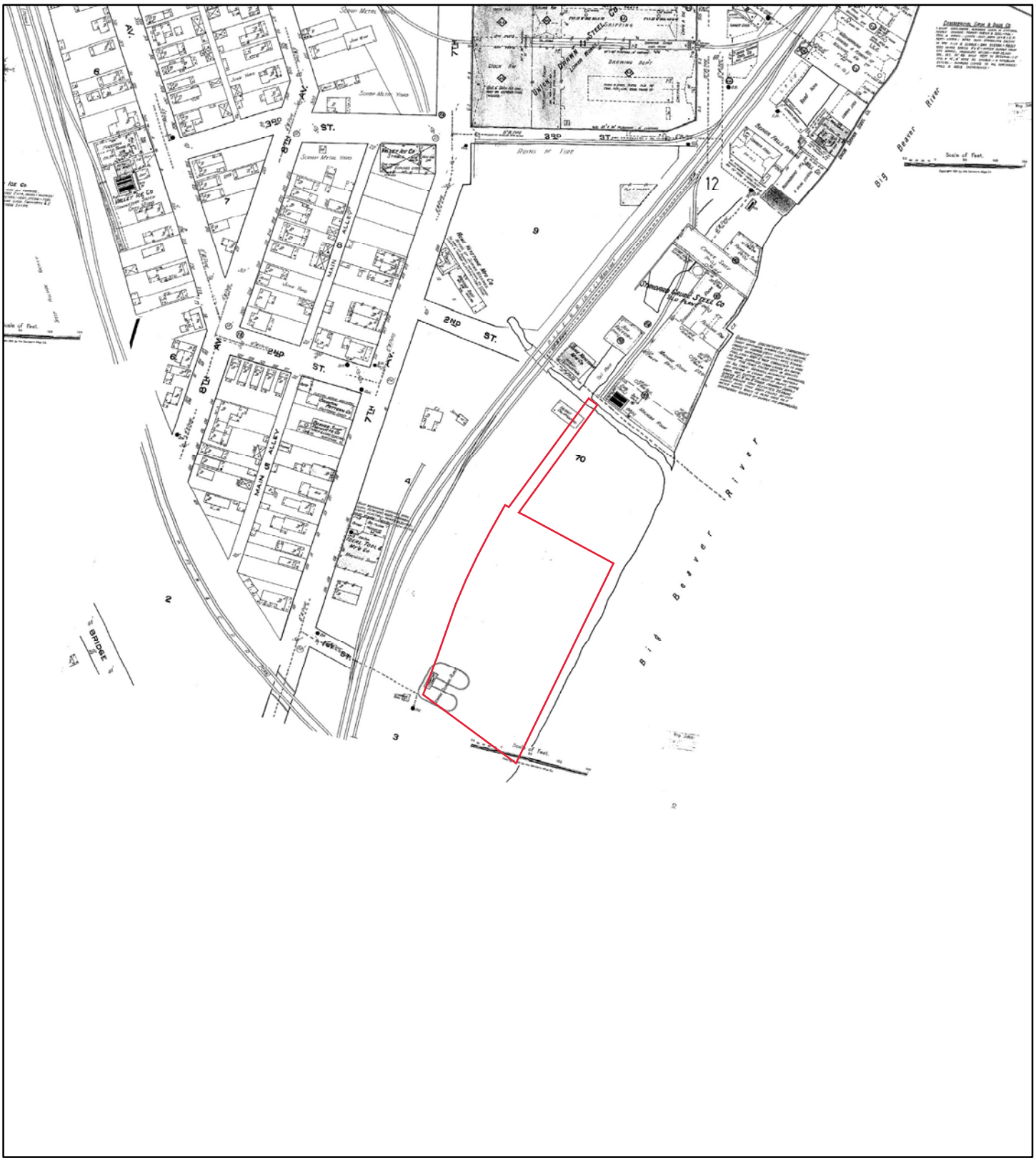
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:5,6,7,8;

Order Number 21051700311

# Fire Insurance Map



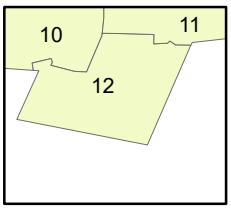

**1921**

N

0 105 210 420 630 840

Feet

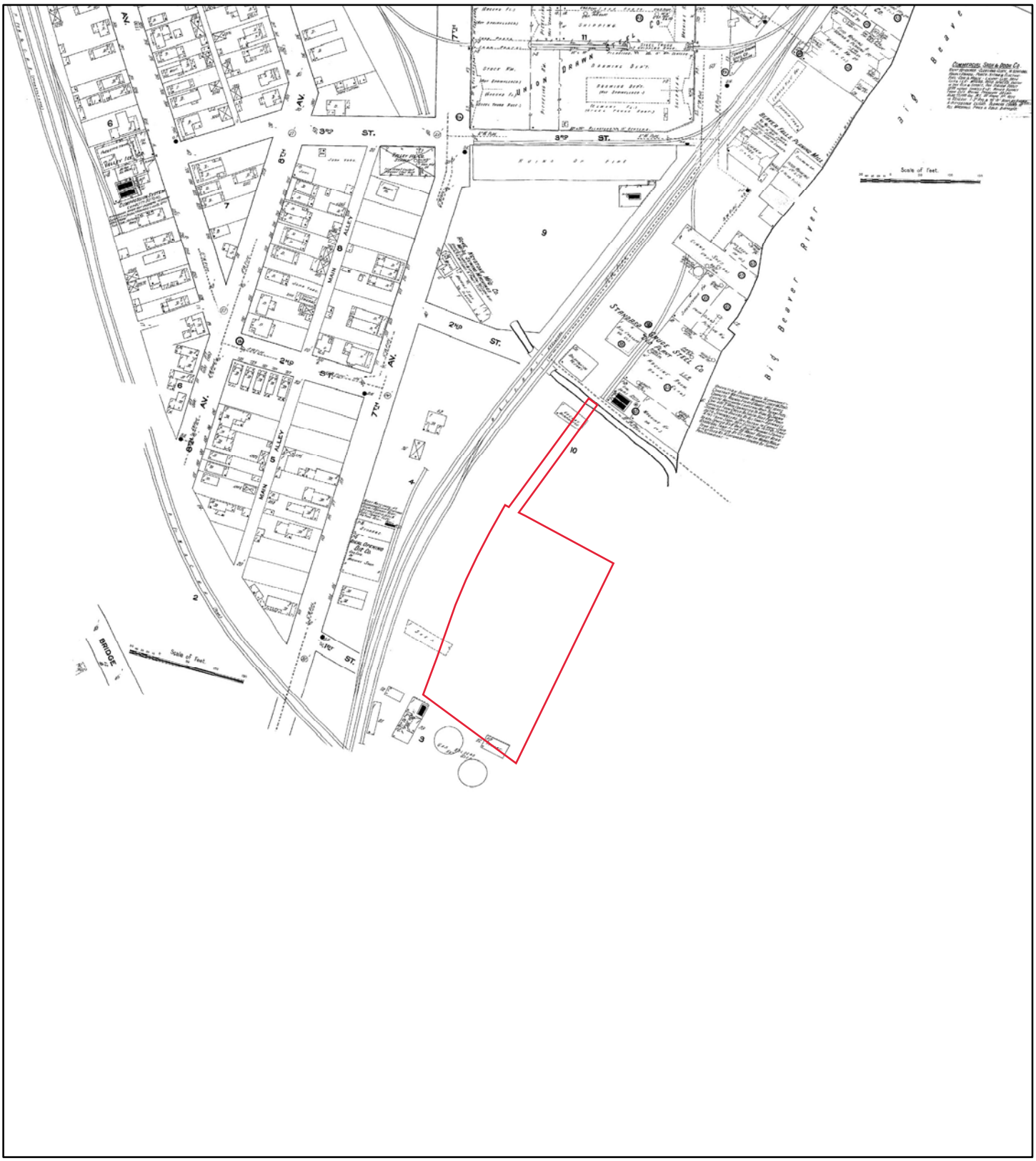
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:10,11,12;

Order Number 21051700311

# Fire Insurance Map



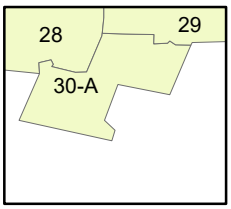

**1912**

**Address: Water Filtration Plant Beaver Falls PA 15010**

N

0 105 210 420 630 840

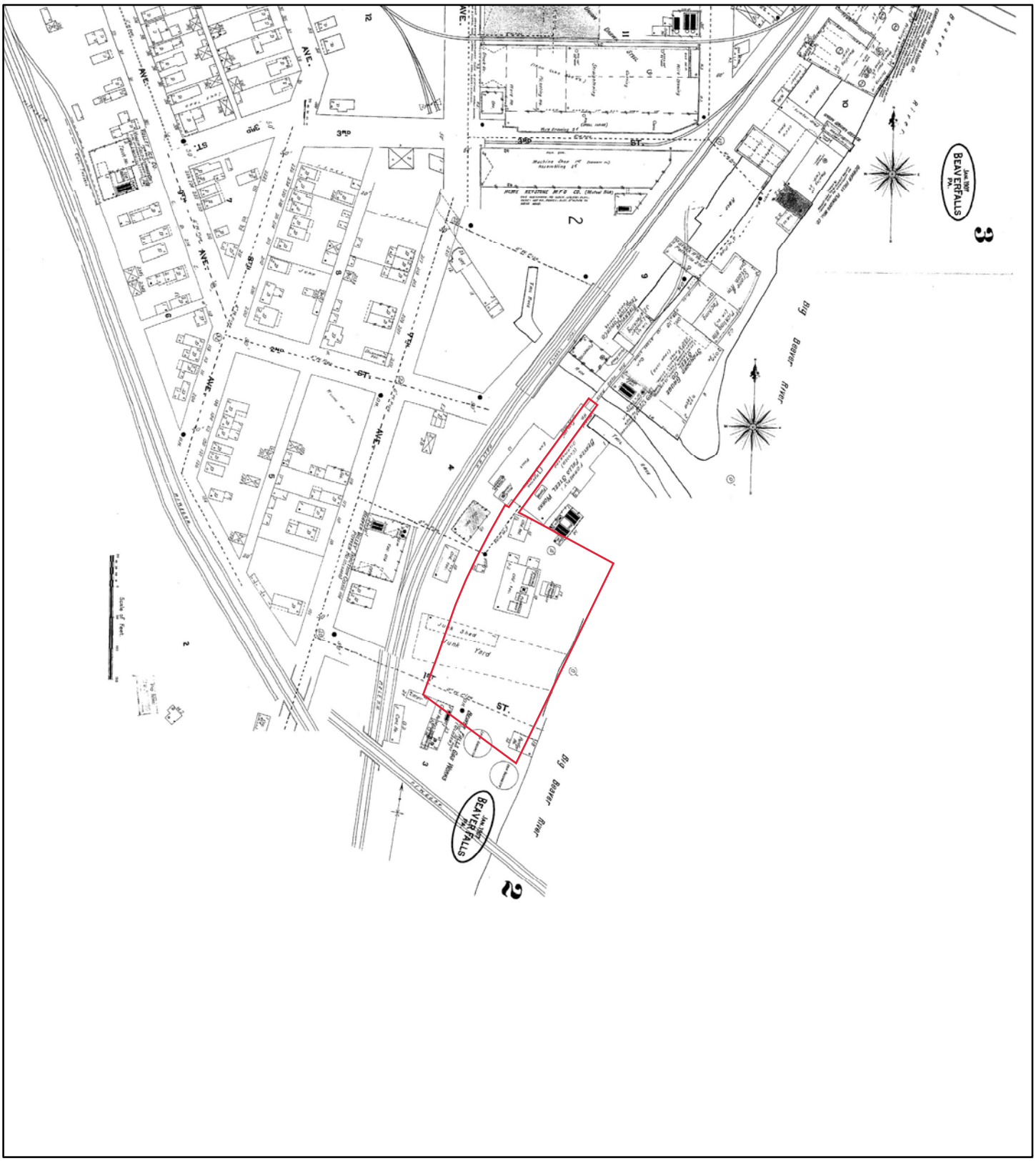
Feet




Map sheet(s):
Volume NA:28,29,30;

Order Number 21051700311

# Fire Insurance Map



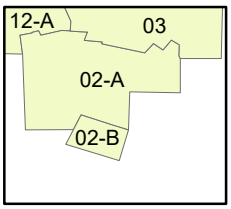

**1907**

N

0 105 210 420 630 840

Feet

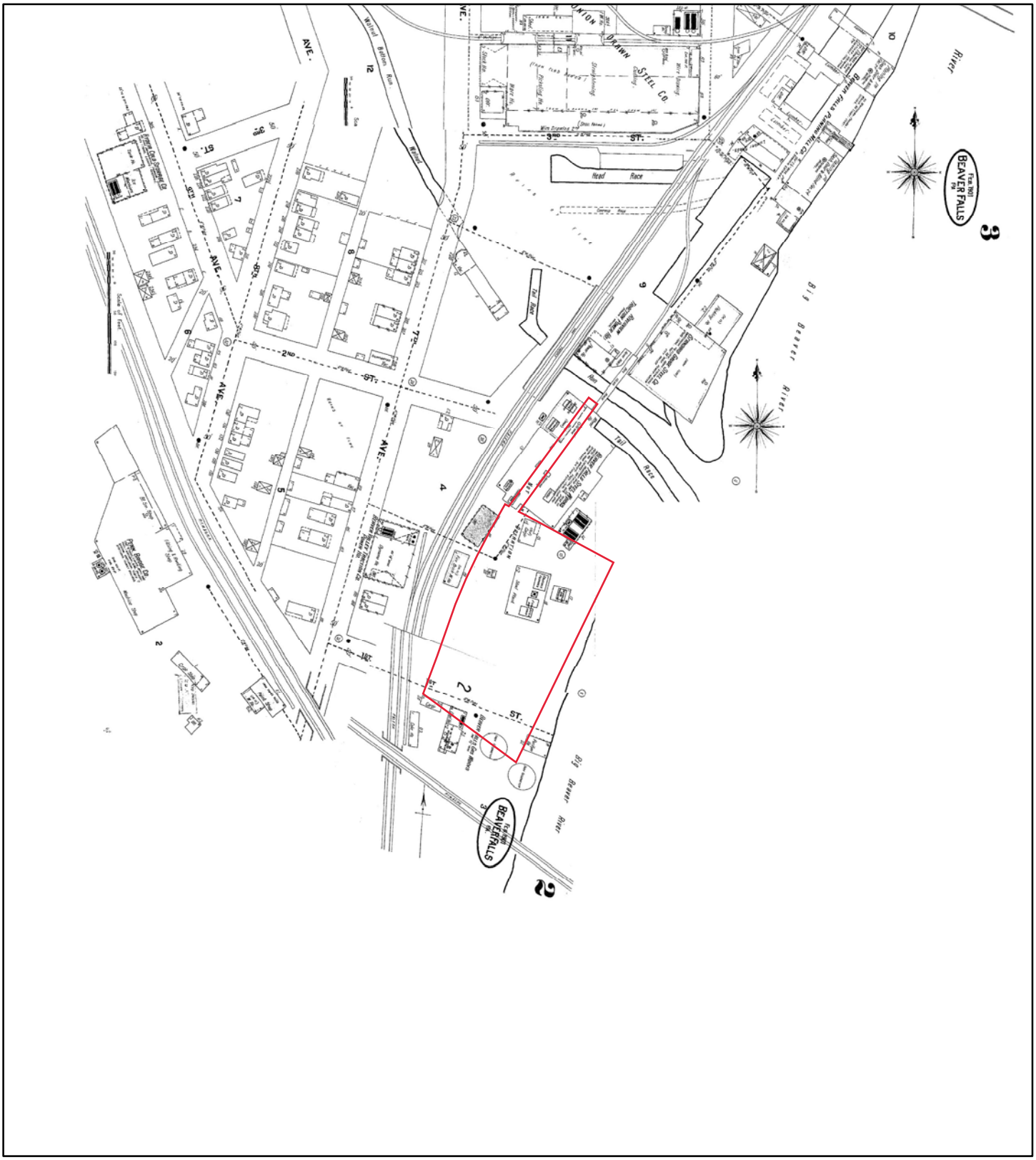
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:2,3;

Order Number 21051700311

# Fire Insurance Map



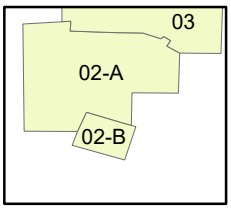

**1901**

**Address: Water Filtration Plant Beaver Falls PA 15010**

N

0 105 210 420 630 840

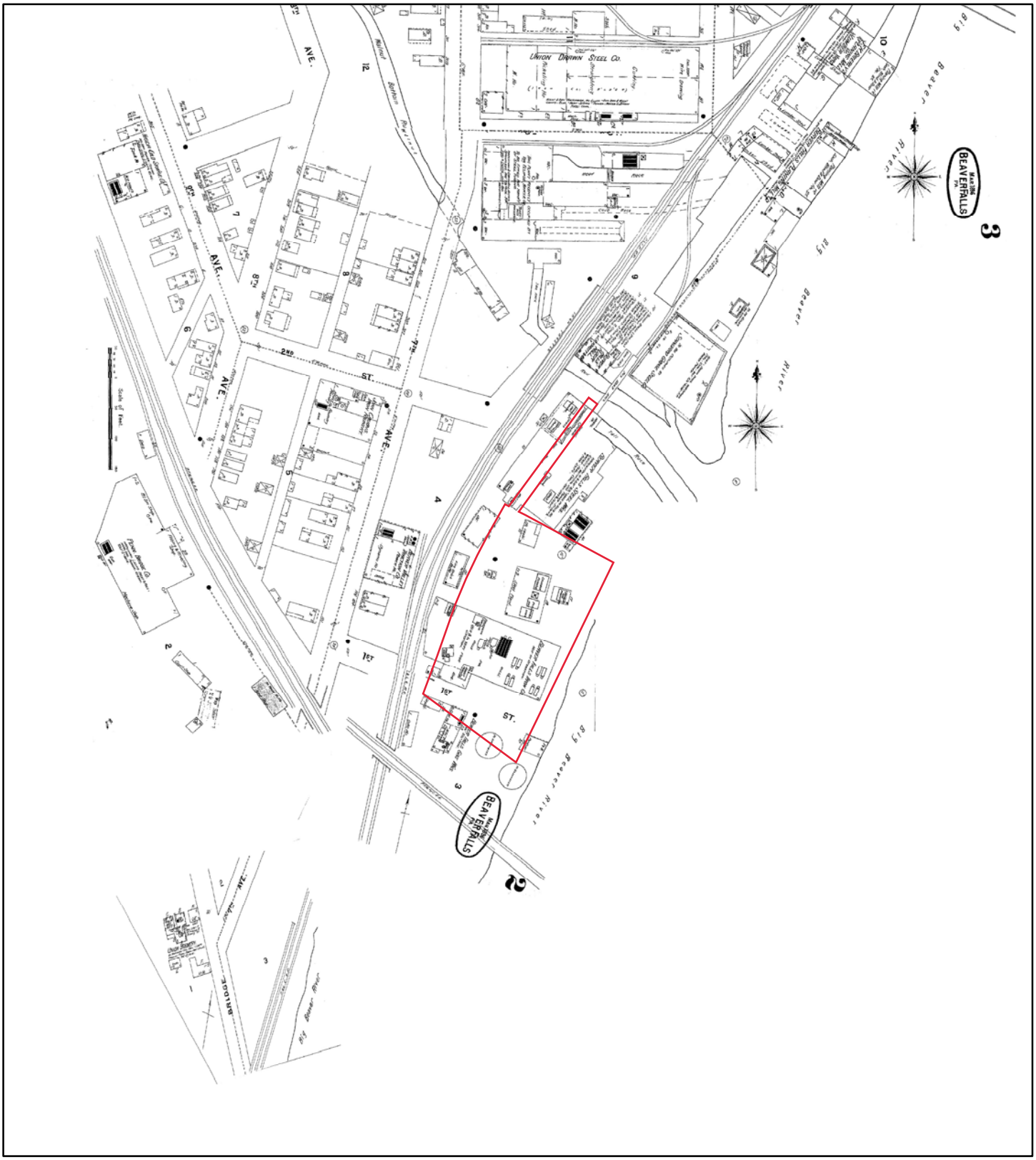
Feet




Map sheet(s):
Volume NA:2,3;

Order Number 21051700311

# Fire Insurance Map



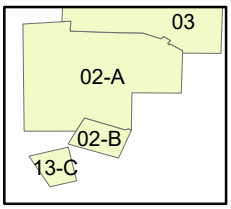

**1896**

N

0 105 210 420 630 840

Feet

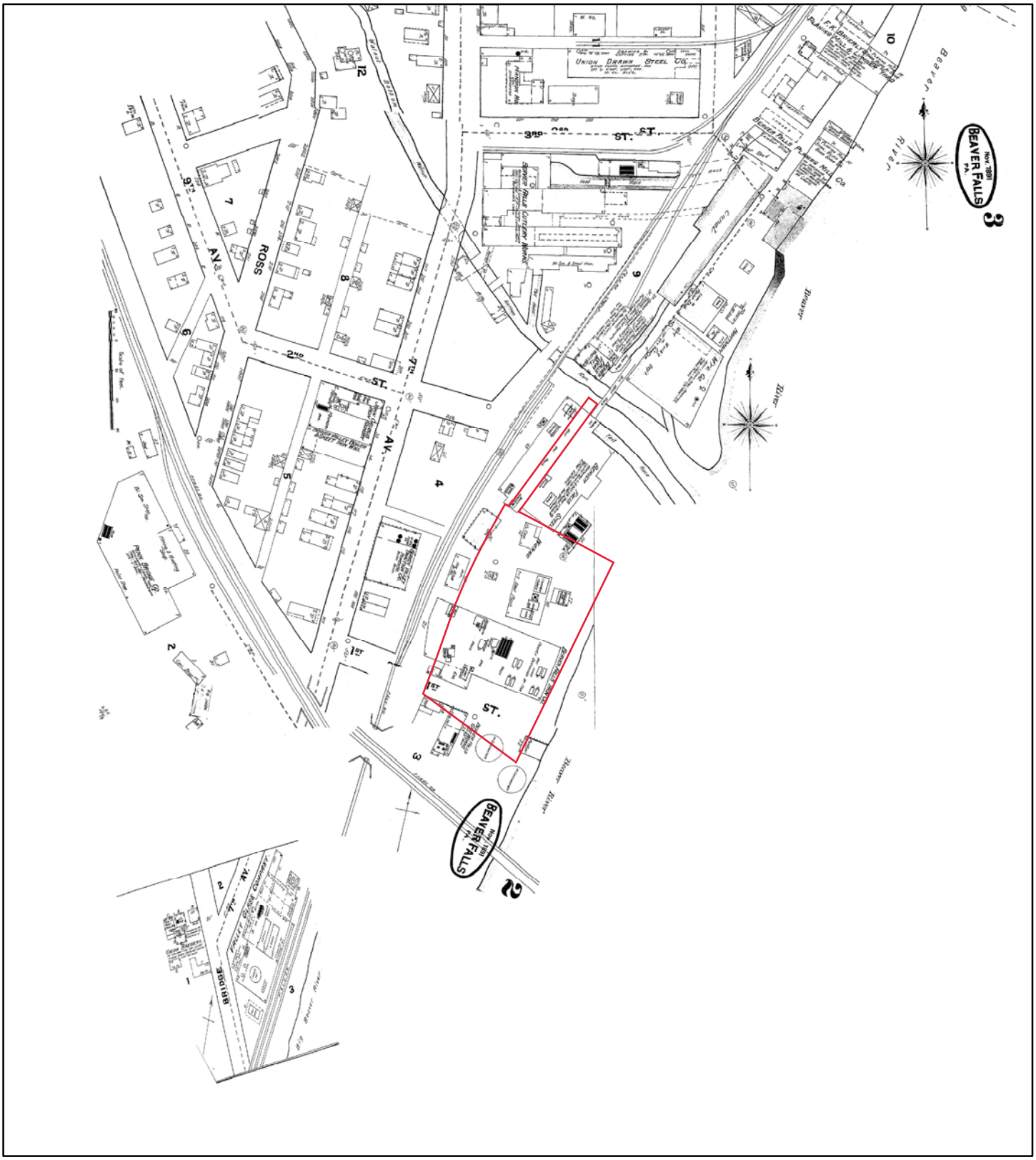
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:13,2,3;

Order Number 21051700311

# Fire Insurance Map



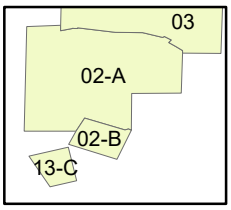

**1891**

N

0 105 210 420 630 840

Feet

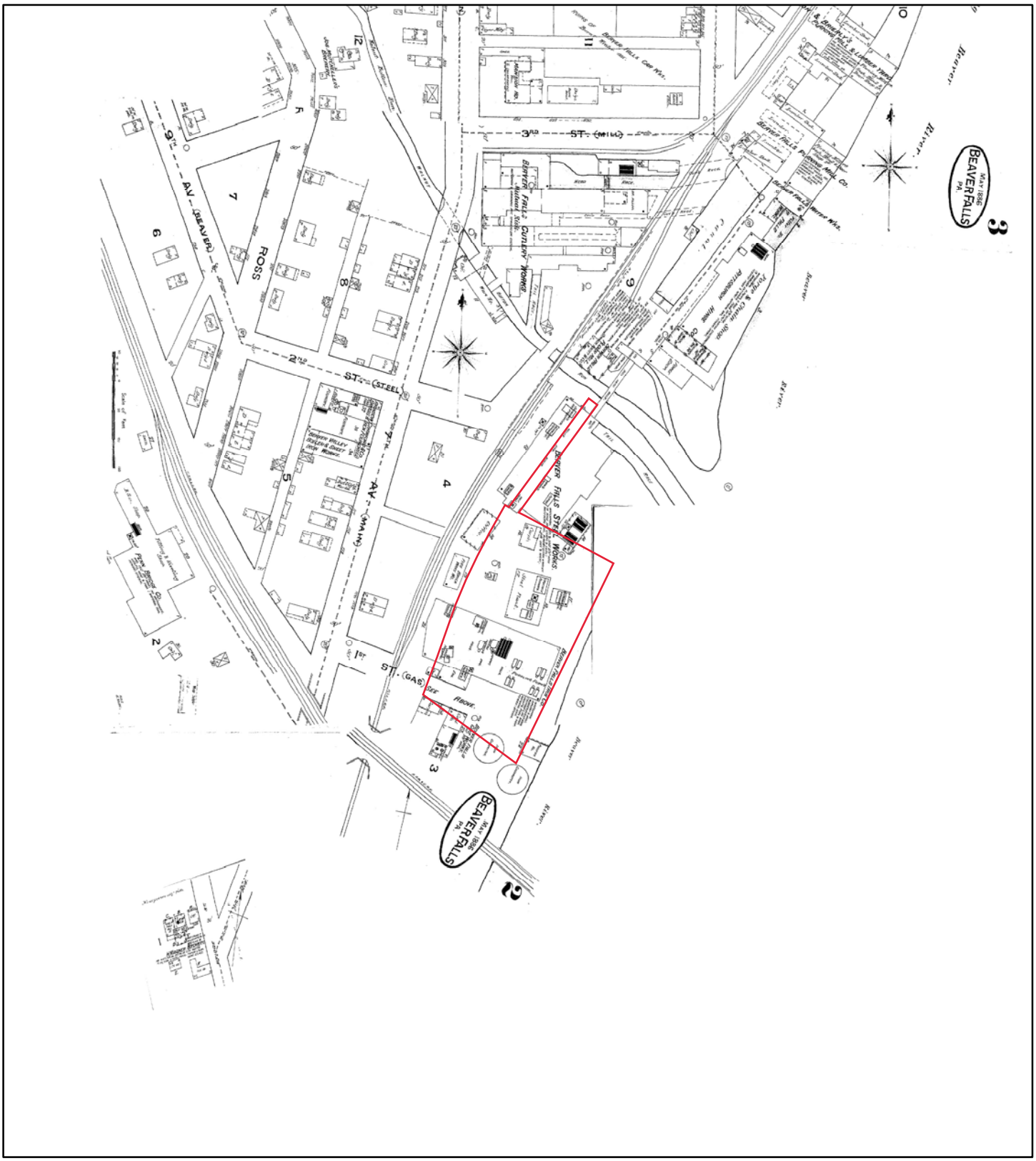
**Address: Water Filtration Plant Beaver Falls PA 15010**




Map sheet(s):
Volume NA:13,2,3;

Order Number 21051700311

# Fire Insurance Map


3RD ST. (MILL)
2ND ST. (STEEL)
1ST ST. (GAS)
AV. (BEAVER)
AV. (MAIN)
ROSS
BEAVER FALLS
BEAVER FALLS STEEL WORKS
BEAVER FALLS CUTLERY WORKS
BEAVER FALLS PRINTING MILL CO.
BEAVER FALLS PULP & PAPER MILL CO.
BEAVER FALLS PULP & PAPER MILL CO.
BEAVER FALLS PULP & PAPER

PSR
PHYSICAL SETTING REPORT

# Property Information

| | | |
|---|---|---|
| Order Number: | | 21051700311p |
| Date Completed: | | May 18, 2021 |
| Project Number: | | 68417.008 |
| Project Property: | | Beaver Falls Water Filtration Plant<br>Water Filtration Plant Beaver Falls PA 15010 |
| Coordinates: | | |
| | Latitude: | 40.74218871 |
| | Longitude: | -80.31943329 |
| | UTM Northing: | 4510360.93237 Meters |
| | UTM Easting: | 557459.347274 Meters |
| | UTM Zone: | UTM Zone 17T |
| | Elevation: | 724.06 ft |
| | Slope Direction: | SSW |


Topographic Information....2
Hydrologic Information....4
Geologic Information....7
Soil Information....9
Wells and Additional Sources....14
  Summary....15
  Detail Report....17
Radon Information....49
Appendix....50
Liability Notice....52


The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

**Disclaimer**

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

## Topographic Information




**Current USGS Topo (2016)**

0 0.2 0.4 0.8 Miles

N

**Quadrangle(s): Beaver,PA; Beaver Falls,PA**

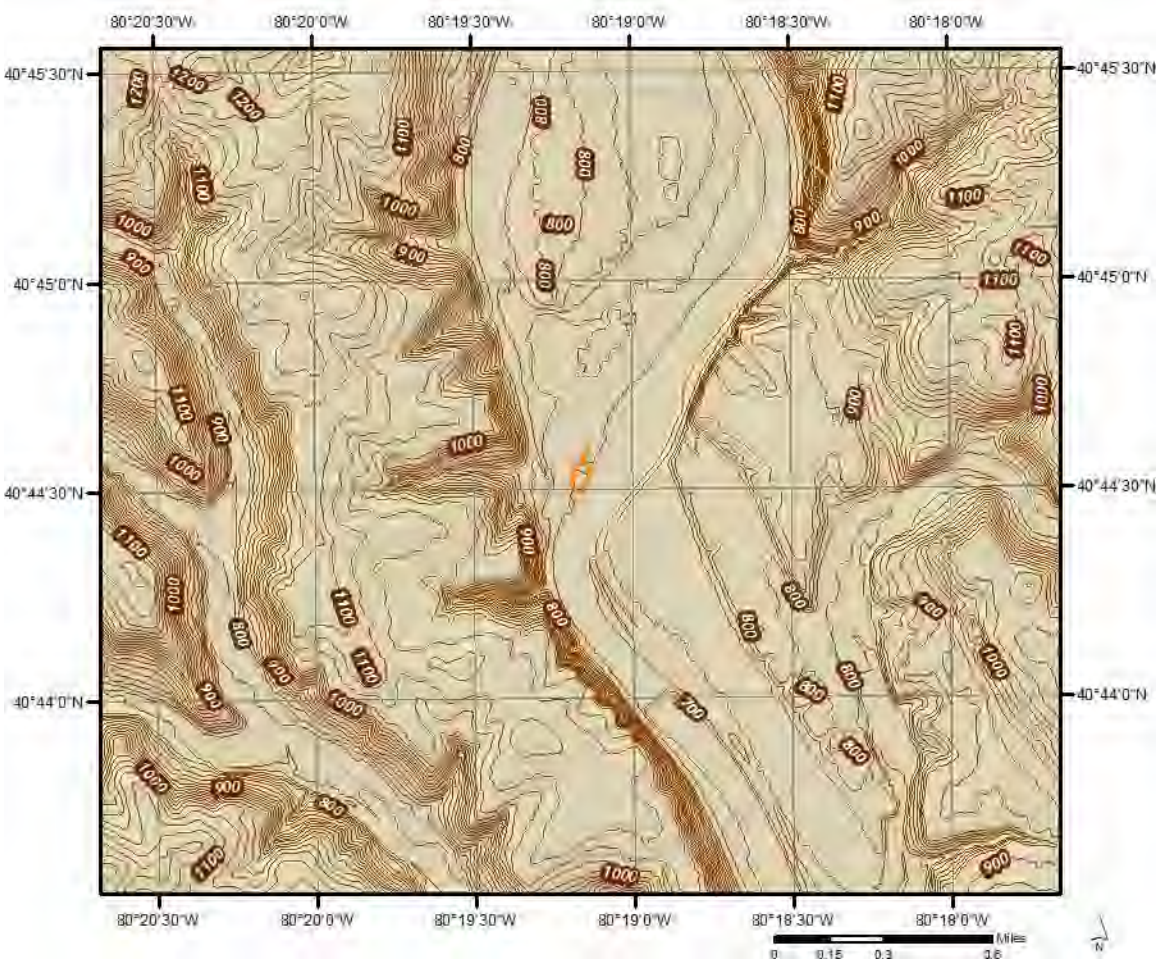
Source: USGS 7.5 Minute Topographic Map

# Topographic Information

The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

| | |
|---|---|
| Elevation: | 724.06 ft |
| Slope Direction: | SSW |



## Hydrologic Information




# Wetland

0 0.075 0.15 0.3 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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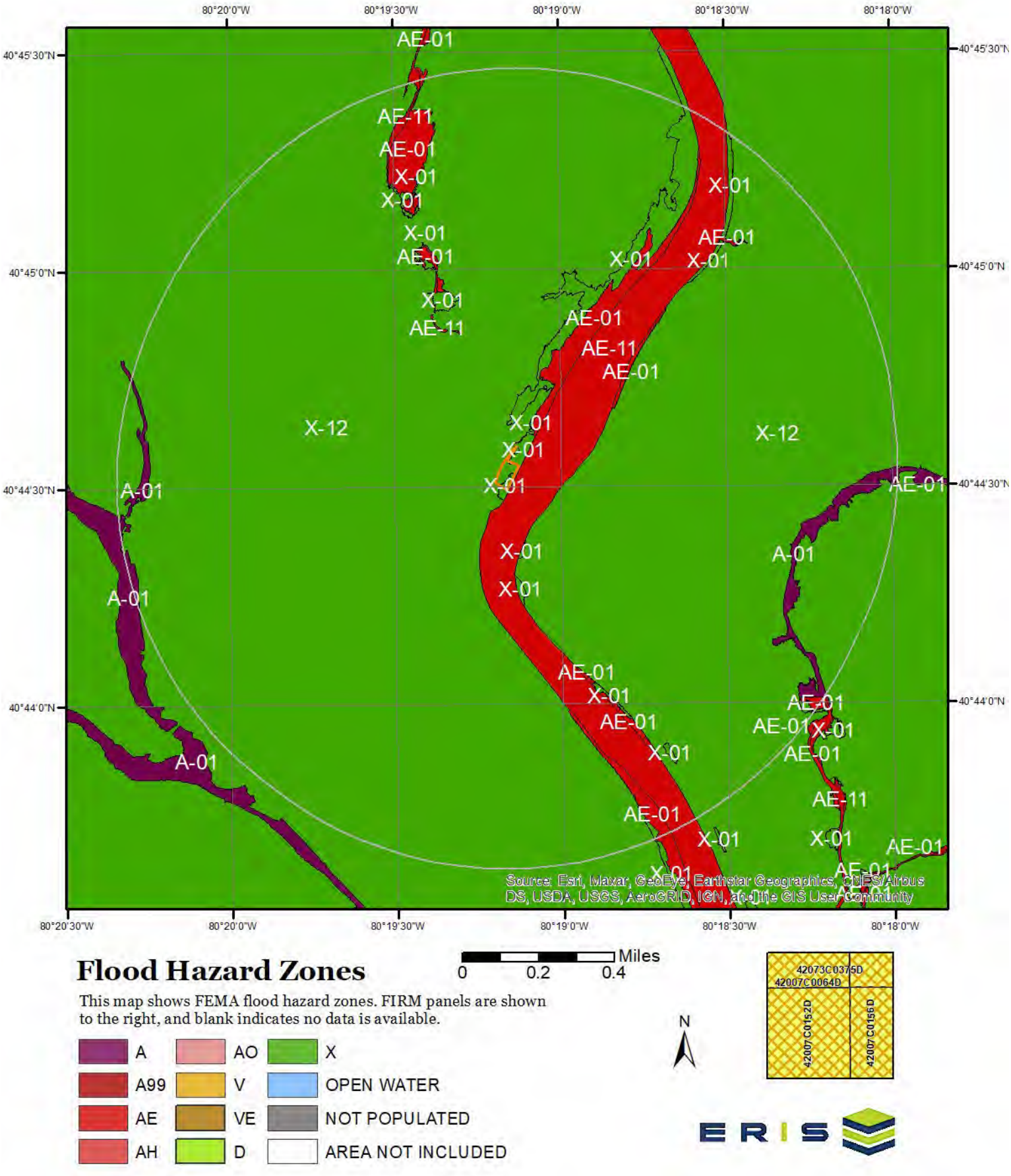
## Hydrologic Information




# Flood Hazard Zones

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

42073C0375D
42007C0064D
42007C0152D
42007C0156D

| | | |
|---|---|---|
| A | AO | X |
| A99 | V | OPEN WATER |
| AE | VE | NOT POPULATED |
| AH | D | AREA NOT INCLUDED |

ERIS

# Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.

| | |
|---|---|
| Available FIRM Panels in area: | 42073C0375D(effective:2012-01-18) 42073C0375D(effective:2012-01-18) 42007C0156D(effective:2015-08-17) 42007C0152D(effective:2015-08-17) 42007C0068D(effective:2015-08-17) 42007C0064D(effective:2015-08-17) |

**Flood Zone A-01**

| | |
|---|---|
| Zone: | A |
| Zone subtype: | |

**Flood Zone AE-01**

| | |
|---|---|
| Zone: | AE |
| Zone subtype: | |

**Flood Zone AE-11**

| | |
|---|---|
| Zone: | AE |
| Zone subtype: | FLOODWAY |

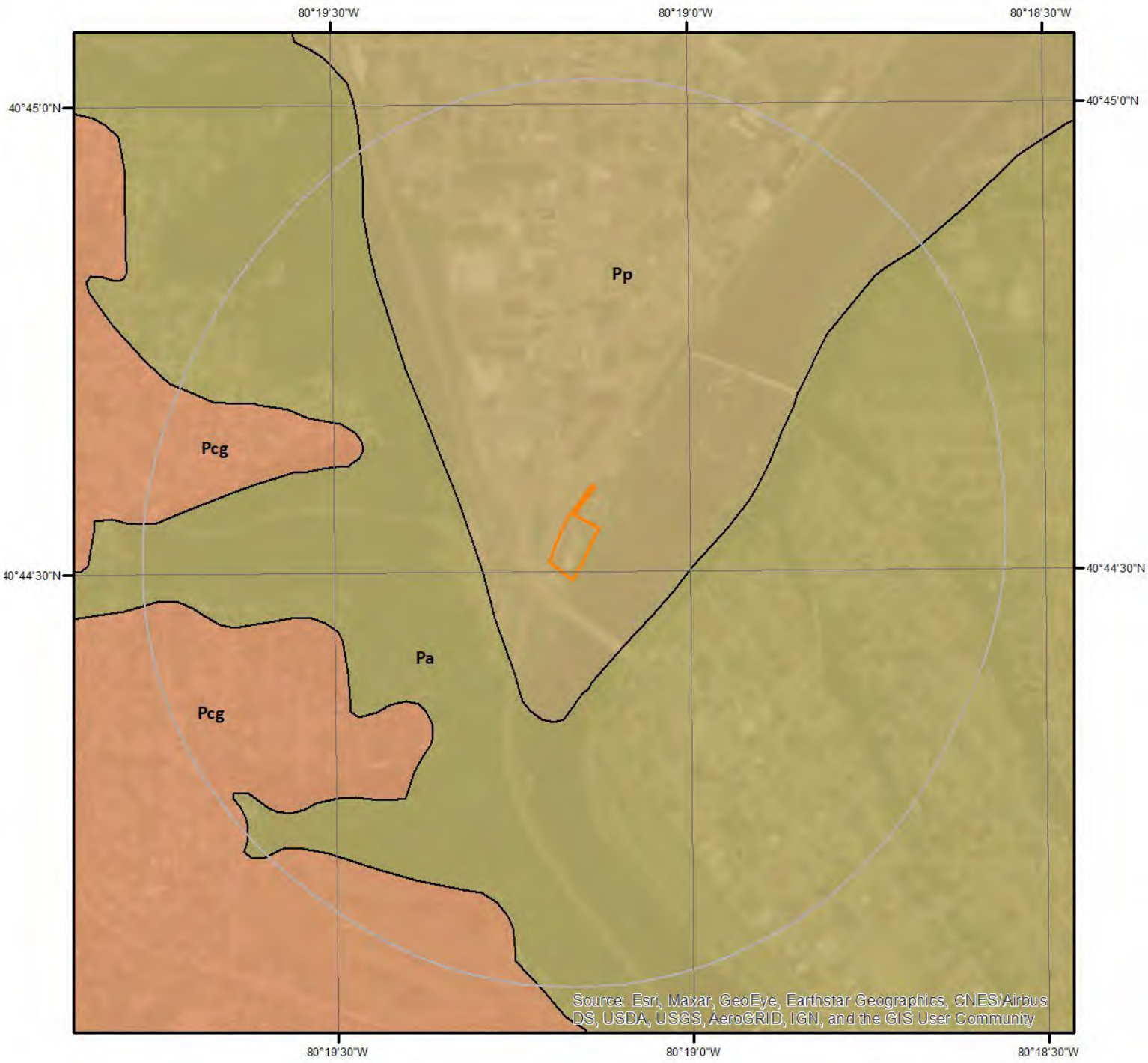
**Flood Zone X-01**

| | |
|---|---|
| Zone: | X |
| Zone subtype: | 0.2 PCT ANNUAL CHANCE FLOOD HAZARD |

**Flood Zone X-12**

| | |
|---|---|
| Zone: | X |
| Zone subtype: | AREA OF MINIMAL FLOOD HAZARD |

## Geologic Information




### Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

# Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

**Geologic Unit Pp**

| | |
|---|---|
| Unit Name: | Pottsville Formation |
| Unit Age: | Pennsylvanian |
| Primary Rock Type: | sandstone |
| Secondary Rock Type: | conglomerate |
| Unit Description: | Pottsville Formation - Predominantly gray sandstone and conglomerate; also contains thin beds of shale, claystone, limestone, and coal; includes Olean and Sharon conglomerates of northwestern Pennsylvania; thin marine limestones present in Beaver, Lawrence, and Mercer Counties; minable coals and commercially valuable high-alumina clays present locally. |

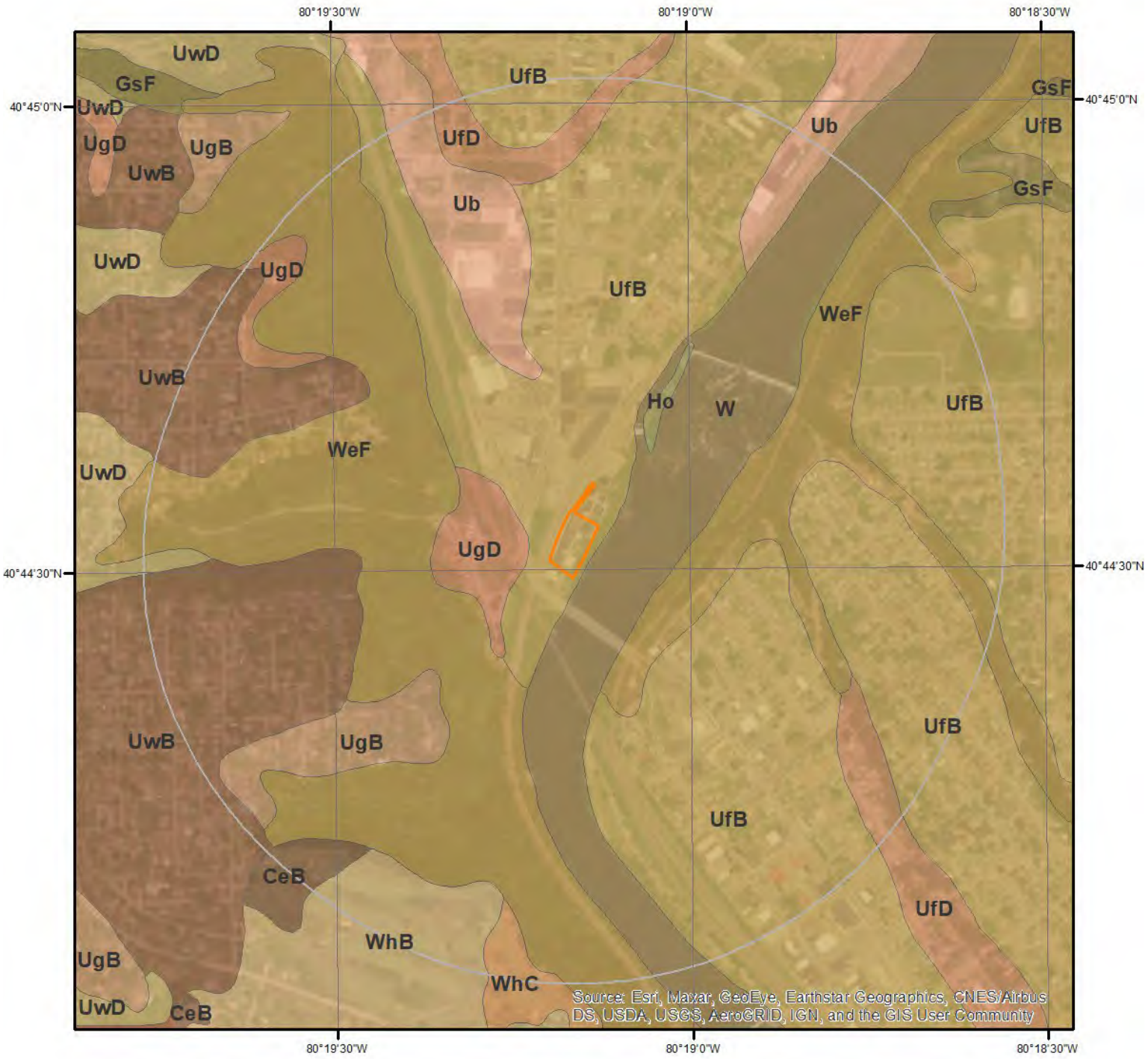
**Geologic Unit Pa**

| | |
|---|---|
| Unit Name: | Allegheny Formation |
| Unit Age: | Pennsylvanian |
| Primary Rock Type: | sandstone |
| Secondary Rock Type: | shale |
| Unit Description: | Allegheny Formation - Cyclic sequences of sandstone, shale, limestone, clay, and coal; includes valuable clay deposits and Vanport Limestone; commercially valuable Freeport, Kittanning, and Brookville-Clarion coals present; base is at bottom of Brookville-Clarion coal. |

**Geologic Unit Pcg**

| | |
|---|---|
| Unit Name: | Glenshaw Formation |
| Unit Age: | Pennsylvanian |
| Primary Rock Type: | shale |
| Secondary Rock Type: | sandstone |
| Unit Description: | Glenshaw Formation - Cyclic sequences of shale, sandstone, red beds, and thin limestone and coal; includes four marine limestone or shale horizons; red beds are involved in landslides; base is at top of Upper Freeport coal. |

## Soil Information




**SSURGO Soils**

0 0.2 0.4 Miles N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

# Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

**Map Unit CeB (0.07%)**

| | |
|---|---|
| Map Unit Name: | Cavode silt loam, 3 to 8 percent slopes |
| Bedrock Depth - Min: | 145cm |
| Watertable Depth - Annual Min: | 35cm |
| Drainage Class - Dominant: | Somewhat poorly drained |
| Hydrologic Group - Dominant: | C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained. |
| Major components are printed below | |
| Cavode(85%) | |
| horizon Ap(0cm to 25cm) | Silt loam |
| horizon Btg(25cm to 119cm) | Silty clay loam |
| horizon BCg(119cm to 145cm) | Channery silt loam |
| horizon R(145cm to 155cm) | Bedrock |

**Map Unit Ho (0.01%)**

| | |
|---|---|
| Map Unit Name: | Holly silt loam |
| Bedrock Depth - Min: | null |
| Watertable Depth - Annual Min: | 8cm |
| Drainage Class - Dominant: | Poorly drained |
| Hydrologic Group - Dominant: | B/D - These soils have moderately low runoff potential when drained and high runoff potential when undrained. |
| Major components are printed below | |
| Holly(90%) | |
| horizon Ap(0cm to 25cm) | Silt loam |
| horizon Bg(25cm to 76cm) | Silt loam |
| horizon BC(76cm to 152cm) | Loam |
| horizon C(152cm to 203cm) | Stratified gravelly sand to silt loam |

**Map Unit Ub (2.07%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Arents complex |
| Bedrock Depth - Min: | null |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |

**Map Unit UfB (10.84%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Conotton complex, 0 to 8 percent slopes |
| Bedrock Depth - Min: | null |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | null |

## Soil Information

| | |
|---|---|
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Conotton(15%) | |
| horizon Ap(0cm to 28cm) | Gravelly loam |
| horizon Bt(28cm to 142cm) | Very gravelly sandy loam |
| horizon C(142cm to 152cm) | Stratified very gravelly sand to very gravelly loamy coarse sand |

---

**Map Unit UfD (0.54%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Conotton complex, 8 to 25 percent slopes |
| Bedrock Depth - Min: | null |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Conotton(15%) | |
| horizon Ap(0cm to 28cm) | Gravelly loam |
| horizon Bt(28cm to 142cm) | Very gravelly sandy loam |
| horizon C(142cm to 152cm) | Stratified very gravelly sand to very gravelly loamy coarse sand |

---

**Map Unit UgB (0.17%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Gilpin complex, 0 to 8 percent slopes |
| Bedrock Depth - Min: | 76cm |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Gilpin(40%) | |
| horizon A(0cm to 20cm) | Channery silt loam |
| horizon Bt(20cm to 60cm) | Channery silt loam |
| horizon C(60cm to 76cm) | Very channery loam |
| horizon R(76cm to 89cm) | Bedrock |

---

**Map Unit UgD (0.17%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Gilpin complex, 8 to 25 percent slopes |
| Bedrock Depth - Min: | 76cm |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Gilpin(40%) | |
| horizon A(0cm to 20cm) | Channery silt loam |
| horizon Bt(20cm to 60cm) | Channery silt loam |
| horizon C(60cm to 76cm) | Very channery loam |
| horizon R(76cm to 89cm) | Bedrock |

---

**Map Unit UwB (3.82%)**

# Soil Information

| | |
|---|---|
| Map Unit Name: | Urban land-Wharton complex, 0 to 8 percent slopes |
| Bedrock Depth - Min: | 175cm |
| Watertable Depth - Annual Min: | 46cm |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Wharton(40%) | |
| horizon Ap(0cm to 23cm) | Silt loam |
| horizon Bt(23cm to 117cm) | Channery silty clay loam |
| horizon C(117cm to 175cm) | Channery silty clay loam |
| horizon R(175cm to 190cm) | Bedrock |

---

**Map Unit UwD (0.18%)**

| | |
|---|---|
| Map Unit Name: | Urban land-Wharton complex, 8 to 25 percent slopes |
| Bedrock Depth - Min: | 175cm |
| Watertable Depth - Annual Min: | 46cm |
| Drainage Class - Dominant: | null |
| Hydrologic Group - Dominant: | null |
| Major components are printed below | |
| Wharton(40%) | |
| horizon Ap(0cm to 23cm) | Silt loam |
| horizon Bt(23cm to 117cm) | Channery silty clay loam |
| horizon C(117cm to 175cm) | Channery silty clay loam |
| horizon R(175cm to 190cm) | Bedrock |

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**Map Unit W (76.74%)**

| | |
|---|---|
| Map Unit Name: | Water |
| No more attributes available for this map unit | |

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**Map Unit WeF (4.34%)**

| | |
|---|---|
| Map Unit Name: | Weikert-Rock outcrop complex, 25 to 80 percent slopes |
| Bedrock Depth - Min: | 46cm |
| Watertable Depth - Annual Min: | null |
| Drainage Class - Dominant: | Somewhat excessively drained |
| Hydrologic Group - Dominant: | D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted. |
| Major components are printed below | |
| Weikert(65%) | |
| horizon Ap(0cm to 18cm) | Channery silt loam |
| horizon Bw(18cm to 46cm) | Very channery silt loam |
| horizon H3(46cm to 56cm) | Unweathered bedrock |

---

**Map Unit WhB (0.84%)**

| | |
|---|---|
| Map Unit Name: | Wharton silt loam, 3 to 8 percent slopes |
| Bedrock Depth - Min: | 175cm |
| Watertable Depth - Annual Min: | 41cm |

## Soil Information

| | |
|---|---|
| Drainage Class - Dominant: | Moderately well drained |
| Hydrologic Group - Dominant: | C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained. |
| Major components are printed below | |
| Wharton(80%) | |
| horizon Ap(0cm to 23cm) | Silt loam |
| horizon Bt1(23cm to 41cm) | Silt loam |
| horizon Bt2(41cm to 56cm) | Silt loam |
| horizon Bt3(56cm to 79cm) | Silt loam |
| horizon BC(79cm to 117cm) | Silty clay loam |
| horizon C(117cm to 175cm) | Channery silty clay loam |
| horizon Cr(175cm to 200cm) | Bedrock |

---

**Map Unit WhC (0.2%)**

| | |
|---|---|
| Map Unit Name: | Wharton silt loam, 8 to 15 percent slopes |
| Bedrock Depth - Min: | 175cm |
| Watertable Depth - Annual Min: | 41cm |
| Drainage Class - Dominant: | Moderately well drained |
| Hydrologic Group - Dominant: | C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained. |
| Major components are printed below | |
| Wharton(80%) | |
| horizon Ap(0cm to 23cm) | Silt loam |
| horizon Bt1(23cm to 41cm) | Silt loam |
| horizon Bt2(41cm to 56cm) | Silt loam |
| horizon Bt3(56cm to 79cm) | Silt loam |
| horizon BC(79cm to 117cm) | Silty clay loam |
| horizon C(117cm to 175cm) | Channery silty clay loam |
| horizon Cr(175cm to 200cm) | Bedrock |

## Wells and Additional Sources




### Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

# Wells and Additional Sources Summary

## Federal Sources

### Public Water Systems Violations and Enforcement Data

| Map Key | PWS ID | Distance (ft) | Direction |
|---|---|---|---|
| 15 | PA5040393 | 2105.730796845252 | N |
| 18 | PA5040058 | 2964.667918157433 | N |
| 27 | PA5040084 | 4425.685862941615 | N |
| 27 | PA5040012 | 4425.685862941615 | N |
| 31 | PA5040340 | 5029.768978195104 | N |

### Safe Drinking Water Information System (SDWIS)

| Map Key | PWS ID | Distance (ft) | Direction |
|---|---|---|---|
| 18 | PA5040058 | 2964.667918157433 | N |

### USGS National Water Information System

| Map Key | Monitoring Loc Identifier | Distance (ft) | Direction |
|---|---|---|---|
| 2 | USGS-404442080190701 | 690.430404606818 | NNE |
| 11 | USGS-404446080191701 | 1236.096692567234 | NNW |
| 12 | USGS-404446080190302 | 1173.765321035331 | NNE |
| 12 | USGS-404446080190303 | 1173.765321035331 | NNE |
| 12 | USGS-404446080190304 | 1173.765321035331 | NNE |
| 12 | USGS-404446080190305 | 1173.765321035331 | NNE |
| 12 | USGS-404446080190301 | 1173.765321035331 | NNE |
| 14 | USGS-404454080191301 | 1909.177472046169 | N |
| 17 | USGS-404457080190001 | 2298.012179065611 | NNE |
| 20 | USGS-404405080184301 | 3252.312770387253 | SE |
| 22 | USGS-404416080182501 | 3749.660717964004 | ESE |
| 24 | USGS-404516080190701 | 4114.172322949423 | N |
| 24 | USGS-404516080190702 | 4114.172322949423 | N |
| 26 | USGS-404431080181101 | 4433.387280100377 | E |

## State Sources

### Groundwater Information System

| Map Key | PA WELL ID | Distance (ft) | Direction |
|---|---|---|---|
| 1 | 1774 | 655.518379203415 | NNE |
| 3 | 649283 | 993.219475425817 | S |
| 4 | 649241 | 1070.887507128262 | S |
| 5 | 649288 | 1115.865266832807 | S |
| 6 | 649287 | 1134.78340296134 | S |
| 7 | 649242 | 1140.307429831397 | S |
| 8 | 649282 | 1153.454906071502 | S |
| 9 | 1779 | 1128.665655126719 | NNE |
| 9 | 1776 | 1128.665655126719 | NNE |
| 9 | 1777 | 1128.665655126719 | NNE |
| 9 | 1775 | 1128.665655126719 | NNE |
| 9 | 1778 | 1128.665655126719 | NNE |
| 10 | 1780 | 1246.104019023887 | NNW |
| 13 | 1781 | 1894.994198230609 | N |

| | | | |
|---|---|---|---|
| 16 | 1782 | 2258.627244780992 | NNE |
| 19 | 1770 | 3233.167762454259 | SE |
| 21 | 1771 | 3707.661935549474 | ESE |
| 23 | 1783 | 4086.902164878666 | N |
| 23 | 1784 | 4086.902164878666 | N |
| 25 | 1772 | 4373.581006412952 | E |
| 28 | 510836 | 5137.819503391522 | ESE |
| 29 | 510834 | 5139.129838660546 | ESE |
| 30 | 510835 | 5229.248910641813 | ESE |

### Oil and Gas Wells

| Map Key | ID | Distance (ft) | Direction |
|---|---|---|---|
| | No records found | | |

## Public Water Systems Violations and Enforcement Data

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 15 | N | 0.40 | 2,105.73 | 745.26 | PWSV |

Address Line 2:
State Code: PA
Zip Code: 15010
City Name: BEAVER FALLS
Address Line 1: 609 8TH ST
PWS ID: PA5040393
PWS Type Code: TNCWS
PWS Type Description: Transient Non-Community Water System
Primary Source Code: GW
Primary Source Desc: Groundwater
PWS Activity Code: I
PWS Activity Description: Inactive
PWS Deactivation Date: 01/08/1993
Phone Number: 724-843-9843

--Details--
Population Served Count: 150
City Served:
County Served:
State Served: PA
Zip Code Served:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 18 | N | 0.56 | 2,964.67 | 791.38 | PWSV |

Address Line 2: 1008 7TH AVE
State Code: PA
Zip Code: 15010
City Name: BEAVER FALLS
Address Line 1:
PWS ID: PA5040058
PWS Type Code: TNCWS
PWS Type Description: Transient Non-Community Water System
Primary Source Code: GW
Primary Source Desc: Groundwater
PWS Activity Code: I
PWS Activity Description: Inactive
PWS Deactivation Date: 01/08/1979
Phone Number:

--Details--
Population Served Count: 50
City Served:
County Served:
State Served: PA
Zip Code Served:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 27 | N | 0.84 | 4,425.69 | 809.21 | PWSV |

Address Line 2:
State Code: PA
Zip Code: 15010
City Name: BEAVER FALLS
Address Line 1: 1425 8TH AVENUE, P.O. BOX 400
PWS ID: PA5040084
PWS Type Code: CWS
PWS Type Description: Community Water System
Primary Source Code: SW
Primary Source Desc: Surface Water
PWS Activity Code: I
PWS Activity Description: Inactive
PWS Deactivation Date: 31/03/1993
Phone Number: 724-846-7122

--Details--
Population Served Count: 23099
City Served:
County Served:
State Served: PA
Zip Code Served:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 27 | N | 0.84 | 4,425.69 | 809.21 | PWSV |

Address Line 2:
State Code: PA
Zip Code: 15010
City Name: BEAVER FALLS
Address Line 1: 1425 EIGHTH AVE
PWS ID: PA5040012
PWS Type Code: CWS
PWS Type Description: Community Water System
Primary Source Code: SW
Primary Source Desc: Surface Water
PWS Activity Code: A

PWS Activity Description: Active
PWS Deactivation Date:
Phone Number: 724-846-2400

--Details--
Population Served Count: 50000
City Served:
County Served: Beaver
State Served: PA
Zip Code Served:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 31 | N | 0.95 | 5,029.77 | 803.51 | PWSV |

Address Line 2:
State Code: PA
Zip Code: 15010
City Name: BEAVER FALLS
Address Line 1: 820 16TH ST
PWS ID: PA5040340
PWS Type Code: NTNCWS
PWS Type Description: Non-Transient Non-Community Water System
Primary Source Code: GW
Primary Source Desc: Groundwater
PWS Activity Code: I
PWS Activity Description: Inactive
PWS Deactivation Date: 05/11/1998
Phone Number: 724-843-6215

--Details--
Population Served Count: 150
City Served:
County Served:
State Served: PA
Zip Code Served:

## Safe Drinking Water Information System (SDWIS)

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 18 | N | 0.56 | 2,964.67 | 791.38 | SDWIS |

PWS ID: PA5040058
PWS Type: Transient non-community system
No of Facilities: 2
No of Violations: 0
No of Site Visits: 0
Cities Served: -

Counties Served: Beaver
Population Served Count: 50
Primacy Agency: Pennsylvania
EPA Region: Region 3

## USGS National Water Information System

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 2 | NNE | 0.13 | 690.43 | 728.17 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Holocene Alluvium |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Other aquifers |
| Well Depth: | 90 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 90 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | | Latitude: | 40.7450654 |
| Source Map Scale: | 24000 | Longitude: | -80.3183962 |
| Monitoring Loc Name: | BV 102 | | |
| Monitoring Loc Identifier: | USGS-404442080190701 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 730.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 20 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 11 | NNW | 0.23 | 1,236.10 | 731.85 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Holocene Alluvium |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Other aquifers |
| Well Depth: | 100 | Aquifer Type: | |

| | | | |
|---|---|---|---|
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 100 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1908 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.321174 |
| Monitoring Loc Name: | BV 103 | | |
| Monitoring Loc Identifier: | USGS-404446080191701 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 740.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 20 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 12 | NNE | 0.22 | 1,173.77 | 735.07 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 50 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 50 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1946 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.317285 |
| Monitoring Loc Name: | BV 120 | | |
| Monitoring Loc Identifier: | USGS-404446080190302 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area | | | |

| | |
|---|---|
| Unit: | |
| Horizontal Accuracy: | 5 |
| Horizontal Accuracy Unit: | seconds |
| Horizontal Collection Mthd: | Interpolated from MAP. |
| Horiz Coord Refer System: | NAD83 |
| Vertical Measure: | 740.00 |
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 20 |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 12 | NNE | 0.22 | 1,173.77 | 735.07 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 50 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 50 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1946 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.317285 |
| Monitoring Loc Name: | BV 121 | | |
| Monitoring Loc Identifier: | USGS-404446080190303 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 740.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 10 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 12 | NNE | 0.22 | 1,173.77 | 735.07 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 35 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 35 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 19470101 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.317285 |
| Monitoring Loc Name: | BV 122 | | |
| Monitoring Loc Identifier: | USGS-404446080190304 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 740.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 10 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 12 | NNE | 0.22 | 1,173.77 | 735.07 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 51 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 51 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1948 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.317285 |
| Monitoring Loc Name: | BV 123 | | |
| Monitoring Loc Identifier: | USGS-404446080190305 | | |

| | |
|---|---|
| Monitoring Loc Type: | Well |
| Monitoring Loc Desc: | |
| HUC Eight Digit Code: | 05030104 |
| Drainage Area: | |
| Drainage Area Unit: | |
| Contrib Drainage Area: | |
| Contrib Drainage Area Unit: | |
| Horizontal Accuracy: | 5 |
| Horizontal Accuracy Unit: | seconds |
| Horizontal Collection Mthd: | Interpolated from MAP. |
| Horiz Coord Refer System: | NAD83 |
| Vertical Measure: | 740.00 |
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 10 |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 12 | NNE | 0.22 | 1,173.77 | 735.07 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 50 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 50 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1946 | Latitude: | 40.7461765 |
| Source Map Scale: | 24000 | Longitude: | -80.317285 |
| Monitoring Loc Name: | BV 119 | | |
| Monitoring Loc Identifier: | USGS-404446080190301 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 740.00 | | |

| | |
|---|---|
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 20 |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 14 | N | 0.36 | 1,909.18 | 744.99 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Holocene Alluvium |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Other aquifers |
| Well Depth: | 95 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 95 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1935 | Latitude: | 40.7483987 |
| Source Map Scale: | 24000 | Longitude: | -80.3200629 |
| Monitoring Loc Name: | BV 104 | | |
| Monitoring Loc Identifier: | USGS-404454080191301 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 740.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 20 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 17 | NNE | 0.44 | 2,298.01 | 737.93 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Outwash |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Sand and gravel aquifers (glaciated regions) |
| Well Depth: | 92 | Aquifer Type: | |

| | | | |
|---|---|---|---|
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 92 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1925 | Latitude: | 40.7492321 |
| Source Map Scale: | 24000 | Longitude: | -80.3164517 |
| Monitoring Loc Name: | BV 165 | | |
| Monitoring Loc Identifier: | USGS-404457080190001 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 750.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 20 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 20 | SE | 0.62 | 3,252.31 | 747.96 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Holocene Alluvium |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Other aquifers |
| Well Depth: | 70 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 70 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1900 | Latitude: | 40.7347878 |
| Source Map Scale: | 24000 | Longitude: | -80.3117294 |
| Monitoring Loc Name: | BV 101 | | |
| Monitoring Loc Identifier: | USGS-404405080184301 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area | | | |

| | |
|---|---|
| Unit: | |
| Horizontal Accuracy: | 5 |
| Horizontal Accuracy Unit: | seconds |
| Horizontal Collection Mthd: | Interpolated from MAP. |
| Horiz Coord Refer System: | NAD83 |
| Vertical Measure: | 745.00 |
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 5. |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 22 | ESE | 0.71 | 3,749.66 | 785.58 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 180 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 180 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1900 | Latitude: | 40.7378434 |
| Source Map Scale: | 24000 | Longitude: | -80.3067293 |
| Monitoring Loc Name: | BV 117 | | |
| Monitoring Loc Identifier: | USGS-404416080182501 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 780.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 20 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 24 | N | 0.78 | 4,114.17 | 788.61 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 125 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 125 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1926 | Latitude: | 40.7545097 |
| Source Map Scale: | 24000 | Longitude: | -80.3183962 |
| Monitoring Loc Name: | BV 124 | | |
| Monitoring Loc Identifier: | USGS-404516080190701 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 810.00 | | |
| Vertical Measure Unit: | feet | | |
| Vertical Accuracy: | 10 | | |
| Vertical Accuracy Unit: | feet | | |
| Vertical Collection Mthd: | Interpolated from topographic map. | | |
| Vert Coord Refer System: | NGVD29 | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 24 | N | 0.78 | 4,114.17 | 788.61 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 125 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | | Provider Name: | NWIS |
| W Hole Depth Unit: | | County: | BEAVER |
| Construction Date: | 19260101 | Latitude: | 40.7545097 |
| Source Map Scale: | 24000 | Longitude: | -80.3183962 |
| Monitoring Loc Name: | BV 125 | | |
| Monitoring Loc Identifier: | USGS-404516080190702 | | |

| | |
|---|---|
| Monitoring Loc Type: | Well |
| Monitoring Loc Desc: | |
| HUC Eight Digit Code: | 05030104 |
| Drainage Area: | |
| Drainage Area Unit: | |
| Contrib Drainage Area: | |
| Contrib Drainage Area Unit: | |
| Horizontal Accuracy: | 5 |
| Horizontal Accuracy Unit: | seconds |
| Horizontal Collection Mthd: | Interpolated from MAP. |
| Horiz Coord Refer System: | NAD83 |
| Vertical Measure: | 810.00 |
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 10 |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 26 | E | 0.84 | 4,433.39 | 849.09 | FED USGS |

| | | | |
|---|---|---|---|
| Organiz Identifier: | USGS-PA | Formation Type: | Homewood Sandstone Member |
| Organiz Name: | USGS Pennsylvania Water Science Center | Aquifer Name: | Pennsylvanian aquifers |
| Well Depth: | 175 | Aquifer Type: | |
| Well Depth Unit: | ft | Country Code: | US |
| Well Hole Depth: | 175 | Provider Name: | NWIS |
| W Hole Depth Unit: | ft | County: | BEAVER |
| Construction Date: | 1900 | Latitude: | 40.74201 |
| Source Map Scale: | 24000 | Longitude: | -80.3028403 |
| Monitoring Loc Name: | BV 118 | | |
| Monitoring Loc Identifier: | USGS-404431080181101 | | |
| Monitoring Loc Type: | Well | | |
| Monitoring Loc Desc: | | | |
| HUC Eight Digit Code: | 05030104 | | |
| Drainage Area: | | | |
| Drainage Area Unit: | | | |
| Contrib Drainage Area: | | | |
| Contrib Drainage Area Unit: | | | |
| Horizontal Accuracy: | 5 | | |
| Horizontal Accuracy Unit: | seconds | | |
| Horizontal Collection Mthd: | Interpolated from MAP. | | |
| Horiz Coord Refer System: | NAD83 | | |
| Vertical Measure: | 800.00 | | |

| | |
|---|---|
| Vertical Measure Unit: | feet |
| Vertical Accuracy: | 20 |
| Vertical Accuracy Unit: | feet |
| Vertical Collection Mthd: | Interpolated from topographic map. |
| Vert Coord Refer System: | NGVD29 |

## Groundwater Information System

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 1 | NNE | 0.12 | 655.52 | 730.47 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 102 | PA WELL ID: | 1774 |
| Site ID: | ="404442080190701" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.745 |
| Bedrock not Reached: | | Longitude DD: | -80.31861 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 740 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | VALLEY FLAT | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 3 | S | 0.19 | 993.22 | 713.66 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 649283 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73881 |
| Bedrock not Reached: | | Longitude DD: | -80.31905 |
| Saltwater Zone: | | Well Address: | Big Rock Park |
| Local Permit: | | Well Zip Code: | 15066 |
| Latest Owner: | | | |
| Elevation Ft: | | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | | | |
| Accuracy of Elevation: | | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | COMMERCIAL STREET ATLAS PROGRAM | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 4 | S | 0.20 | 1,070.89 | 711.24 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 649241 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |

| | | | |
|---|---|---|---|
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73859 |
| Bedrock not Reached: | | Longitude DD: | -80.31913 |
| Saltwater Zone: | | Well Address: | Big Rock Park |
| Local Permit: | | Well Zip Code: | 15066 |
| Latest Owner: | | | |
| Elevation Ft: | | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | | | |
| Accuracy of Elevation: | | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | COMMERCIAL STREET ATLAS PROGRAM | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 5 | S | 0.21 | 1,115.87 | 741.93 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 649288 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73847 |
| Bedrock not Reached: | | Longitude DD: | -80.31907 |
| Saltwater Zone: | | Well Address: | Big |
| Local Permit: | | Well Zip Code: | 15066 |
| Latest Owner: | | | |

Elevation Ft:
Elev Method Code:
Elevation Mthd Desc:
Accuracy of Elevation:
Data Reliability Code:
Data Reliability Desc:
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method: COMMERCIAL STREET ATLAS PROGRAM
Coord Method Desc:
Topography Code:
Topography Desc:
Lat Long Accuracy Code:
Lat Long Accuracty Desc:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 6 | S | 0.21 | 1,134.78 | 733.32 | WATER WELLS |

Local Well No:
Site ID:
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
Latest Owner:
Elevation Ft:
Elev Method Code:
Elevation Mthd Desc:
Accuracy of Elevation:
Data Reliability Code:
Data Reliability Desc:
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:

PA WELL ID: 649287
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name: BEAVER
County Code:
County: BEAVER
Municipality Code:
Municipality: NEW BRIGHTON BORO
Latitude DD: 40.73842
Longitude DD: -80.31904
Well Address: Big Rock Park
Well Zip Code: 15066

Site Source Desc:
Drillers Coord Method: COMMERCIAL STREET ATLAS PROGRAM
Coord Method Desc:
Topography Code:
Topography Desc:
Lat Long Accuracy Code:
Lat Long Accuracty Desc:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 7 | S | 0.22 | 1,140.31 | 719.86 | WATER WELLS |

Local Well No:
Site ID:
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
Latest Owner:
Elevation Ft:
Elev Method Code:
Elevation Mthd Desc:
Accuracy of Elevation:
Data Reliability Code:
Data Reliability Desc:
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method: COMMERCIAL STREET ATLAS PROGRAM
Coord Method Desc:
Topography Code:
Topography Desc:
Lat Long Accuracy Code:
Lat Long Accuracty Desc:

PA WELL ID: 649242
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name: BEAVER
County Code:
County: BEAVER
Municipality Code:
Municipality: NEW BRIGHTON BORO
Latitude DD: 40.7384
Longitude DD: -80.31911
Well Address: Big Rock Park
Well Zip Code: 15066

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 8 | S | 0.22 | 1,153.45 | 733.32 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 649282 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73837 |
| Bedrock not Reached: | | Longitude DD: | -80.31902 |
| Saltwater Zone: | | Well Address: | Big Rock Park |
| Local Permit: | | Well Zip Code: | 15066 |
| Latest Owner: | | | |
| Elevation Ft: | | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | | | |
| Accuracy of Elevation: | | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | COMMERCIAL STREET ATLAS PROGRAM | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 9 | NNE | 0.21 | 1,128.67 | 733.43 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 123 | PA WELL ID: | 1779 |
| Site ID: | ="404446080190305" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |

| | | | |
|---|---|---|---|
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74611 |
| Bedrock not Reached: | | Longitude DD: | -80.3175 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 740 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 10 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | VALLEY FLAT | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 9 | NNE | 0.21 | 1,128.67 | 733.43 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 120 | PA WELL ID: | 1776 |
| Site ID: | ="404446080190302" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74611 |
| Bedrock not Reached: | | Longitude DD: | -80.3175 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |

Latest Owner:
Elevation Ft: 740
Elev Method Code:
Elevation Mthd Desc: INTERPOLATED FROM TOPOGRAPHIC MAP
Accuracy of Elevation: 20
Data Reliability Code:
Data Reliability Desc: FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY)
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc: VALLEY FLAT
Lat Long Accuracy Code:
Lat Long Accuracty Desc: ACCURATE TO +5 SECONDS

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 9 | NNE | 0.21 | 1,128.67 | 733.43 | WATER WELLS |

Local Well No: BV 121
Site ID: ="404446080190303"
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
PA WELL ID: 1777
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name: BEAVER
County Code:
County: BEAVER
Municipality Code:
Municipality: BEAVER FALLS
Latitude DD: 40.74611
Longitude DD: -80.3175
Well Address:
Well Zip Code:
Latest Owner:
Elevation Ft: 740
Elev Method Code:
Elevation Mthd Desc: INTERPOLATED FROM TOPOGRAPHIC MAP
Accuracy of Elevation: 10
Data Reliability Code:
Data Reliability Desc: FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY)
Source Depth Data Code:
Source Depth Desc:

Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc: VALLEY FLAT
Lat Long Accuracy Code:
Lat Long Accuracty Desc: ACCURATE TO +5 SECONDS

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 9 | NNE | 0.21 | 1,128.67 | 733.43 | WATER WELLS |

Local Well No: BV 119
Site ID: ="404446080190301"
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
Latest Owner:
PA WELL ID: 1775
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name: BEAVER
County Code:
County: BEAVER
Municipality Code:
Municipality: BEAVER FALLS
Latitude DD: 40.74611
Longitude DD: -80.3175
Well Address:
Well Zip Code:
Elevation Ft: 740
Elev Method Code:
Elevation Mthd Desc: INTERPOLATED FROM TOPOGRAPHIC MAP
Accuracy of Elevation: 20
Data Reliability Code:
Data Reliability Desc: FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY)
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc: VALLEY FLAT
Lat Long Accuracy Code:
Lat Long Accuracty Desc: ACCURATE TO +5 SECONDS

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 9 | NNE | 0.21 | 1,128.67 | 733.43 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 122 | PA WELL ID: | 1778 |
| Site ID: | ="404446080190304" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74611 |
| Bedrock not Reached: | | Longitude DD: | -80.3175 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 740 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 10 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | VALLEY FLAT | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 10 | NNW | 0.24 | 1,246.10 | 731.64 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 103 | PA WELL ID: | 1780 |
| Site ID: | ="404446080191701" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |

| | | | |
|---|---|---|---|
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74611 |
| Bedrock not Reached: | | Longitude DD: | -80.32139 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 740 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | VALLEY FLAT | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 13 | N | 0.36 | 1,894.99 | 738.32 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 104 | PA WELL ID: | 1781 |
| Site ID: | ="404454080191301" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74833 |
| Bedrock not Reached: | | Longitude DD: | -80.32028 |
| Saltwater Zone: | | Well Address: | |

| | | | |
|---|---|---|---|
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 740 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | VALLEY FLAT | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 16 | NNE | 0.43 | 2,258.63 | 741.28 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 165 | PA WELL ID: | 1782 |
| Site ID: | ="404457080190001" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.74917 |
| Bedrock not Reached: | | Longitude DD: | -80.31667 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 760 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |

Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc: VALLEY FLAT
Lat Long Accuracy Code:
Lat Long Accuracty Desc: ACCURATE TO +5 SECONDS

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 19 | SE | 0.61 | 3,233.17 | 746.87 | WATER WELLS |

Local Well No: BV 101
Site ID:
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
Latest Owner:
Elevation Ft: 0
Elev Method Code:
Elevation Mthd Desc:
Accuracy of Elevation:
Data Reliability Code:
Data Reliability Desc: FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY)
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc:
Lat Long Accuracy Code:
Lat Long Accuracty Desc:

PA WELL ID: 1770
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name: BEAVER
County Code:
County: BEAVER
Municipality Code:
Municipality: NEW BRIGHTON BORO
Latitude DD: 40.73472
Longitude DD: -80.31194
Well Address:
Well Zip Code:

# Wells and Additional Sources Detail Report

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 21 | ESE | 0.70 | 3,707.66 | 788.48 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 117 | PA WELL ID: | 1771 |
| Site ID: | ="404416080182501" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73778 |
| Bedrock not Reached: | | Longitude DD: | -80.30694 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 780 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | HILLSIDE | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 23 | N | 0.77 | 4,086.90 | 789.52 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 124 | PA WELL ID: | 1783 |
| Site ID: | ="404516080190701" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |

# Wells and Additional Sources Detail Report

| | | | |
|---|---|---|---|
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER FALLS |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.75444 |
| Bedrock not Reached: | | Longitude DD: | -80.31861 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 810 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 10 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | HILLTOP | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 23 | N | 0.77 | 4,086.90 | 789.52 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 125 | PA WELL ID: | 1784 |
| Site ID: | ="404516080190702" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER FALLS |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | BEAVER FALLS |
| Depth to Bedrock: | | Latitude DD: | 40.75444 |
| Bedrock not Reached: | | Longitude DD: | -80.31861 |

| | | | |
|---|---|---|---|
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 810 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 10 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | HILLTOP | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | ACCURATE TO +5 SECONDS | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 25 | E | 0.83 | 4,373.58 | 820.84 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | BV 118 | PA WELL ID: | 1772 |
| Site ID: | ="404431080181101" | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | BEAVER |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | PULASKI TWP. |
| Depth to Bedrock: | | Latitude DD: | 40.74194 |
| Bedrock not Reached: | | Longitude DD: | -80.30306 |
| Saltwater Zone: | | Well Address: | |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | 800 | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | INTERPOLATED FROM TOPOGRAPHIC MAP | | |
| Accuracy of Elevation: | 20 | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | FIELD CHECKED BY REPORTING AGENCY (PADAG PEST. SURVEY) | | |

Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method:
Coord Method Desc:
Topography Code:
Topography Desc: HILLSIDE
Lat Long Accuracy Code:
Lat Long Accuracty Desc: ACCURATE TO +5 SECONDS

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 28 | ESE | 0.97 | 5,137.82 | 859.07 | WATER WELLS |

Local Well No:
Site ID:
Date Created:
Date Updated:
Date Drilled:
Type of Site Code:
Type of Site Desc: WELL
Latest Production:
Latest Well Use:
Type of Activity:
Well Depth:
Hydrologic Unit:
Depth to Bedrock:
Bedrock not Reached:
Saltwater Zone:
Local Permit:
Latest Owner:
Elevation Ft:
Elev Method Code:
Elevation Mthd Desc:
Accuracy of Elevation:
Data Reliability Code:
Data Reliability Desc:
Source Depth Data Code:
Source Depth Desc:
Source Site Data Code:
Site Source Desc:
Drillers Coord Method: GPS - GLOBAL POSITIONING SYSTEM
Coord Method Desc:
Topography Code:
Topography Desc:
Lat Long Accuracy Code:

PA WELL ID: 510836
PA GWIS ID:
Dep Counter:
Transac Counter:
AAPG Code:
Aquafier Desc:
Quad Code:
Quad Name:
County Code:
County: BEAVER
Municipality Code:
Municipality: NEW BRIGHTON BORO
Latitude DD: 40.73653
Longitude DD: -80.302
Well Address: 831 Fifth Avenue
Well Zip Code:

Lat Long Accuracty Desc:

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 29 | ESE | 0.97 | 5,139.13 | 857.82 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 510834 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73644 |
| Bedrock not Reached: | | Longitude DD: | -80.30205 |
| Saltwater Zone: | | Well Address: | 831 Fifth Avenue |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | | | |
| Accuracy of Elevation: | | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | GPS - GLOBAL POSITIONING SYSTEM | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | | | |

| Map Key | Direction | Distance (mi) | Distance (ft) | Elevation (ft) | DB |
|---|---|---|---|---|---|
| 30 | ESE | 0.99 | 5,229.25 | 869.02 | WATER WELLS |

| | | | |
|---|---|---|---|
| Local Well No: | | PA WELL ID: | 510835 |
| Site ID: | | PA GWIS ID: | |
| Date Created: | | Dep Counter: | |
| Date Updated: | | Transac Counter: | |

# Wells and Additional Sources Detail Report

| | | | |
|---|---|---|---|
| Date Drilled: | | AAPG Code: | |
| Type of Site Code: | | Aquafier Desc: | |
| Type of Site Desc: | WELL | Quad Code: | |
| Latest Production: | | Quad Name: | |
| Latest Well Use: | | County Code: | |
| Type of Activity: | | County: | BEAVER |
| Well Depth: | | Municipality Code: | |
| Hydrologic Unit: | | Municipality: | NEW BRIGHTON BORO |
| Depth to Bedrock: | | Latitude DD: | 40.73636 |
| Bedrock not Reached: | | Longitude DD: | -80.30174 |
| Saltwater Zone: | | Well Address: | 831 Fifth Avenue |
| Local Permit: | | Well Zip Code: | |
| Latest Owner: | | | |
| Elevation Ft: | | | |
| Elev Method Code: | | | |
| Elevation Mthd Desc: | | | |
| Accuracy of Elevation: | | | |
| Data Reliability Code: | | | |
| Data Reliability Desc: | | | |
| Source Depth Data Code: | | | |
| Source Depth Desc: | | | |
| Source Site Data Code: | | | |
| Site Source Desc: | | | |
| Drillers Coord Method: | GPS - GLOBAL POSITIONING SYSTEM | | |
| Coord Method Desc: | | | |
| Topography Code: | | | |
| Topography Desc: | | | |
| Lat Long Accuracy Code: | | | |
| Lat Long Accuracty Desc: | | | |

# Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *BEAVER* County: **1**

*Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L*
*Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L*
*Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L*

---

Federal Area Radon Information for *BEAVER* County

| | |
|---|---|
| No Measures/Homes: | 120 |
| Geometric Mean: | 4.3 |
| Arithmetic Mean: | 7.9 |
| Median: | 3.7 |
| Standard Deviation: | 12.5 |
| Maximum: | 103.5 |
| % >4 pCi/L: | 46 |
| % >20 pCi/L: | 11 |
| Notes on Data Table: | TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of Pennsylvania conducted during 1987-88. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested. |

# Appendix

## Federal Sources

**FEMA National Flood Hazard Layer** — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

**Indoor Radon Data** — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

**Public Water Systems Violations and Enforcement Data** — **PWSV**

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

**Radon Zone Level** — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

**Safe Drinking Water Information System (SDWIS)** — **SDWIS**

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

**Soil Survey Geographic database** — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

**U.S. Fish & Wildlife Service Wetland Data** — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

**USGS Current Topo** — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

**USGS Geology** — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

**USGS National Water Information System** — **FED USGS**

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

## State Sources

**Groundwater Information System** — **WATER WELLS**

The Pennsylvania GroundWater Information System (PaGWIS) made available by the Pennsylvania

# Appendix

Geological Survey Department of Conservation and Natural Resources (DCNR) maintains well records that have been submitted by water well drillers.

**Oil and Gas Wells** **OGW**

Oil and Gas Well Data made available by Pennsylvania Department of Environmental Protection.

# Liability Notice

**Reliance on information in Report:** The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

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# TOPOGRAPHIC MAPS

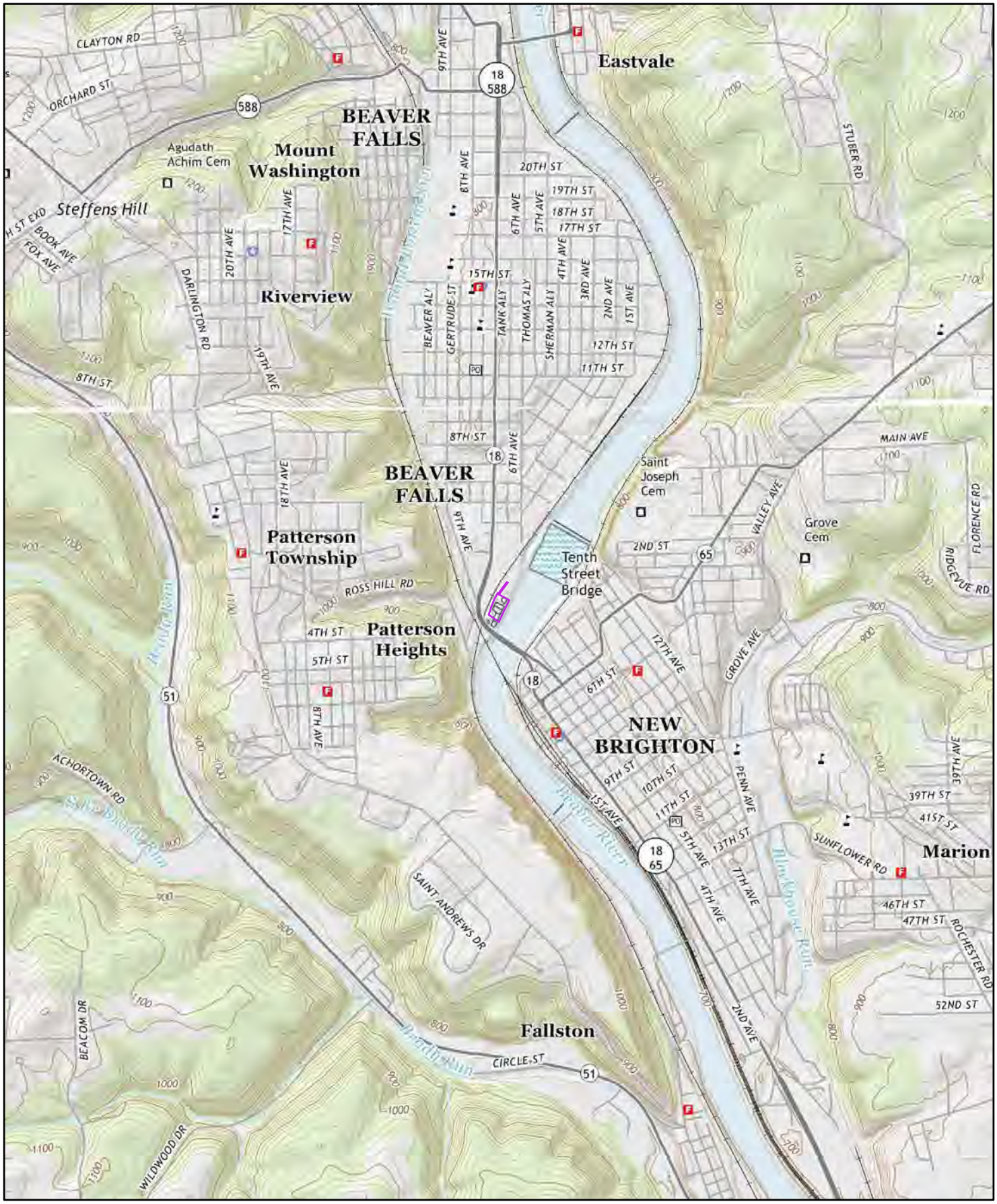
| | |
|---|---|
| **Project Property:** | Beaver Falls Water Filtration Plant<br>Water Filtration Plant<br>Beaver Falls PA 15010 |
| **Project No:** | 68417.008 |
| **Requested By:** | Gannett Fleming, Inc. |
| **Order No:** | 21051700311 |
| **Date Completed:** | May 18, 2021 |

**Environmental Risk Information Services**
*A division of Glacier Media Inc.*
1.866.517.5204 | info@erisinfo.com | erisinfo.com

We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

| Year | Map Series |
|---|---|
| 2016 | 7.5 |
| 1979 | 7.5 |
| 1969 | 7.5 |
| 1953 | 7.5 |
| 1904 | 15 |
| 1901 | 15 |

Topographic Maps included in this report are produced by the USGS and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property.
No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc.(in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS', using Topographic Maps produced by the USGS. This maps contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.



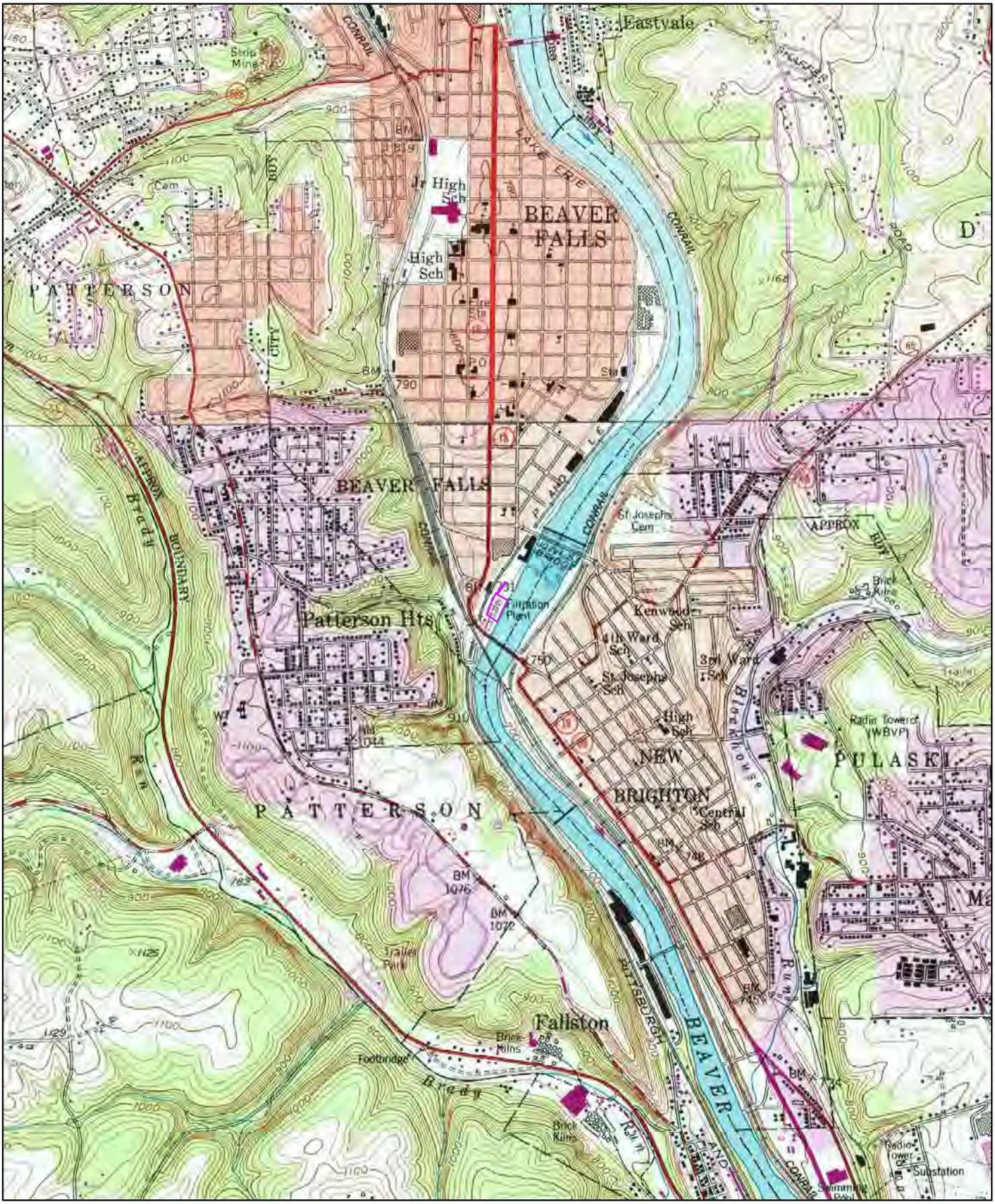

2016

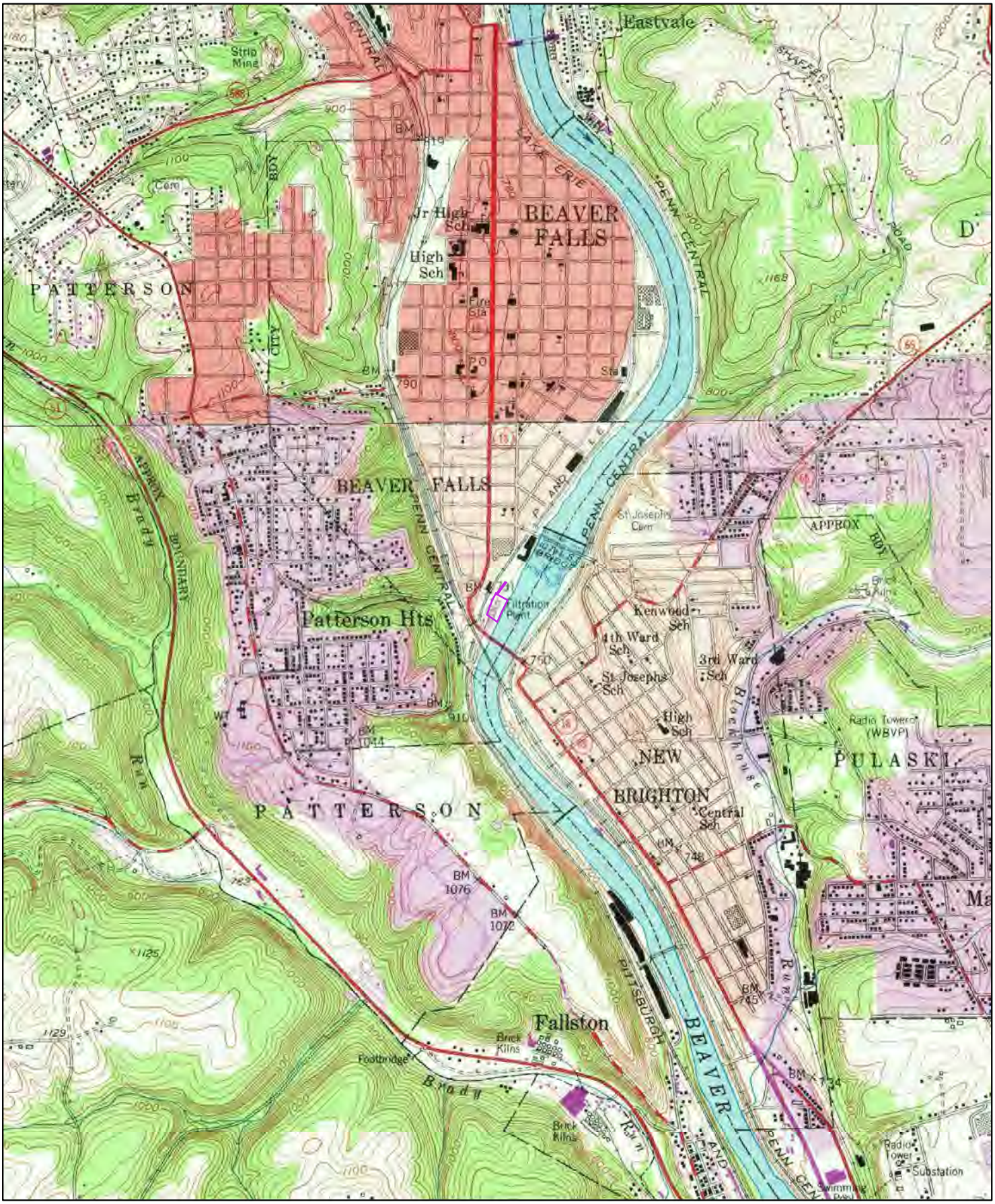
0 0.2 0.4 0.8 Miles

Order No. 21051700311

Quadrangle(s): Beaver,PA

Source: USGS 7.5 Minute Topographic Map


Eastvale
BEAVER FALLS
PATTERSON
BEAVER FALLS
Patterson Hts
PATTERSON
NEW BRIGHTON
PULASKI
Fallston
Jr High Sch
High Sch
St Joseph's Cem
Kenwood Sch
4th Ward Sch
3rd Ward Sch
St Joseph Sch
Central Sch
Filtration Plant
Brick Kilns
Radio Tower (WBVP)
Radio Tower
Substation
Footbridge
Trailer Park
Strip Mine
Cem
Fire Sta
Sta
P O
BM 790
BM 1076
BM 1072
BM 1044
BM 748
BM 745
BM 734
APPROX
BOUNDARY
CONRAIL
PITTSBURGH & LAKE ERIE
BEAVER
Brady Run
Raccoon Run
Brady
1979
0 0.2 0.4 0.8 Miles
Order No. 21051700311
Quadrangle(s): Beaver,PA
Source: USGS 7.5 Minute Topographic Map



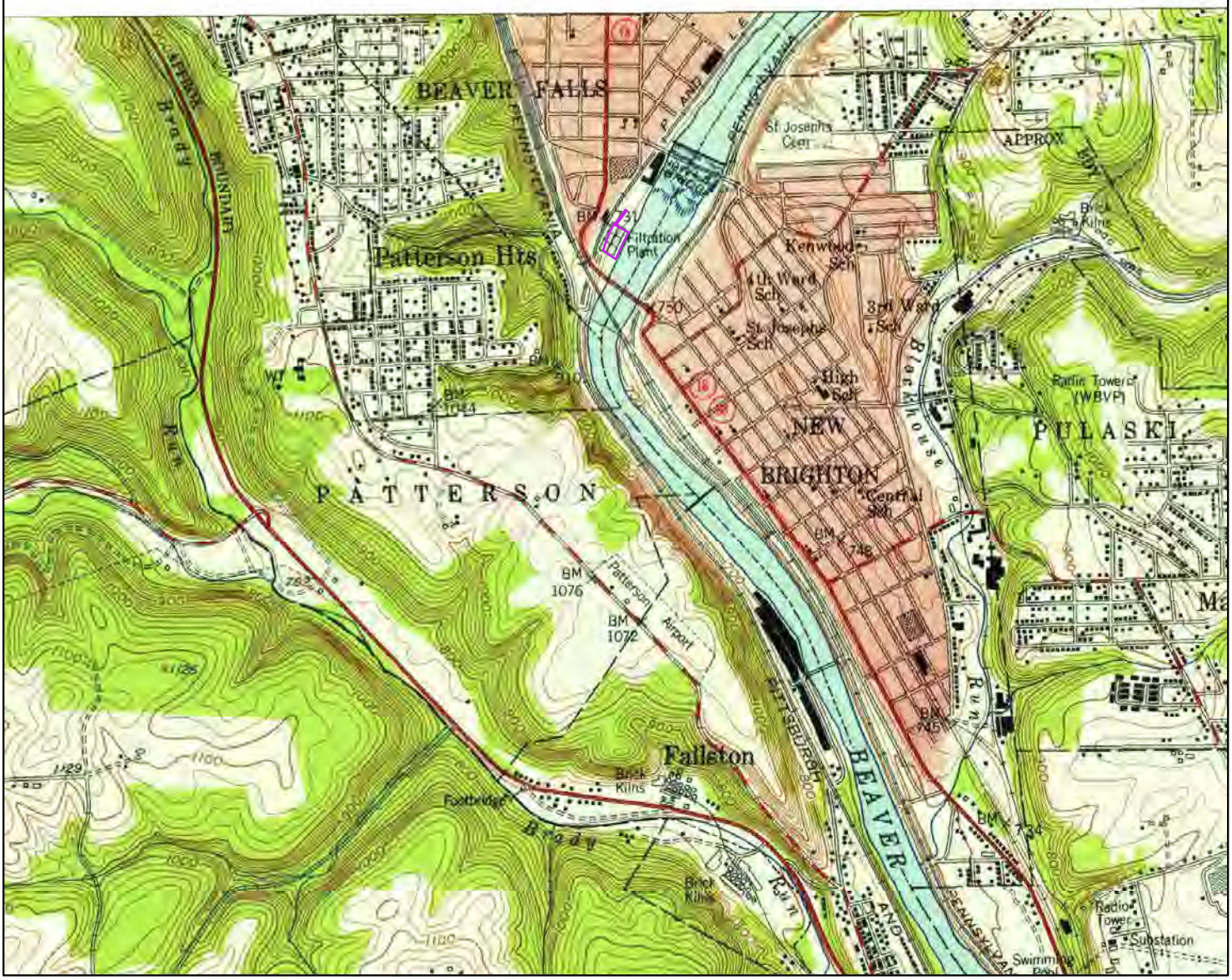

1969

0 0.2 0.4 0.8 Miles

Order No. 21051700311

Quadrangle(s): Beaver,PA

Source: USGS 7.5 Minute Topographic Map



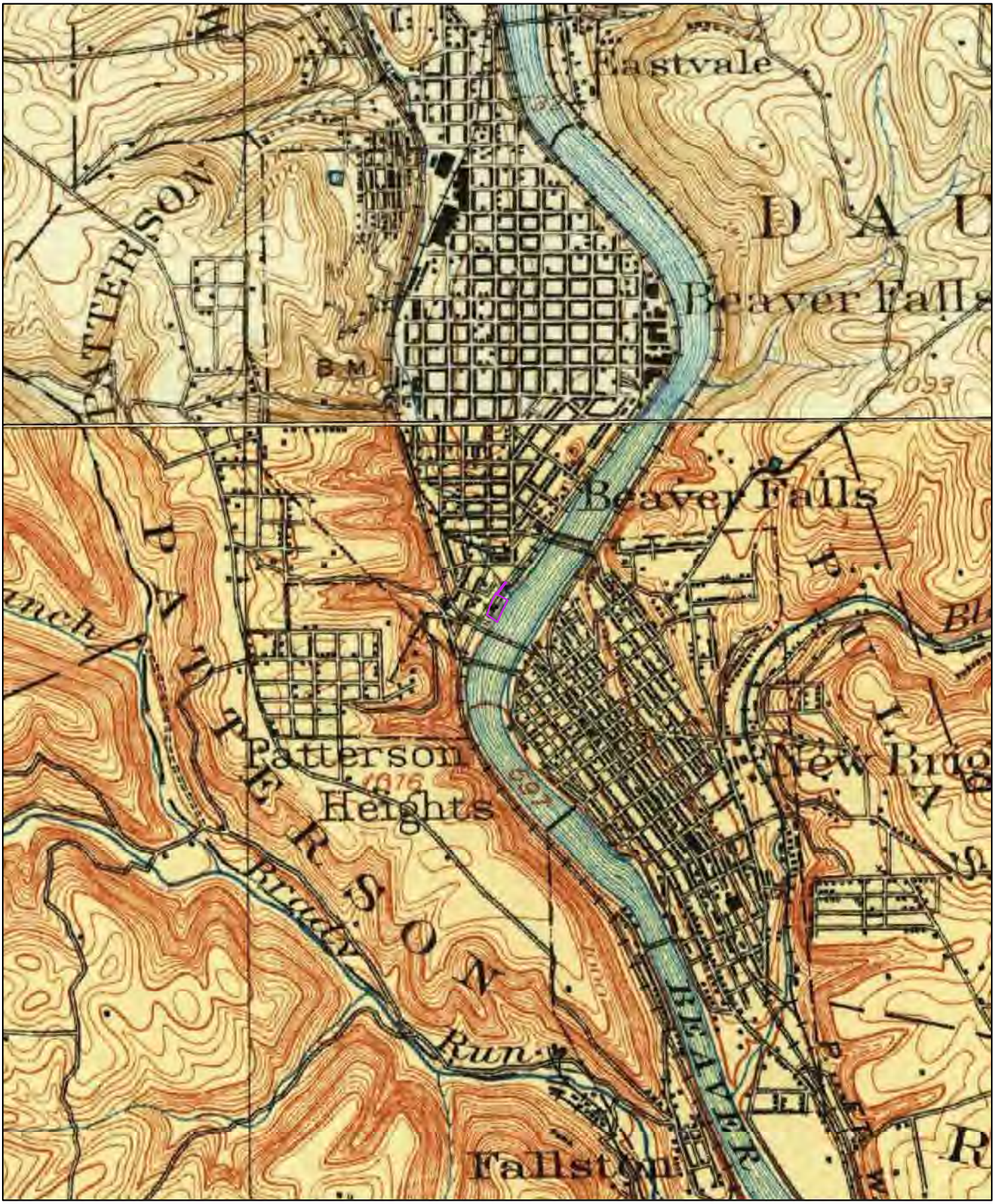

1953

0 0.2 0.4 0.8 Miles

Order No. 21051700311

Quadrangle(s): Beaver,PA

Source: USGS 7.5 Minute Topographic Map



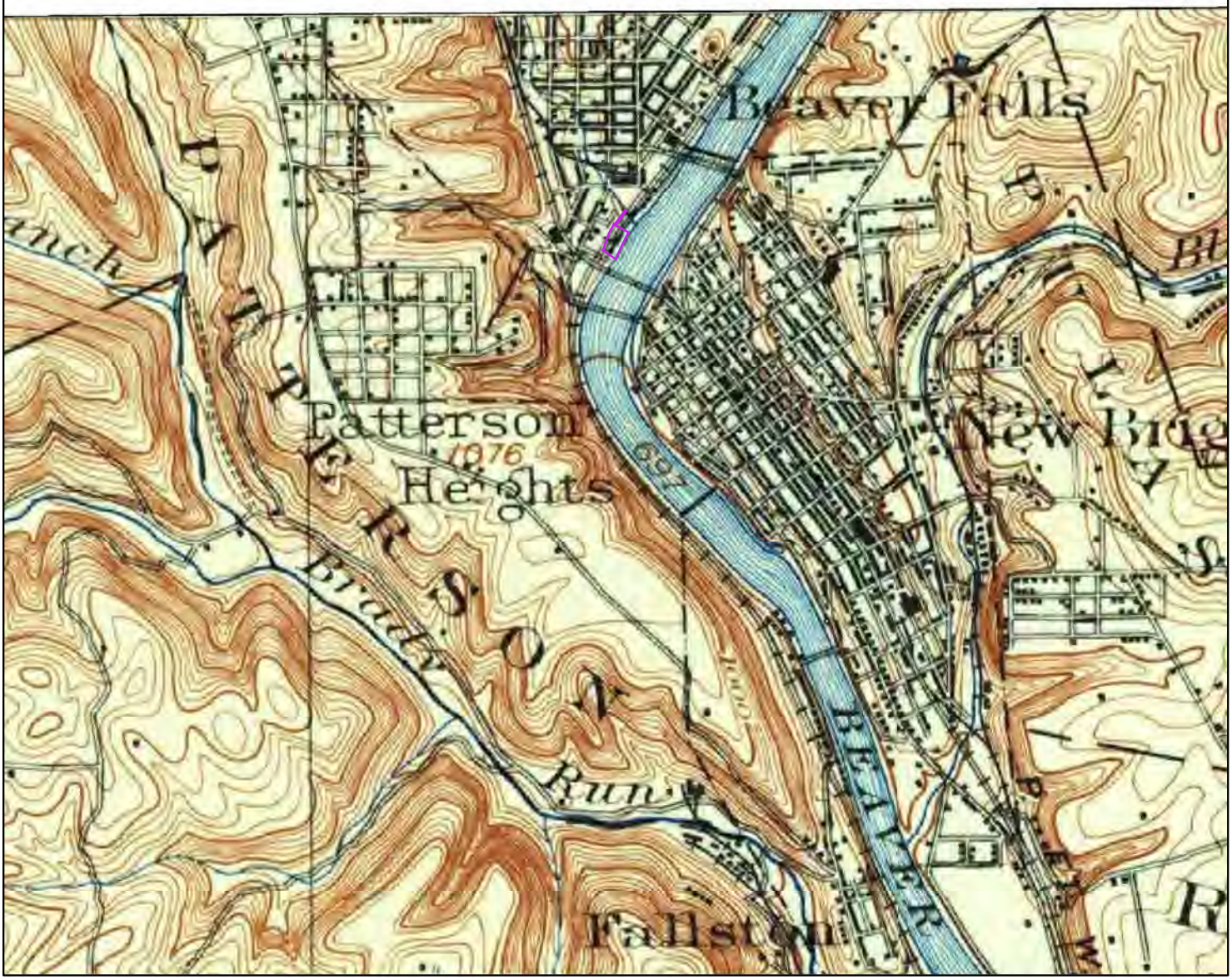

1904

0 0.2 0.4 0.8 Miles

Order No. 21051700311

Quadrangle(s): Beaver,PA

Source: USGS 15 Minute Topographic Map




1901

0 0.2 0.4 0.8 Miles

Order No. 21051700311

Quadrangle(s): Beaver,PA

Source: USGS 15 Minute Topographic Map

ERIS

# CITY DIRECTORY

| | |
|---|---|
| **Project Property:** | *Beaver Falls Water Filtraon Plan t*<br>*Water Filtraon Plan t*<br>*Beaver Falls, PA 15010* |
| **Project No:** | *68417.008* |
| **Requested By:** | *Ganne Fleming, Inc.* |
| **Order No:** | *21051700311* |
| **Date Completed:** | *May 20, 2021* |

May 20, 2021
RE: CITY DIRECTORY RESEARCH
Beaver Falls Water Filtraon Plan t
Water Filtraon Plan t Beaver Falls, PA

Thank you for contacng ERIS f or an City Directory Search for the site described above. Our staff has conducted a reverse lisng City Dir ectory search to determine prior occupants of the subject site and adjacent properes. W e have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Lisng Dir ectories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either uliz ed the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as mulple digiz ed directories. These do not claim to be a complete collecon of all r everse lisng city dir ectories produced.

ERIS has made every effort to provide accurate and complete informaon but shall not be held liable f or missing, incomplete or inaccurate informaon. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are addional addr esses or streets that require searching please contact us at 866-517-5204.

**Search Criteria:**
BEG-400 of 7th Ave
All of 2nd St

## Search Results Summary

| Date | Source | Comment |
|---|---|---|
| 2020 | DIGITAL BUSINESS DIRECTORY | |
| 2016 | DIGITAL BUSINESS DIRECTORY | |
| 2012 | DIGITAL BUSINESS DIRECTORY | |
| 2008 | DIGITAL BUSINESS DIRECTORY | |
| 2003 | DIGITAL BUSINESS DIRECTORY | |
| 1998 | DIGITAL BUSINESS DIRECTORY | |
| 1966 | POLKS | |
| 1964 | POLKS | |
| 1927-28 | BURCHS | |
| 1925 | BURCHS | |

## 2020
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**2ND ST**

**NO LISTING FOUND FOR THIS YEAR**...

## 2020
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**7TH AVE**

201 **MORROW FORD-LINCOLN**...*Automobile Dealers-used Cars*
201 **MORROW FORD-LINCOLN**...*Truckdealersused*
201 **RON LEWIS FORD**...*Automobile Dealers-new Cars*
201 **RON LEWIS FORD**...*Automobile Dealersused Cars*
220 **KEYSTONE PROFILES LTD**...*Steeldistributors & Warehouses (whls)*
220 **KEYSTONE PROFILES LTD**...*Welding & Steel Fabrication*
220 **REPUBLIC ENGINEERED PROD LLC**...*Holding Companies (non-bank)*
301 **RON LEWIS KIA BEAVER FALLS**...*Automobile Dealers-new Cars*
330 **BEAVER COUNTY FRUIT GARDEN**...*Fruits & Vegetables & Produce-retail*
330 **BEAVER COUNTY FRUIT & GARDEN**...*Gift Baskets & Parcels*
330 **BEAVER COUNTY FRUIT & GARDEN**...*Ecommerce*


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

## 2016
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**2ND ST**

**NO LISTING FOUND FOR THIS YEAR**...

## 2016
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**7TH AVE**

201 **MORROW FORD-LINCOLN**...*Automobile Dealers-used Cars*
220 **KEYSTONE PROFILES LTD**...*Welding & Steel Fabrication*
220 **REPUBLIC ENGINEERED PROD LLC**...*Holding Companies (non-bank)*
301 **RON LEWIS KIA BEAVER FALLS**...*Automobile Dealers-new Cars*
327 **RINI MARINE SALES**...*Army & Navy Goods*
330 **BEAVER COUNTY FRUIT & GARDEN**...*Gift Baskets & Parcels*


Report ID: 210517003111 - 5/20/2021
www.erisinfo.com

## 2012
*SOURCE: DIGITAL BUSINESS DIRECTORY*

## 2ND ST

**NO LISTING FOUND FOR THIS YEAR**...

## 2012
*SOURCE: DIGITAL BUSINESS DIRECTORY*

## 7TH AVE

. **REEVES BANK**...*Banks*
201 **MORROW FORD-LINCOLN-MERCURY**...*Automobile Dealers-new Cars*
327 **RINI MARINE SALES**...*Army & Navy Goods*
330 **BEAVER COUNTY FRUIT & GARDEN**...*Fruits & Vegetables & Produce-retail*


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

## 2008
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**2ND ST**

**NO LISTING FOUND FOR THIS YEAR**...

## 2008
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**7TH AVE**

201 **MORROW FORD-LINCOLN-MERCURY**...*Automobile Dealers-new Cars*
220 **KEYSTONE PROFILES**...*Foundries-steel*
327 **RINI MARINE SALES**...*Boat Dealers Sales & Service*


Report ID: 210517003111 - 5/20/2021
www.erisinfo.com

## 2003
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**2ND ST**

**NO LISTING FOUND FOR THIS YEAR**...

## 2003
*SOURCE: DIGITAL BUSINESS DIRECTORY*

**7TH AVE**

201 **MORROW FORD-LINCOLN MERCURY**...*Engine Repair*
301 **MORROW CHEVROLET**...*Engine Repair*
307 **CONRADY WILLIAM E MD**...*Internal Medicine Practitioners*
327 **RINI SURPLUS SALES**...*Marine Supplies And Equipment*
330 **BEAVER COUNTY FRUIT & GARDEN**...

## 1998
*SOURCE: DIGITAL BUSINESS DIRECTORY*

## 2ND ST

**NO LISTING FOUND FOR THIS YEAR**...

## 1998
*SOURCE: DIGITAL BUSINESS DIRECTORY*

## 7TH AVE

. **RITE AID PHARMACIES BEAVER FALLS PHARMACY**...*Drug Stores And Proprietary Stores*
327 **RINI SURPLUS SALES**...*Miscellaneous General Merchandise*
328 **BEAVER COUNTY FRUIT & GARDEN CENTER**...*Fruit And Vegetable Markets*

11

**2D (Beaver Falls) — From 200 7th av west**

717 Vacant
719 Davidson Robt E © 843-6415
721 Bartus John A © 843-3174
723 Adams James © 843-8349
725 Adams Steve ©



11

**7TH AV (Beaver Falls) — From 13 Bridge north**

90 Vacant
92 King's Mirror & Glass Co (whse)
108 King's Mirror & Glass Co 843-4550
es P&LERR (frt & pass sta) 843-5422
**2d begins**
cor Rick's Auto Sls (repr shop) 846-0490
201 Morrow Mtrs Inc 843-1000
220 Republic Steel Corp (Union Drawn Div) plant 846-5500
**3d begins**
301 Young Don R Serv gas sta 843-9812
305 Pennzoil Oil Co (br) fuel oil 846-1040
313 Spur Oil Co (br) gas sta 843-9966
327 Stitt J W (whse)
328 Bob's Sunoco Serv gas sta 843-9761
335 Sportsman Bar 843-7610
335½ Maglischi Florence Mrs 846-3216
McMikon Kay
Shebish Chas J 843-2361
Medaroc Lucy
337 Vacant
400 Vacant
401 Ohnezeit Moving & Stge 846-2640
Aero Mayflower Transit Co Agcy
402 Vacant
404 Vacant
406 Marsico Vending Co 843-6300
407 Barrett Hardy © 846-7236
408 Beaver Falls Candy & Cigar Co 846-6123
410 Sill James E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**2D (Beaver Falls) — From 200 7th av west to 8th av**

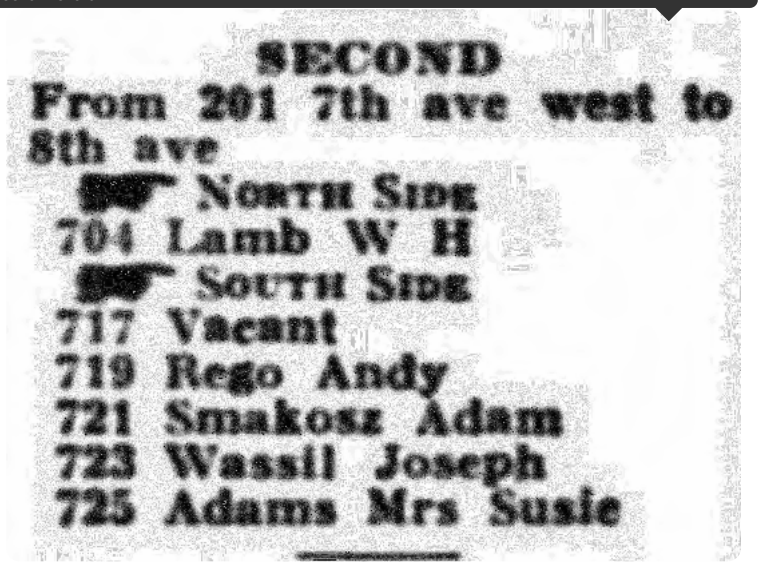
717 Vacant
719 Davidson Robt E ◎ 843-6415
721 Bartus John A ◎ 843-3174
723 Adams James ◎ 843-8349
725 Adams Steve ◎



**7TH AV (Beaver Falls) — From 13 Bridge north to 10th**

90 Layton's Auto Sls used
92 King's Mirror & Glass Co (whse)
108 King's Mirror & Glass Co 843-4550
cs P&LERR (frt & pass sta) 843-5422
**2d begins**
cor Hitchin Quaker State Serv Sta 843-0294
200 Morrow Mtrs Inc 843-1000
220 Republic Steel Corp (Union Drawn Div) plant 846-5500
**3d begins**
301 Young Don R Serv gas sta 843-9812
305 Pennzoil Oil Co (br) fuel oil 846-4040
313 Spur Oil Co (br) gas sta 843-9966
327 Hitchin Mtrs Inc 846-1660
328 Bob's Sunoco Serv gas sta 843-9761
335 Sportsman Bar 843-7610
335½ Maglischi Florence Mrs 846-3216
335½ McMikon Kay
335½ Shebish Chas J 843-2364
335½ Thomas Mary E Mrs
337 Arent's Gro 843-6984
400 Vacant
401 Ohnezeit Moving Storage 846-2640
Aero Mayflower Transit Co Agcy 841-2640
402 Vacant
404 Vacant
406 Vacant
407 Barrett Hardy ◎ 846-7236
408 Beaver Falls Candy & Cigar Co 846-6123
410 Sill James E 846-6359
Ben's Eggs poultry 843-6230


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

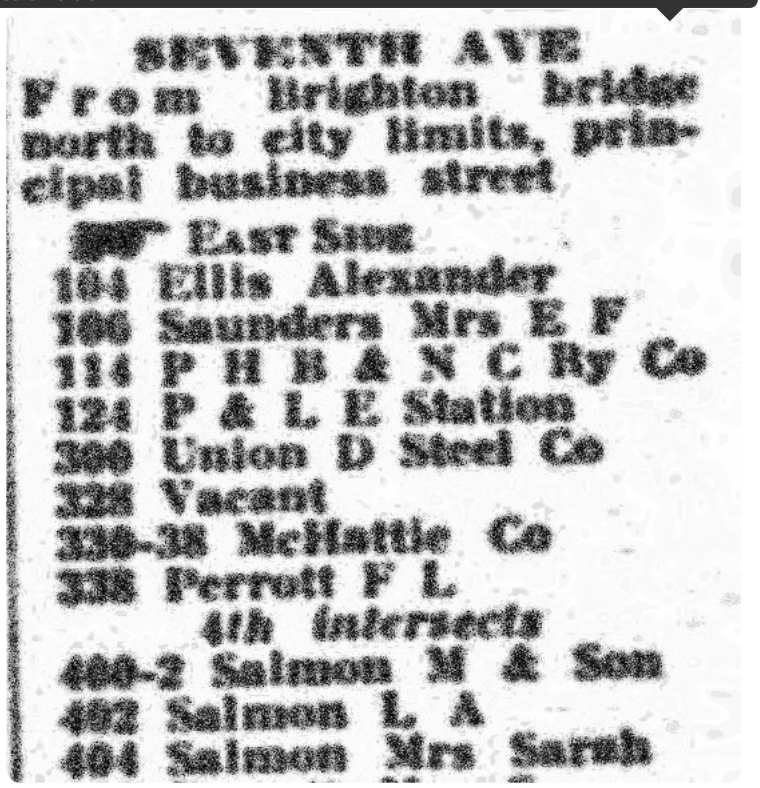


SECOND
From 201 7th ave west to 8th ave

NORTH SIDE
704 Lamb W H

SOUTH SIDE
717 Vacant
719 Rego Andy
721 Smakosz Adam
723 Wassil Joseph
725 Adams Mrs Susie





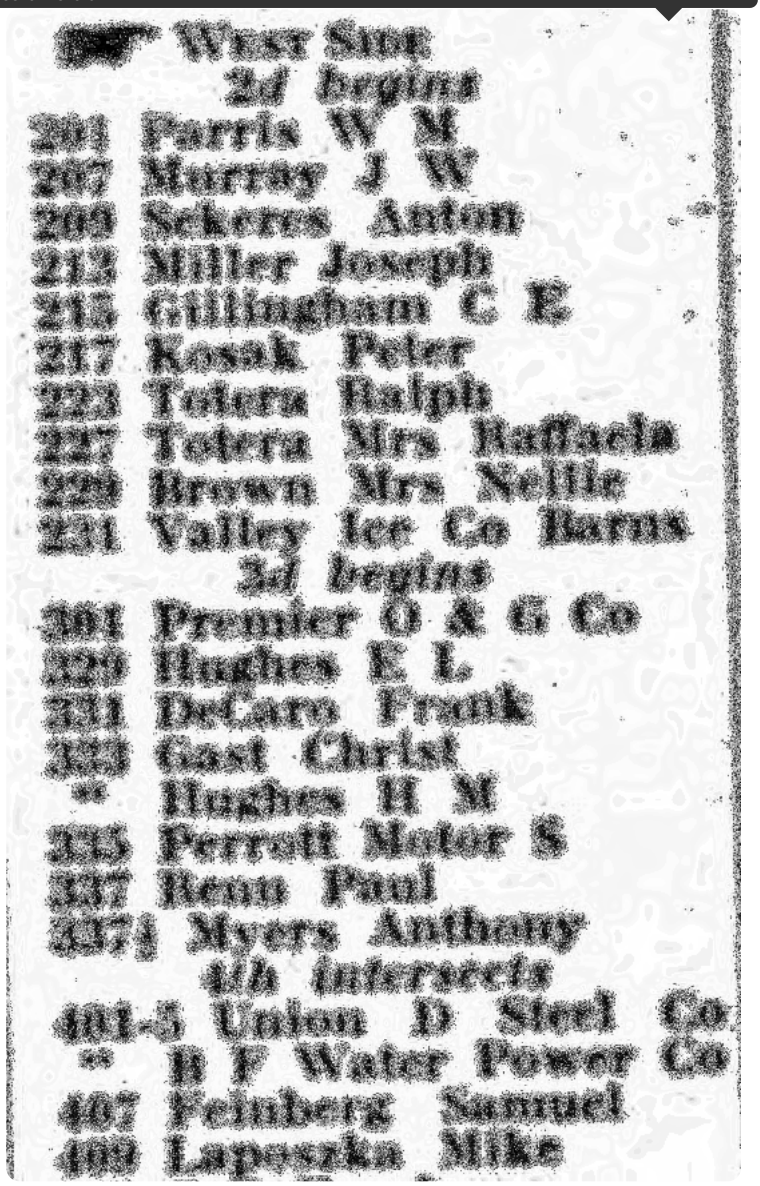
SEVENTH AVE
From Brighton bridge north to city limits, principal business street

EAST SIDE
104 Ellis Alexander
106 Saunders Mrs E F
114 P H B & N C Ry Co
124 P & L E Station
300 Union D Steel Co
328 Vacant
330-38 McHattie Co
338 Perrott F L
4th intersects
400-2 Salmon M & Son
402 Salmon L A
404 Salmon Mrs Sarah


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

**1927-28**
*SOURCE: BURCHS*

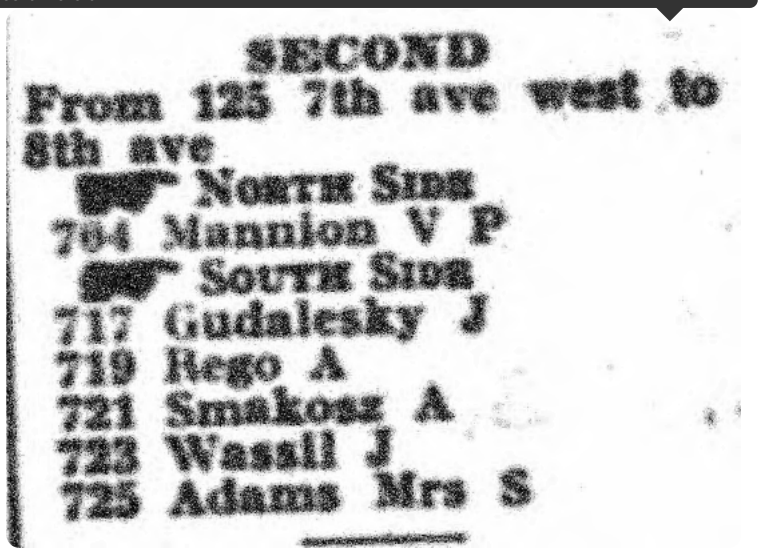
**7TH AVE - B**



West Side
2d begins
201 Parris W M
207 Murray J W
209 Sekeres Anton
213 Miller Joseph
215 Gillingham C E
217 Kosak Peter
223 Totera Ralph
227 Totera Mrs Raffaela
229 Brown Mrs Nellie
231 Valley Ice Co Barns
3d begins
301 Premier O & G Co
329 Hughes E L
331 DeCaro Frank
333 Gast Christ
" Hughes H M
335 Perrati Motor S
337 Reno Paul
4371 Myers Anthony
4th intersects
401-5 Union D Steel Co
" B F Water Power Co
407 Feinberg Samuel
409 Lapeszka Mike

**1925**
*SOURCE: BURCHS*

**2ND ST**



SECOND
From 125 7th ave west to 8th ave
North Side
704 Mannion V P
South Side
717 Gudalesky J
719 Rego A
721 Smakosz A
723 Wassil J
725 Adams Mrs S

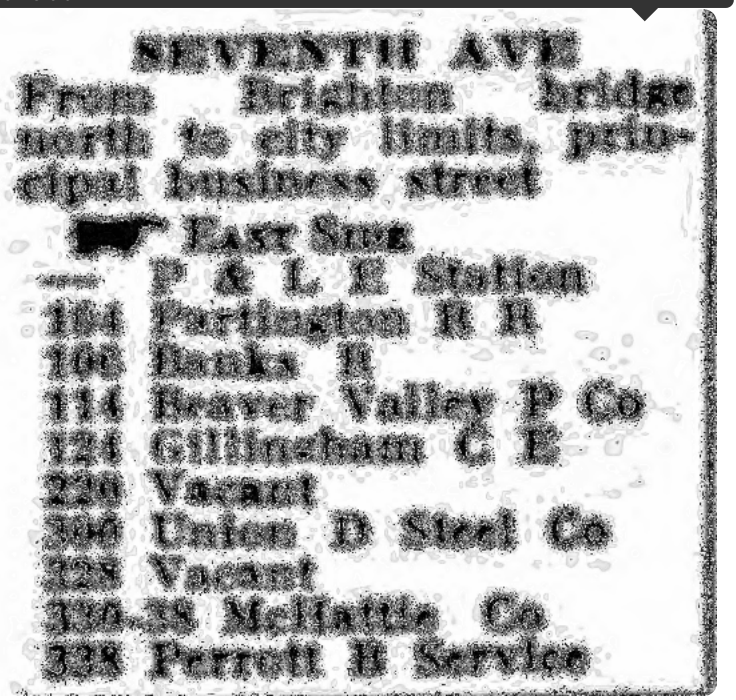




Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

**1925**
*SOURCE: BURCHS*

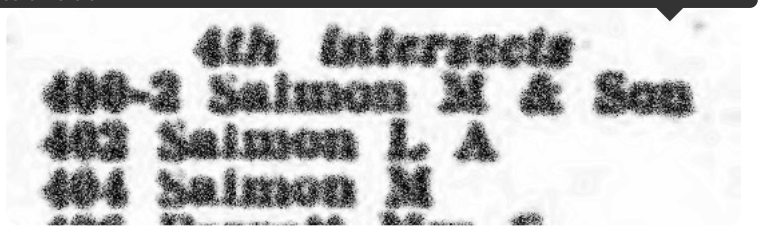
**7TH AVE - A**



SEVENTH AVE
From Brighton bridge
north to city limits, prin-
cipal business street
East Side
P & L E Station
Pittsburgh R R
Banks R
Beaver Valley P Co
Gillingham C E
Vacant
Union D Steel Co
Vacant
McIntyre Co
Perrott B Service

**1925**
*SOURCE: BURCHS*

**7TH AVE - B**

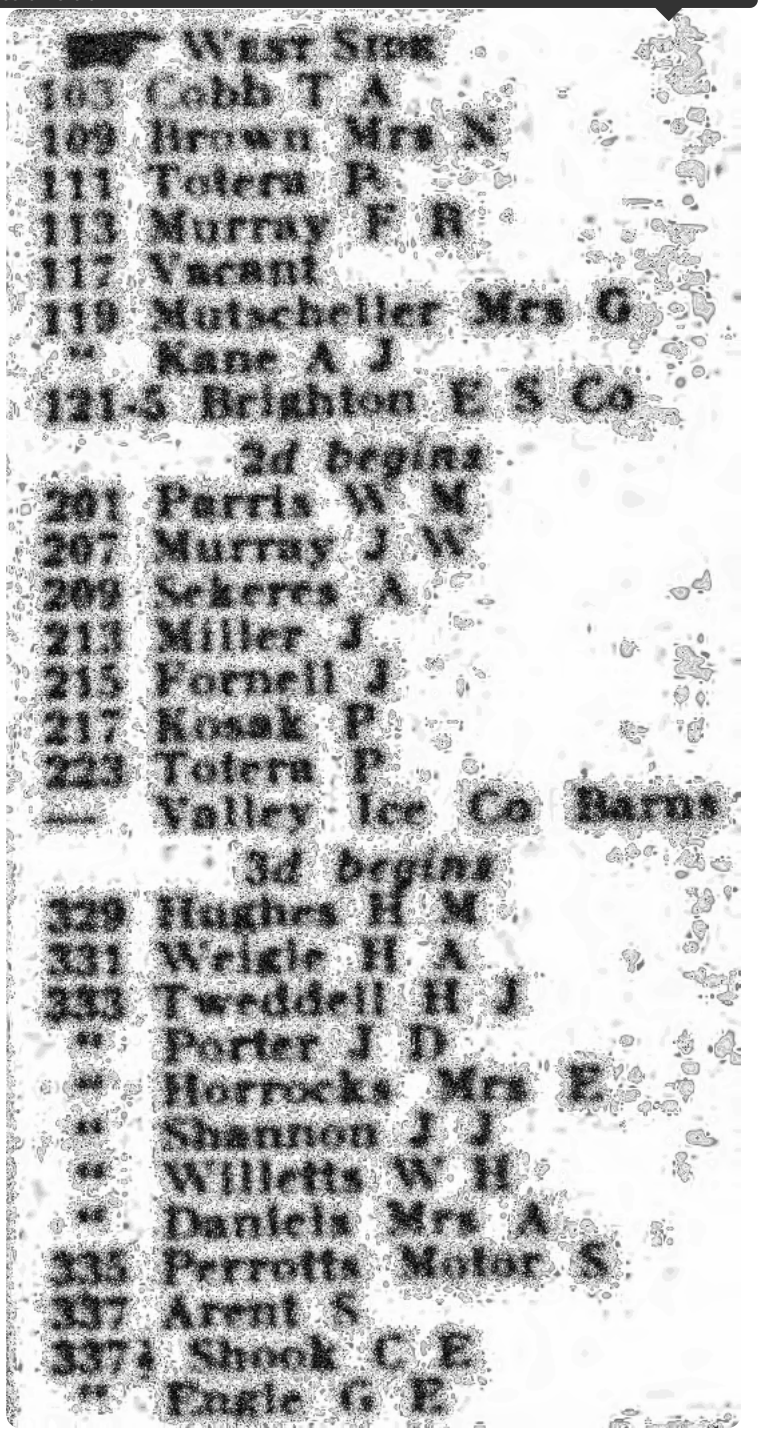


4th Intersects
400-2 Salmon M & Son
403 Salmon L A
404 Salmon M



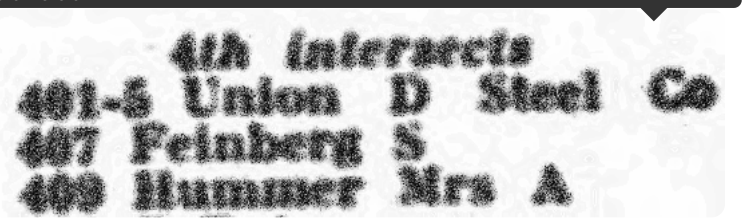


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com



West Side
103 Cobb T A
109 Brown Mrs N
111 Totera P
113 Murray F R
117 Vacant
119 Mutscheller Mrs G
" Kane A J
121-5 Brighton E S Co
2d begins
201 Parris W M
207 Murray J W
209 Sekeres A
213 Miller J
215 Fornell J
217 Kosak P
223 Totera P
Valley Ice Co Barns
3d begins
329 Hughes H M
331 Weigle H A
333 Tweddell H J
" Porter J D
" Horrocks Mrs E
" Shannon J J
" Willetts W H
" Daniels Mrs A
335 Perrotts Motor S
337 Arent S
337½ Shook C E
" Eagle G E





4th intersects
401-6 Union D Steel Co
407 Feinberg S
409 Hummer Mrs A


Report ID: 21051700311 - 5/20/2021
www.erisinfo.com

## APPENDIX E

**Site Photograph Log**

PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS, BEAVER COUNTY
PENNSYLVANIA

**Photo 1**
**Wastewater Treatment Plant as Viewed**
**From the Northwest looking Southeast across the Railroad Tracks**



**Photo 2**
**Keystone Profiles, Ltd.**
**Bordering the Subject Site to the West**



PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTO LOG
BEAVER FALLS WASTEWATER TREATMENT PLANT
CITY OF BEAVER FALLS, BEAVER COUNTY
PENNSYLVANIA

**Photo 3**
**Typical Dry Transformer**
**Pumping Station Building**



**Photo 4**
**Power Distribution Panel**
**Pumping Station Building**



**Photo 5**
**Pumping Station Building**
**Lower Level**



**Photo 6**
**Pumping Station Building**
**As viewed from the West looking East**



**Photo 7**
**East side of Pumping Station Building**
**As viewed from the South looking North towards the Final Settling Tanks**



**Photo 8**
**Main Equipment Building**
**As viewed from the Northwest looking Southeast**



**Photo 9**
**Main Equipment Building**
**Lower Level**



**Photo 10**
**Main Equipment Building**
**Middle Level**

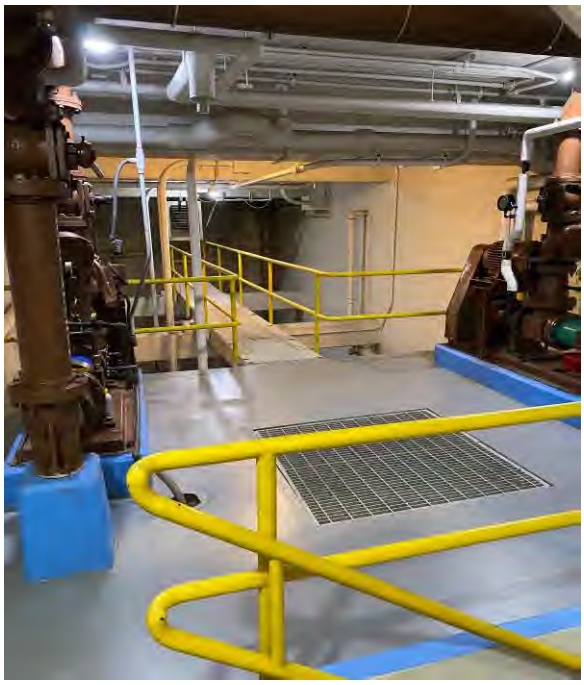


**Photo 11**
**Main Equipment Building**
**Ground Level**



**Photo 12**
**Main Equipment Building-Ground Level**
**Suspect Asbestos Containing Thermal Insulation**

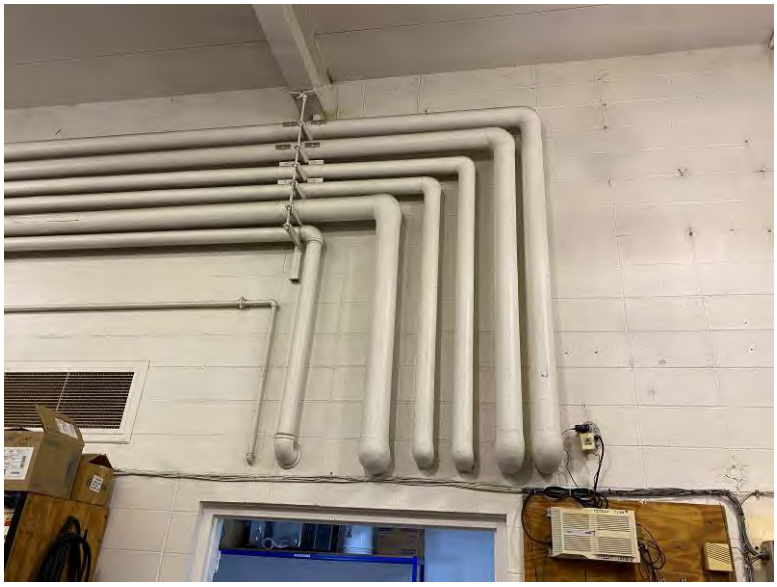


**Photo 13**
**Primary Settling Tanks**



**Photo 14**
**Emergency Generator Enclosure**



**Photo 15**
**Emergency Generator Fill Pipe**
**Diesel Fuel Storage built into Base of Enclosure**




**Photo 16**
**Main Equipment Building**
**Chlorine Storage**



**Photo 17**
**Main Equipment Building**
**Chlorine Storage**



**Photo 18**
**Grit Building**
**Grit Wash and Screw**



**Photo 19**
**Maintenance Garage**



**Photo 20**
**Maintenance Garage Interior**

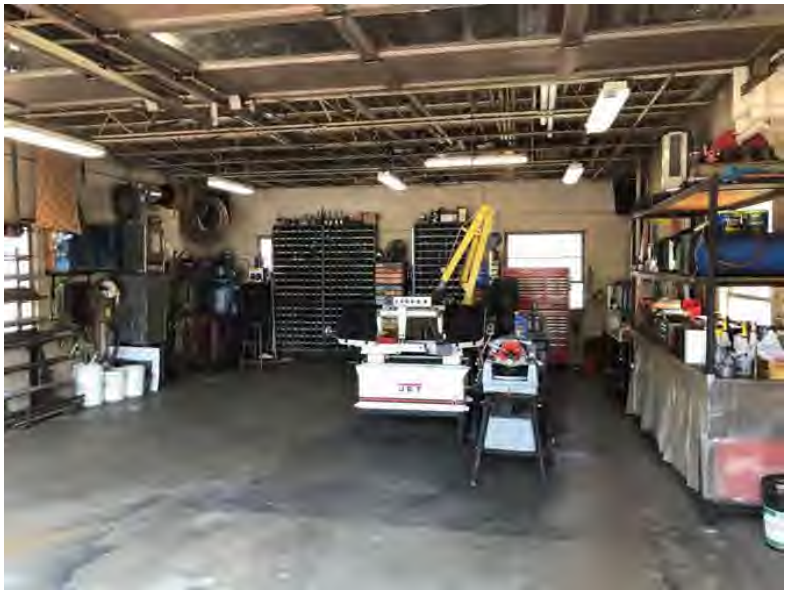


**Photo 21**
**Main Building and Sludge Holding Tank**



**Photo 22**
**Sludge Holding Tank**



**Photo 23**
**Lab Room in Main Building**




**Photo 24**
**Safety Data Sheet and Emergency Medical Equipment**
**Main Building Garage Storage**



**Photo 25**
**Main Building Garage Storage**



**Photo 26**
**Press Building Section of Main Building**



**Photo 27**
**Lower Level of Press Building and Main Building**




**Photo 28**
**Dumpster Receiving Pressed Solids from Press Building**



**Photo 29**
**New Storage Garage**



**Photo 30**
**Flammable Storage area of Storage Garage**



**Photo 31**
**Digester Building**




**Photo 32**
**Digester Building Interior**



**Photo 33**
**Exhaust Vent Adjacent to Digester Building**



**Photo 34**
**Sand Filter for Sludge Overflow**
**Beaver Falls New Brighton Bridge to the South**



**Photo 35**
**Adjoining City Lot to the North**
**Central Rivers Power - Beaver Valley Hydroelectric Project Site Beyond**



**APPENDIX F**

**Freedom of Information Act (FOIA) Requests and Responses**

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

*Good communication is vital in the RTKL process. Complete this form thoroughly and retain a copy; it is required should an appeal be necessary. You have 15 business days to appeal after a request is denied or deemed denied.*

**SUBMITTED TO AGENCY NAME**: City of Beaver Falls (Attn: AORO)

Date of Request: 5/25/2021 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: Mark Brosnan Company (if applicable): Gannett Fleming

Mailing Address: 5 Eves Drive, Suite 200

City: Marlton State: NJ Zip: 08053 Email: mbrosnan@gfnet.com

Telephone: 609.876.8532 Fax: 856.596.8143

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☒ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. Use additional sheets if necessary. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law.*

Requesting the following records associated with the Beaver Falls Water Filtration Plant at Seventh Avenue, City of Beaver Falls: documents regarding underground storage tanks, aboveground storage tanks, chemical spills and releases, emergency responses, or hazardous material incidents at the indicated property from 1950 until the present.

**DO YOU WANT COPIES?** ☒ Yes, electronic copies preferred if available
☐ Yes, printed copies preferred
☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☒ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☒ $0.00.**

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Nov. 27, 2018

pennsylvania
OFFICE OF OPEN RECORDS

# Standard Right-to-Know Law Request Form

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**SUBMITTED TO AGENCY NAME**: City of Beaver Falls (Attn: AORO)

Date of Request: 5/25/2021 Submitted via: ☒ Email ☐ U.S. Mail ☐ Fax ☐ In Person

**PERSON MAKING REQUEST:**

Name: Mark Brosnan Company (if applicable): Gannett Fleming

Mailing Address: 5 Eves Drive, Suite 200

City: Marlton State: NJ Zip: 08053 Email: mbrosnan@gfnet.com

Telephone: 609.876.8532 Fax: 856.596.8143

How do you prefer to be contacted if the agency has questions? ☐ Telephone ☒ Email ☐ U.S. Mail

**RECORDS REQUESTED:** *Be clear and concise. Provide as much specific detail as possible, ideally including subject matter, time frame, and type of record or party names. Use additional sheets if necessary. RTKL requests should seek records, not ask questions. Requesters are not required to explain why the records are sought or the intended use of the records unless otherwise required by law.*

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**DO YOU WANT COPIES?** ☒ Yes, electronic copies preferred if available
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☐ No, in-person inspection of records preferred (*may request copies later*)

Do you want certified copies? ☐ Yes (*may be subject to additional costs*) ☒ No

*RTKL requests may require payment or prepayment of fees. See the Official RTKL Fee Schedule for more details.*

**Please notify me if fees associated with this request will be more than ☐ $100 (or) ☒ $0.00.**

**ITEMS BELOW THIS LINE FOR AGENCY USE ONLY**

Tracking: _____ Date Received: _____ Response Due (5 bus. days): _____

30-Day Ext.? ☐ Yes ☐ No (If Yes, Final Due Date: _____) Actual Response Date: _____

Request was: ☐ Granted ☐ Partially Granted & Denied ☐ Denied Cost to Requester: $_____

☐ Appropriate third parties notified and given an opportunity to object to the release of requested records.

*NOTE: In most cases, a completed RTKL request form is a public record.*
*More information about the RTKL is available at https://www.openrecords.pa.gov*

Form updated Nov. 27, 2018

SOLICITOR'S OFFICE 724-770-4444 PHONE 724-773-7268 FAX 724-770-4457 TTY

**Board of Commissioners**
Daniel C. Camp III, Chairman
Jack Manning
Tony Amadio

**County Solicitor**
Garen Fedeles

**Assistant County Solicitor**
Nathan A. Morgan

**Paralegal**
Stacey L. Householder

May 25, 2021

mbrosnan@gfnet.com
Mark Brosnan
5 eves Drive, Suite 200
Marlton, NJ 08053

***RE: Right to Know Request***

Dear Mr. Brosnan,

Thank you for writing to Beaver County with your request for information pursuant to the Pennsylvania Right to Know Law, 65 P.S. Section 67.101, *et. seq.* On May 25, 2021, you requested information regarding the Beaver Falls Water Filtration Plant located on Seventh Avenue, Beaver Falls, PA.

Your request is misdirected. Beaver County does not possess or maintain these records. You must submit your Right to Know Request to the Pennsylvania Department of Environmental Protection and the City of Beaver Falls, as they are the agencies that may possess these records. Their Open Records Officers can be contacted at:

PA Dept. of Environmental Protection
Rachel Carson Building
400 Market Street
Harrisburg, PA 17106
Attn: Sandra Keister, Open Records Officer
EP-DEP-RTK@pa.gov
717-214-3737 (Phone)
717-705-8023 (Fax)

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010
Attn: Paula J. Durish, Open Records Officer
pdurish@beaverfallspa.org
724-847-2800 (Phone)
724-847-4748 (Fax)

If you choose to interpret this response as a denial, you have a right to appeal to Erik Arneson, Executive Director, Office of Open Records, Commonwealth Keystone Building, 400 North Street, 4th Floor, Harrisburg, PA 17120.

If you choose to file an appeal you must do so within fifteen (15) business days of the mailing date of the agency's response, as outlined in Section 1101. If you have further questions, please contact me. Please be advised that this correspondence will serve to close this record with our office as permitted by law.

Sincerely,

Stacey L. Householder
Open Records Officer

# Information File Review

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

## Submitter Information

**Name**
Mark Brosnan

**Company**
Gannett Fleming

**Address**
5 Eves Drive

**City**
Marlton

**State**
NJ

**Zipcode**
08053

**Telephone #**
6098768532

**Email**
mbrosnan@gfnet.com

## Programs for file review - check all that apply

- [x] **All Programs**
- [ ] **Air Quality**
- [ ] **Clean Water**
- [ ] **Environmental Cleanup (Storage Tanks, Hazardous Sites)**
- [ ] **Oil and Gas(Southwest, Northwest, North-Central Regions)**
- [ ] **Radiation Protection(Southwest, Southeast, South-Central Regions)**
- [ ] **Safe Drinking Water**
- [ ] **Waste Management**
- [ ] **Waterways and Wetlands**
- [ ] **Other**

## Site Information (Click the "ADD MORE" button) - Use one row per site/permit

ADD MORE

**Site Name/Address *** Character limit is 200
Beaver Falls Water Filtration Plant
Seventh Avenue

**Permit #** Character limit is 100

**Municipality ***

Beaver Falls

**County ***

BEAVER

**Site Name/Address** Character limit is 200

**Permit #** Character limit is 100

**Municipality**

**County**

**Site Name/Address** Character limit is 200

**Permit #** Character limit is 100

**Municipality**

**County**

## File Time Frame

**Dates or Timeframe of Records Requested ***

1950 to present

## Please Describe the Records You Wish to Review

Requesting the following records associated with the Beaver Falls Water Filtration Plant at Seventh Avenue, City of Beaver Falls: documents regarding underground storage tanks, aboveground storage tanks, chemical spills and releases, emergency responses, or hazardous material incidents at the indicated property from 1950 until the present.

## Records Certifications and ADA Accommodations

☐ **Records Certification? A fee of $1 will be charged**

☐ **I am requesting accommodations under The Americans with Disabilities Act**

## Please Select DEP Regional Office(s)

**Region ***

SOUTHWEST

Submit Cancel

| | |
|---|---|
| **From:** | EP, SW Informal Review |
| **To:** | Brosnan, Mark C. |
| **Cc:** | EP, SW Informal Review |
| **Subject:** | IFR-2021-0306 |
| **Date:** | Tuesday, May 25, 2021 2:32:27 PM |
| **Attachments:** | Informal File Review - Submitter MARK BROSNAN.html |

**[EXTERNAL EMAIL]:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

IFR-2021-0306

The DEP Southwest Regional Office has received the attached informal file review request.

Please note that the Southwest Regional Office is currently closed due to the COVID-19 disaster emergency and no in-person file reviews will be conducted. Until such time as the office is fully reopened, all responses to file reviews will be through electronic means, either via email or mailed on a flash drive.

We will contact you in approximately four to six weeks once it is determined what records we have and either provide you the records via email or on a flash drive.

Additional information regarding file reviews can be found on our website, http://www.dep.pa.gov/Citizens/PublicRecords/Pages/Informal-File-Review.aspx.

**From:** donotreply@pa.gov <donotreply@pa.gov>
**Sent:** Tuesday, May 25, 2021 11:29 AM
**To:** EP, SW Informal Review <RA-EPSWINFORMFILERE@pa.gov>
**Subject:** MARK BROSNAN Informal File Review Request

Please see attached File Review Request.

Please remember to send a confirmation letter within 48 business hours.

Submitter: **MARK BROSNAN**

Email: mbrosnan@gfnet.com

| Site Name | Permit # | Municipality | County |
|---|---|---|---|
| BEAVER FALLS WATER FILTRATION PLANT SEVENTH AVENUE | | BEAVER FALLS | BEAVER |

# CITY OF BEAVER FALLS
# MEMO – ASBESTOS REMOVAL
# July 19, 2021

This Memo is to notify potential bidders on the sale of the City of Beaver wastewater assets that the City plans to remove the asbestos pipe insulation cited in the document titled “BeaverFalls_Asbestos” in the “Memos” folder posted in the data room prior to the closing of the sale. The City is in the process of engaging the appropriate professionals to safely remove the material.

# EXHIBIT P1

# Beaver Falls Area
# Regional Sewage Facilities Plan

DARWIN R. MAIN

Prepared for:

**City of Beaver Falls**
**Borough of Homewood**
**Borough of Big Beaver**

**June 1993**

Prepared by:

**Widmer Engineering Inc.**
806 Lincoln Place
Beaver Falls, PA 15010

# Beaver Falls Area
# Regional Sewage Facilities Plan

Prepared for:

## City of Beaver Falls
## Borough of Homewood
## Borough of Big Beaver

**June 1993**

Prepared by:


## Widmer Engineering Inc.
**806 Lincoln Place**
**Beaver Falls, PA 15010**

# TABLE OF CONTENTS


| Topic | | Page |
|---|---|---|
| Executive Summary | | i |
| Introduction | | 1 |
| **Section 1 - Planning Objectives and Needs** | | |
| 1.1 | Identification of Wastewater Planning | 2 |
| 1.2 | Identification of Planning Documents Adopted Pursuant to Act 247 | 7 |
| 1.3 | Consistency of Existing and Proposed Planning | 15 |
| 1.4 | Identification of Wastewater Treatment Needs for Growth Areas | 20 |
| **Section 2 - Physical Description of Planning Area** | | |
| 2.1 | Identification of Planning Boundaries and Physical Description | 23 |
| 2.2 | Analysis of Soils | 23 |
| 2.3 | Identification of Geological Features which would Influence Sewage Treatment or Disposal and Water Supplies | 30 |
| 2.4 | Analysis of Population Information as Related to Sewage Facilities Needs | 35 |
| **Section 3 - Evaluation of Existing Wastewater Treatment and Conveyance Systems** | | |
| 3.1 | Description of Wastewater Treatment Systems | 47 |
| 3.2 | Description of Sewer System Components | 52 |
| 3.3 | Identification of Areas Using On-Lot Subsurface Disposal | 55 |
| 3.4 | Identification of Unpermitted Collection and Disposal Systems | 57 |
| 3.5 | Identification of Sludge Generation, Transport, and Disposal Methods | 57 |
| **Section 4 - Evaluation of Wastewater Treatment Needs** | | |
| 4.1 | Identification of Areas Using On-Lot Disposal Technology | 60 |
| 4.2 | Analysis of Malfunctioning On-Lot Systems | 61 |
| 4.3 | Analysis of Potential Malfunctions Due to Soils or Site Conditions | 62 |
| 4.4 | Analysis of Other Potentially Malfunctioning Systems | 64 |
| 4.5 | Identification of Areas utilizing Illegal Disposal Systems | 65 |

# TABLE OF CONTENTS


| Topic | | Page |
|---|---|---|
| **Section 5 - Planning and Facilities Alternatives** | | |
| 5.1 | Identification of Alternatives | 66 |
| 5.2 | Evaluation of Sewage Management Program Alternatives | 87 |
| 5.3 | Identification of Nonstructural Planning Alternatives | 90 |
| 5.4 | Evaluation of Local Agency Program | 91 |
| 5.5 | Evaluation of Alternatives | 92 |
| 5.6 | Evaluation of Capital Financing Plan | 109 |
| **Section 6 - Institutional Evaluation and Recommended Alternatives** | | |
| 6.1 | Identification of Public Organizations Providing Wastewater Service | 116A |
| 6.2 | Analysis of Existing Wastewater Treatment Authorities | 116A |
| 6.3 | Identification of Institutional Alternatives Necessary for Plan Implementation | 117 |
| 6.4 | Evaluation of Alternatives | 121 |
| 6.5 | Identification of Recommended Municipal Management Alternative | 122 |
| 6.6 | Identification of Administrative and Legal Activities Necessary for Plan Implementation | 123 |
| 6.7 | Conclusion | 125 |
| **Section 7 - Selected Wastewater Treatment and Institutional Alternatives** | | |
| 7.1 | Selected Wastewater Treatment Alternatives | 126 |
| 7.2 | Selected On-Lot Treatment Alternatives | 126 |
| 7.3 | Selected Wastewater Collection and Conveyance Alternative | 127 |
| 7.4 | Selected Institutional Alternative | 128 |
| 7.5 | Financing Methods Available | 129 |
| 7.6 | Growth Areas | 129 |
| **Section 8 - Implementation** | | |
| 8.1 | Design and Construction Schedule | 131 |
| 8.2 | Administrative Activities Schedule | 131 |

# TABLE OF CONTENTS


| Topic | | Page |
|---|---|---|
| **Section 9 - PennVest Requirements** | | |
| 9.1 | I & I Study of the Beaver Falls Collection System | 132 |
| 9.2 | Innovaion and Alternative Technologies | 139 |
| 9.3 | Open Space and Recreational Opportunities | 140 |
| 9.4 | Alternatives Evaluation / Cost Effective Analysis | 140 |
| 9.5 | Environmental Assessment | 140 |

# LIST OF TABLES


| | Title | Page |
|---|---|---|
| 1-1 | Summary of Flows | 22 |
| 2-1 | Study Area Population Projections | 27 |
| 2-2 | Projected Development | 35 |
| 3-1 | Beaver Falls W.P.C.P. Permit Levels | 47 |
| 3-2 | City of Beaver Falls Sanitary Sewer System | 53 |
| 3-3 | Joint Sewer User Contributory Flows | 53 |
| 3-4 | Composition of Beaver Falls W.P.C.P. Flows | 54 |
| 3-6 | Evaluation of Beaver Falls Sewer System | 56 |
| 5-1 thru 5-18 | Cost Alternatives | 66 |
| 5-19 thru 5-28 | Financing Alternatives | 93 |
| 6-1 | Evaluation of Municipal Management Alternatives | 122 |


# LIST OF APPENDICES


Appendix A - Beaver Falls Sewer System
Appendix B - Beaver Falls W.P.C.P. Study
Appendix C - Borough of Koppel Sewer System
Appendix D - Consumers Guide to On-Lot Sewage Disposal System Operation and Maintenance
Appendix E - Correspondence
Appendix F - Public Comments and Municipal Response
Appendix G - Municipal Adoption Resolutions


# LIST OF PLATES


Plate 1 - Base Map
Plate 2 - Zoning Map
Plate 3 - Soils Map
Plate 4 - Wetlands/Floodplains Map
Plate 5 - Geology Map

# BEAVER FALLS AREA REGIONAL OFFICIAL SEWAGE FACILITIES PLAN

## EXECUTIVE SUMMARY

Recently, the City of Beaver Falls was awarded a PennVEST loan to replace an extremely leaky section of sewer known as the East Trunk Line. During this project, the City decided to enlarge the line to allow for future development. The Pennsylvania Department of Environmental Resources ruled that the City would be required to prepare an official Sewage Facilities Plan to expand the sewer line. DER defined an area to be studied, which included the City of Beaver Falls and the Borough of Big Beaver, Homewood, and Koppel. Beaver Falls then declined the loan and began work on the Plan.

The plan included several alternatives. Several of the alternatives included only the City of Beaver Falls. They include: expansion of the treatment plant, expansion of the interceptor line from the overflow manhole to the treatment plant, and replacement-in-kind of the East Trunk Line. These alternatives would solve the sewage disposal problems within the City, but would not address the sewage disposal needs of Big Beaver or Homewood, and would discourage economic growth. For these reasons, the alternatives including only the City of Beaver Falls were not selected as the chosen alternatives.

Another alternative was considered in which the same Beaver Falls alternatives were implemented with the addition of a pump station to serve Big Beaver Plaza. This alternative would have the same disadvantages as the Beaver Falls alternatives alone: limited economic growth and the lack of service for other needs areas. For these reasons, this alternative was not chosen for implementation.

A further alternative explored the sewering of Homewood and the extension of an interceptor to Homewood to convey their sewage to the City for treatment. This would involve 2 pump stations. This alternative would provide for slight economic growth in the enterprise zone area south of Homewood, but the needs areas would still not be addressed adequately. Therefore, this alternative was not chosen.

An alternative to serve the Holiday Inn on Route 18 as well as sewering Homewood and the connection of Koppel was also considered. This alternative would involve 3 pump stations. This alternative allows for a greater degree of economic growth in the enterprise zone, however the motels to the north of the Holiday Inn would still not be served. Therefore, this alternative was not chosen.

An alternative extending sewer lines to the motels north of the Holiday Inn as well as sewering Homewood was also considered. The alternative would involve 3 pump stations, and would include the following: expansion of the Beaver Falls treatment plant, replacement of leaky 24 inch terra cotta sewer pipe with PVC, and expansion of the existing sewer lines from the northern border of the City to 11th Street as well as the sewer extension to serve the motels. This alternative offers the maximum in economic growth potential, as it will be able to serve the Route 351/Route 60 enterprise zone as well as the entire portion of the Route 18 enterprise zone which can be feasibly served. Capacity is provided for the Borough of Koppel and the rest of the Route 18 enterprise zone which could feasibly flow to Koppel. Capacity is also provided for the Route 551 enterprise zone. Due to the fact that this alternative does serve all of the present and potential needs areas, and because of the potential for economic growth that is provided, this alternative has been selected as the alternative of choice.

The additional alternative of extending sewers to serve the Route 351/Route 60 enterprise zone and the Route 551 enterprise zone has also been considered. However, the small number of service connections which would be added do not justify the additional expense of providing sewers at this time. However, if concrete plans for developing these areas develop, the feasibility of extending these sewer lines should be considered.

# INTRODUCTION

The Pennsylvania Sewage Facilities Act (Act 537), enacted by the legislature in 1968, required that every municipality in the state must develop and maintain an up-to-date sewage facilities plan.

The main purpose of the sewage facilities plan of a municipality is to protect the health, safety, and welfare of the citizens living in the municipality. Problems such as malfunctioning on-lot septic systems, overloaded treatment plants or sewer lines create real and immediate threats to the health, safety, and welfare of the citizen. Development and implementation of plans for the sanitary disposal of sewage waste can aid in the resolution of such problems.

Another purpose of the plan is to prevent future problems from occurring where sewage plans are consistent with land use plans, municipal officials are able to direct development to areas that have adequate sewage service, or where sewer service is planned. The planning area is shown on Plate I.

# SECTION 1 - PLANNING OBJECTIVES AND NEEDS

The following is a summary of planning studies performed to date in the study area, including wastewater, land and water planning.

## 1.1 IDENTIFICATION OF WASTEWATER PLANNING

### 1.1.1 COMPREHENSIVE WATER QUALITY MANAGEMENT PLAN, PADER, 1979

The Comprehensive Water Quality Management Plan for the Ohio Valley study area was published in October, 1979 and identifies the then-existing problems in the Beaver River Drainage Basin as sewage, urban runoff, and industrial wastewater. On-lot disposal problems are also cited. The apparent best alternatives listed are:

a) The Chippewa Township sewage treatment plant was to be upgraded in 1980 to treatment level 2A (activated secondary treatment plus 2-stage nitrification and effluent aeration) and expanded in 1995. Based on the NPDES permit for the facility, upgrading the facility was not necessary and has not been done. The Chippewa Township adopted Sanitary Authority has adopted an Act 537 Plan to expand the plant to 2.5 MGD. No schedule was given, but the plan states that the expansion will occur as soon as possible.

b) The conventional sewage treatment plant in Koppel was to be unchanged. This recommendation has been implemented to date.

c) A sewage treatment plant utilizing lagoon treatment was to be constructed in Eastvale by 1985. This recommendation has not been implemented. It has since been determined

that it would be more feasible, both environmentally and economically, for the Borough to pump its sewage to the City of Beaver Falls. This alternative has been implemented.

d) The Homewood area was to have been tied in with the Beaver Falls sewage treatment plant by 1990. This has not been implemented to date but this study is considering this alternative.

e) Sewer lines and pump stations were to be installed to provide municipal sewage treatment to areas of Big Beaver, West Mayfield, White Township, and Patterson Township. This has been done.

### 1.1.2 BEAVER COUNTY COMPREHENSIVE SEWAGE FACILITIES PLAN, BEAVER COUNTY PLANNING COMMISSION, 1971

In 1971, the Beaver County Comprehensive Sewage Facilities Plan proposed a three-phase, 10-year plan. The plan divided the county into planning districts. The planning districts addressed in this official plan include: Planning District Number 2, consisting of Big Beaver Borough, Homewood Borough, Koppel Borough, and New Galilee Borough; and Planning District Number 5, consisting of the City of Beaver Falls, the Borough of Eastvale, Patterson Heights, and West Mayfield, and Chippewa, Patterson, and White Townships.

*PLANNING DISTRICT NUMBER 2*

During Phase I, 0-3 years, a survey of existing on-lot disposal systems was to have been done, and feasibility studies performed for the Route 18 and Shenango and Friendship Road areas. During Phase II, 3-5 years, sewage facilities were to be constructed in Chippewa Township and

Koppel Borough for the Route 18 and Shenanago and Friendship Road areas, if feasible. During Phase III, 5-10 years, additional feasibility studies were to have been completed based on growth and development and health problems.

*PLANNING DISTRICT NUMBER 5*

During Phase I, it was recommended that the City of Beaver Falls upgrade their sewage treatment plant to secondary treatment. Also recommended were: a collection line investigation for deficiencies and repairs; cooperative participation in feasibility studies with Patterson Heights, White Township, and Patterson Heights Borough; and cooperate in feasibility studies with Eastvale Borough. During Phase II, the following were recommended: the existing collection system be investigated and repaired, if necessary; feasibility studies be conducted in anticipation of growth; and that Eastvale construct a plant, or connect to Beaver Falls if feasible. During Phase III it was recommended that feasibility studies be conducted for growth and that a feasibility study be conducted in Patterson Township. These recommendations were taken into account, and all of the previously mentioned municipalities have connected to the Beaver Falls system, where feasible. In addition, sewer system investigations and improvements have been ongoing since 1964, and the plant has been upgraded.

### 1.1.3 CITY OF BEAVER FALLS COMPREHENSIVE PLAN, CLIFTON E. RODGERS & ASSOC., 1969

The Beaver Falls Comprehensive Plan has addressed the sewerage system for the City. Several trunk line improvements were recommended, including: a larger line on Third Street; a connection

on Eleventh Avenue between Tenth and Eleventh Streets; a connection on First Avenue between Eleventh and Sixteenth Streets; a trunk line paralleling the river and the railroad from twenty-fourth Street Extension; and a trunk line extension along Ingrich Road from approximately Thirty-Second Street Extended to Thirty-Fourth Street. The plan also recommends that the treatment plant be upgraded to secondary treatment as soon as possible. For unknown reasons, these recommendations were never implemented, other than upgrading the treatment plant.

### 1.1.4 CITY OF BEAVER FALLS AND ADJACENT COMMUNITIES SEWERAGE NEEDS STUDY UPDATE, WIDMER ENGINEERING INC., 1980

This plan re-recommended the same sewer system improvements that were recommended in the Comprehensive Plan. These problem areas were first noted in 1964 by Consoer, Townshend and Associates and later reaffirmed in 1972 by Michael Baker, Jr., Inc. This study also quoted a 1976 study by Baker which stated that four interceptor sewer segments must be increased in capacity. These four segments are the same segments recommended in 1964 and 1972, with the exception of the line on First Avenue. The study also recommended construction of the treatment plant to allow for recirculation of secondary sludge, and acceptance of sewage from Eastvale and North Sewickley Township, providing that the conveyance to Beaver Falls if feasible.

The City has constructed and owns the sanitary sewer line and pump station serving the Borough of Eastvale. North Sewickley Township is still examining the feasibility of treating its sewage of the City plant, and the sludge recirculation mechanism has been installed at the plant. The sewer system improvements have not been carried out.

### 1.1.5 COMPREHENSIVE PLAN FOR THE BOROUGH OF BIG BEAVER, BIG BEAVER PLANNING COMMISSION, 1978

In 1978, the Big Beaver Planning Commission developed a comprehensive plan. The plan recognized that public sewerage facilities were a necessity for the Borough, since the majority of soils in the Borough are generally not suitable for on-lot sewage disposal.

The Borough is divided by a major watershed divide. Due to the rural nature of the Borough west of the divide, it was determined that this area should remain rural. Areas to the east of the divide, draining to the Beaver River, are planned for more intense development, including public sewers. The southern portion of Shenango Road from Stell-Rich Heights and the elementary school are proposed to be sewered and treated by the Chippewa Township Sanitary Authority.

The developed areas around Koppel are proposed for sewerage service at Koppel. The Rt 60-Rt 351 interchange area is proposed for sewerage service through Koppel or an individual sewerage system.

The Chippewa Township Sanitary Authority has recently adopted a 537 plan which includes service to the areas proposed in the Big Beaver Comprehensive Plan. The Borough has not been able to accomplish the sewerage service in areas proposed for service by Koppel due to a variety of reasons, including development density, financing, and lack of intermunicipal cooperation. This plan will study the feasibility of sewering these areas through the Beaver Falls system.

## 1.2 IDENTIFICATION OF PLANNING DOCUMENTS ADOPTED PURSUANT TO ACT 247

No land use planning or zoning has been done at the county level. Comprehensive plans have been completed by the City of Beaver Falls, the Borough of Big Beaver, and the Borough of Koppel. These municipalities have also adopted Zoning and Subdivision and Land Development Ordinances. These planning documents are described below.

### 1.2.1 CITY OF BEAVER FALLS COMPREHENSIVE PLAN

The land use plan for Beaver Falls recognizes that the City is generally fully developed. Residential land use comprises approximately 608 acres, or 45.2% of the City's 1344 acres. Future construction in residential areas is recommended to prefer multi-family residence over single-family units. This is recommended to cluster development, and to allow for consolidation of open land into communal areas providing for recreation and leisure activities. Commercial land use is divided into three classifications: Downtown, Automotive-oriented, and Neighborhood. The Downtown classification is to be unchanged, and comprises the retail shopping center for the City. The Automotive-oriented uses are planned for the southern portion of the city and approximately in the center of the city at Twenty-fourth Street. These uses include supermarkets, auto sales and service, drive-in facilities, and other uses inappropriate in the Central Business District. The Neighborhood facilities are proposed in the northern portion of the City to serve the low density residential district and students of Geneva College. These uses include: grocery, drugstores, barbers and beauty salons, professional services, branch banks, restaurants, laundromats, and

similar businesses. Total commercial uses would occupy approximately 119 acres. Public and Semi-Public Lands comprise approximately 294 acres and include: library, municipal buildings, fire stations, post office, United Hospital, sewage treatment plant, schools, playgrounds, parks, and conservation areas.

No change is anticipated in this land use. Industrial and railroad uses occupy a total of approximately 323 acres. In an effort to maintain and attract new industry, no recommendations were made to reduce these classified use areas.

### 1.2.2 THE BEAVER FALLS CITY ZONING ORDINANCE

The City's Zoning Ordinance divides the City into six districts: R-1, Residential-Single Family; R-2, Residential-Multi-family; R-3, Residential Limited Use; C-1, Commercial-Pedestrian; C-2, Commercial-Automotive; and I, Industrial and Railroad. These districts are shown on plate 2. The R-1 District allows a variety of uses, including one and two family dwellings, churches, schools, public parks, municipal buildings, radio & television stations or utility substations, and home occupations. This District is concentrated in the northern portion of the City, which is consistent with the Land Use Plan. The R-2 District allows all of the uses of the R-1 District, as well as multiple dwellings and apartments, clubs and lodges except those which serve alcohol to the public, and community garages and off-street parking for residential uses. This district is concentrated in the central and southern portions of the City, and west of Geneva College and is consistent with the Land Use Plan. The R-3 District was created mainly to protect and preserve natural resources and open space not readily adaptable to economic development. Permitted uses

include preservation of natural amenities, production of forest products and agricultural activities, parks and recreation grounds, utility transmisson and distribution facilities, municipality buildings, single family detached dwellings, and transmission and receiving towers. This district is located on the steep slopes of the western part of the City, as well as along the floodplain of Walnut Bottom Run. Another area is located along the floodplain of the Beaver River in the northeastern portion of the City. The C-1 district represents the Downtown commercial district in the Land Use Plan. It is mainly concentrated along Seventh Avenue in the central to southern portion of the City, although there are areas around Geneva College. The C-2 District represents the automotive oriented commercial uses in the Land Use Plan. It is located in the areas recommended in the land use plan. The I District is located at the extreme edges of the City, basically along existing use areas.

The Beaver Falls City Zoning Ordinance contains no provisions for on-lot sewage disposal. Floodplains are addressed to a limited extent by the R-3 district and Drainage Regulations. The Drainage Regulations are out of date, and should be updated to be consistent with DER Regulations for floodplain management.

### 1.2.3. BEAVER FALLS SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

This ordinance addresses both flood plains and stormwater. Both of these sections are based on Ordinance 1277, dated February 24, 1970. These sections do not appear adequate in view of recent regulations on floodplains and stormwater, and therefore should be updated.

### 1.2.4. BOROUGH OF BIG BEAVER COMPREHENSIVE PLAN

The Borough has established a Special Conservation land use category to protect sensitive areas. Areas included in this category are: all major areas with slopes greater than 25%, major 16-24% slope areas adjacent to 25% slope areas, 100-year floodplains, low-lying swampy areas having unique wildlife habitats, and land areas that are environmentally sensitive. Environmentally sensitive areas are: State Game Lands, the Clarks Run Gorge associated with Homewood Falls, scenic steep hillsides of the Beaver River and the steep valley walls and unique wildlife habitat areas of Stockman Run, including the Butternut Falls area. Industrial development in the study area is located between Route 18 and the Beaver River between the Turnpike and Koppel. Also planned for industrial development is an area on the southern corner of the Rt 60 - Rt 351 interchange, and an area on the east side of Route 18 just north of Koppel. Highway Commercial Land uses are planned east of Route 18 south of Homewood, on Rt 18 north of Homewood, at the intersection of Rts 18 & 351 west of Koppel, and the intersection of Rts 60 & 351. General urban development is planned west of Rt 18 north and south of Homewood, west of Koppel, and at the intersection of Rts 60 & 351. Suburban development is planned south of the Conrail right-of-way and in the northeastern part of the Borough. Rural development makes up the remainder of the land use in the Borough.

Some of the proposed land uses are not consistent with sewage facilities planning, especially in the areas around Koppel and the Route 18 corridor. These areas are proposed for high density development, but only on-lot methods are available for sewage disposal. This plan will investigate the feasibility of sewering these areas. Floodplains and wetlands are protected by the Special

Conservation Land Use category. This category should protect all environmentally sensitive areas.

### 1.2.5. BOROUGH OF BIG BEAVER ZONING ORDINANCE

The Boroughs Zoning Ordinance divides the land area into seven districts: SC, Special Conservation; R-1, Rural Development; R-2, Suburban Residential Development; R-3, General Urban Development; C-1, Highway Commercial Development; C-2, Neighborhood Commercial Development; and I, Industrial Development. These districts are shown on plate 2. The zoning exactly corresponds to the Land Use Plan with the exception of the areas shown on the Land Use Plan as having community facilities. These areas are zoned for Suburban Residential Development. This is not an inconsistent use, since the existing use map shows that only a portion of the land is used for community facilities, while the rest is not currently developed. In addition, R-2 zoning does not preclude use of the land for community facilities - such use is permitted by special exception. Also, the Borough has no zoning district for community facilities. The SC district is unique in that it has no uses permitted by right - all uses in this district are by conditional use. Principal uses include single-family detached residential dwellings, recreational, educational, or agricultural uses. Accessory uses include private garage or parking area, or other uses customarily incidental to the principal uses. Minimum Lot sizes are 1 acre for single-family dwelling units, and 5 acres for other principal uses, and all buildings must cover no more than 30% of the total land area. R-1 district allows single-family detached and semi-detached dwellings, mobile homes, agricultural uses, and private swimming pools. Lot sizes depend on method of sewage disposal, with on-lot disposal requiring one acre per lot, or 30,000 square feet for

single-family semi-detached units. Lot coverage shall be less than 30%. R-2 zoning permits single-family detached residential dwellings by right. Other uses, such as community facilities, are permitted by special exception. On-lot sewage disposal requires 20,000 square foot lots. Lot coverage shall be less than 30%. Principal Uses for the R-3 district include multi-family dwelling units, recreational uses, public uses, general business offices, professional offices, banks, and restaurants. Lot sizes for on-lot sewage disposal are 15,000 sq. ft per dwelling unit for multi-family units and 20,000 sq. ft. for single-family semi-detached units. Lot coverage shall not exceed 50%. The C-1 zoning district allows the following conditional uses: retail uses, wholesale uses, service and professional offices, recreational uses, public uses, and integrated business centers and shopping malls. No minimum lot sizes are required; all developments are handled on a case-by-case basis. Lot coverage shall not exceed 70%. The C-2 district allows retail business, business, service, and professional office buildings, recreational, religion, or educational buildings, or public uses and buildings. Lot sizes are as the C-1 district, and the lot coverage shall not exceed 50%. The I district permits wholesale uses or public uses by right, and manufacturing and industrial activities, auto body repair shops, research and development activities, and junk yards by conditional use. Minimum lot sizes are as the commercial districts, with less than 70% lot coverage. The zoning ordinance has been amended several times since its adoption concerning floodplain regulations. One amendment stated that a certification would be required stating that the project would comply with all requirements of this Ordinance and all applicable laws, codes and regulations as promulgated and enacted by the United States Government, the Commonwealth of Pennsylvania, or their Agencies, Departments and/or Bureaus, as shall be in

effect at the time of the application being submitted and another amendment prohibits any new construction, development, use, activity, or encroachment that would cause any increase in flood heights. The ordinance as amended makes the following statement:

"As to surface water drainage and runoff, reference is hereby made to the Pennsylvania Storm Water Management Act and any regulations as may be promulgated thereunder. The floodplain and storm water control regulations are therefore adequate, since PA DER regulations are effectively incorporated by reference."

It appears that minimum lot sizes for zoning districts R-2 and R-3 are too small to adequately accommodate on-lot disposal systems and protect groundwater quality. Groundwater protection is important in Big Beaver, since the majority of residents utilize on-site wells. It is recommended that these lot sizes be retained for areas proposed for sewers within 10 years, but that the minimum size should be 1 acre for long-term OLDS use.

### 1.2.6 BIG BEAVER BOROUGH SUBDIVISION ORDINANCE

In order to subdivide in Big Beaver Borough, the subdivision ordinance requires developers to identify existing waterways, flood plains, drainage courses, and existing drainage facilities structure or systems. It is required to maintain a 20' isolation distance from flood plains. If the development is within 1500 linear feet of a sewer line, the development is required to connect to it. The Borough will not issue building permits until it, and the DER, approve of the methods of water supply and sewage disposal.

### 1.2.7 THE BOROUGH OF KOPPEL ZONING ORDINANCE

The Borough of Koppel Zoning Ordinance was established in 1958. It sets up six different land uses. They are: R1 - single family residential; R2 - General Residential; C1 - General Business; C2 - Heavy Commercial; I - Industrial; and T - Transitional. The transitional zoning creates a 100 foot buffer zone between industrial development and other land uses. There are no known proposed zoning changes at this time.

R1 and R2 zoning establish the minimum required lot area of 6,000 sq. ft. In R2 zones, the lot area must increase 1,500 sq. ft. for each family unit greater than one. Since these zones are sewered, it is consistent with the subdivision ordinance for the Borough.

### 1.2.8 THE BOROUGH OF KOPPEL SUBDIVISION ORDINANCE

The Borough of Koppel has a sewage treatment plant. The subdivision ordinance enacted in 1958 stipulates the following:

Residential lots that are not served by sanitary sewers or public water shall be not less than 100 feet wide at the building line nor less than 20,000 sq. ft. in area per family;

Residential lots served by either public water or sanitary sewers shall be not less than 100 feet wide at the building line nor less than 15,000 sq. ft. in area per family.

Residential lots where served by both public water and sanitary sewers shall not be less than sixty feet wide at the building line nor less than 6,000 sq. ft. in area per family;

Lots intended for more than one family shall increase minimum lot area size by 1,500 sq. ft. per each family unit more than one; and,

Subdivision of land for uses other than residential shall be subject to review by the Borough Engineer and the Planning Commission for size, depth, and width of lots and parking areas.

The borough is almost fully developed and no additional subdivisions are presently proposed. Storm water drainage plans are subject to the approval of the Borough Engineer for new development. In areas where a sanitary sewer is available, all properties within the subdivision will connect to the sanitary sewer. In areas where a sanitary sewer is not available, individual septic tanks or project sewer systems must be provided, reviewed, and approved by both the Borough Engineer and the State Health Department (now the Department of Environmental Resources).

## 1.3 ANALYSIS OF EXISTING AND PROPOSED PLANNING FOR CONSISTENCY WITH:

### 1.3.1 COMPREHENSIVE WATER QUALITY MANAGEMENT PLAN (COWAMP)

As previously detailed, COWAMP recommended Homewood Borough and portions of Big Beaver and West Mayfield Boroughs and White and Patterson Townships be tied into the Beaver Falls plant, that Eastvale Borough build their own plant, and that the plant of Koppel remain unchanged. At the current time, several of these recommendations have been implemented. West Mayfield Borough and White and Patterson Townships have been connected to the Beaver Falls system. The Koppel plant has remained unchanged. The Borough of Eastvale, however, did not construct their own plant as recommended. It was determined to be more feasible, both environmentally and economically, for the Borough to connect to Beaver Falls, and this has been

done. Homewood and Big Beaver Boroughs have not been connected to the City's plant yet, but this plan is being done to investigate the feasibility of connection at this time. This plan will also investigate the possibility of connecting Koppel Borough to the City's system, as opposed to upgrading the Boroughs treatment plant. Connection to the City may prove to be more economically feasible, and is also environmentally the better choice. This connection will allow for the consolidation of treatment, and the elimination of three treatment plants.

### 1.3.2 ANTI-DEGRADATION OBJECTIVES IN DESIGNATED WATERSHEDS

The study area lies wholly within the Beaver River watershed. This plan is investigating the elimination of three surface water discharges as well as a raw sewage overflow and secondary treatment bypass. If this plan is determined to be feasible, water quality in the Beaver River will improve. The Beaver River is classified for warm water fishes, water supply, irrigation, boating, fishing, water contact sports, and esthetics. The Beaver River is not classified as a high-quality or exceptional value stream in Section 93.9 of the Departments regulations.

### 1.3.3 CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT

Since the City of Beaver Falls has an overloaded interceptor and secondary treatment bypass, they are subject to the overload conditions of Section 94.21 of the Departments regulations.

The City and all of the tributary municipalities have submitted Corrective Action Plans as required by Section 94.21. The stated purpose of this Composite Corrective Action Plan and Schedule (CAP) is the elimination of the overload conditions through the elimination of excess

infiltration and inflow. The City was proposed to have completed their plant upgrade by January 31, 1993. This implies that the City is slightly more than 3 years behind schedule. Since the sewer system is divided into mini-systems, and since manhole numbers are the same in the mini-systems, the following convention will be used to identify manholes: manhole number - mini-system number. The following repair work has been done to date: manholes 21-5 and 23-5 and 300 feet of sewer line; manholes 124-3 and 125-3 and 155 feet of line; 146-3, 122-3, 121-3, and 120-3 and 213 feet of line; manholes 86-3 and 87-3 and 330 feet of line; manholes 140-3 and 141-3 and 365 feet of line; manholes 217-3, 218-3, 29-5, 30-5, 33-8, 34-8, 35-8, 30-8, 31-8, LH, 24-8, 25-8 and 2,435 feet of line; and manholes 8-5, 37-5, 29-5, 16-5, 6-8, 11-8, 95-8, 86-8, 96-8, 155-9, and 158-9. The Borough of Patterson Heights has proposed to rehabilitate every manhole within the Borough by the end of 1994. Patterson and White Townships and West Mayfield Borough are also planning sewer system rehabilitation. The projects are anticipated to be completed by the end of 1994. The Beaver Falls sewer system is enclosed as Appendix A.

### 1.3.4 STATE WATER PLAN

The State Water Plan was prepared by the Pennsylvania Department of Environmental Resources in 1983. The goal of the plan was to assure water supplies of adequate quantity and quality to meet both short - and long-term needs.

The Beaver Falls Municipal Authority withdraws water from the Beaver River, which has a yield of 102 MGD. The Authority has received an allocation of 16.0 MGD, and has a filtration plant capacity of 16.0 MGD and treated water storage capacity of 13.9 MG. Based on the

projected use in 2010 of 11.2 MGD, there should be no shortage of drinking water available. The Borough of Homewood is served by the Beaver Falls Authority.

Koppel Borough purchases water from the western PA water company - Ellwood District (WPWE), who withdraws water from Slippery Rock Creek, which has a yield of 15.2 MGD. WPWE has received an allocation of 8.0 MGD, and has a filtration plant capacity of 6.4 MGD and treated water storage capacity of 7.05 MG. The company has a projected average use in 2010 of 5.54 MGD, but based on peak usage, the company is projected to have a filtration plant capacity deficiency of 0.412 MGD. The SWP recommends that the deficiency could be completely eliminated if industrial conservation practices are implemented; as an alternative, the plan recommends that the filtration plant could be expanded.

The Borough of Big Beaver depends on on-lot wells to supply drinking water to their residents. Since there is no public water source serving this area, it is not included in the state water plan.

### 1.3.5 PRIME AGRICULTURAL LAND USE

In order to conserve land that is considered prime agricultural land a list of prime agricultural soils was obtained from the Beaver County Soil Conservation Service. The prime agricultural soils in the study area are:

AgB - Allegheny Silt Loam, 3%-8% slopes

CdB - Canfield Silt Loam, 3%-8% slopes

GnB - Gilpin Silt Loam, 3%-8% slope

MoA - Monagahela Silt Loam, 0%-3% slope

Ph - Philo Silt Loam

RaB - Ravenna Silt Loam, 3%-8% slope

WhB - Wharton Silt Loam, 3%-8% slope

These soils are scattered throughout the study area with the highest concentration occurring in Big Beaver. The prime agricultural soils are clustered along the wetlands and floodplains of Stockman Run (AgB, CdB, GnB, RaB), the Beaver River (east of Homewood: Ph, MoA) and the Clarks Run watershed to the western border of the study area (CdB, GnB, RaB, WhA). These areas are presently zoned as R-1, R-2, SC, Industrial, and Highway Commercial. Prime Agricultural Land that is currently being farmed should be zoned R-1. Prime agricultural soils total approximately 538 acres (7.9%) of the total 6776 acres of the study area.

### 1.3.6 STORM WATER MANAGEMENT AREA

Beaver County has no formal comprehensive storm water management plan. The subdivision ordinances in the study area state that all subdivision applications must address storm water run-off and are subject to the approval of the Municipality's engineer. It is generally accepted that post-development run-off shall not exceed pre-development run-off. When Beaver County does develop a storm water management plan, all new subdivisions will be forced to comply with it because the County Planning Commission must approve of all new subdivisions.

### 1.3.7 WETLANDS PROTECTION POLICY

Floodplains and wetlands in the study area are illustrated on Plate 4. The floodplains were taken from Flood Insurance Rate maps (FIRM) developed by the Federal Emergency Management Agency (FEMA). The wetlands were reproduced from the National Wetlands Inventory Maps. Wetlands play an unusual role in nature. They are essential for flood control and provide unique wildlife habitats. In the past, wetlands were regarded as blight that should be eliminated and their destruction was encouraged. Now, development on wetlands is prohibited. If development is planned in areas designated as wetlands, the Army Corps of Engineers and the Department of Environmental Resources should be contacted so the appropriate permits can be obtained.

## 1.4 IDENTIFICATION OF WASTEWATER TREATMENT NEEDS FOR GROWTH AREAS

The Department of Community Affairs has designated areas in Beaver County as enterprise zones. In this study area, the enterprise zones are along Route 18 from the Beaver/Lawrence County line to Beaver Falls, Route 351 from Koppel Borough to Route 60, and along Rte. 551 from Beaver Falls to Rte 60 (See figure 1.4-1). These enterprise zones were designated as such to promote economic growth. In order for development to occur in the enterprise zones, the feasibility of sewer extensions should be examined. The Beaver County Soils Survey shows that severe limitations for on-lot sewage disposal exist in these enterprise zones. Depending on the density of development, sewer extensions may be the only way to develop these areas.

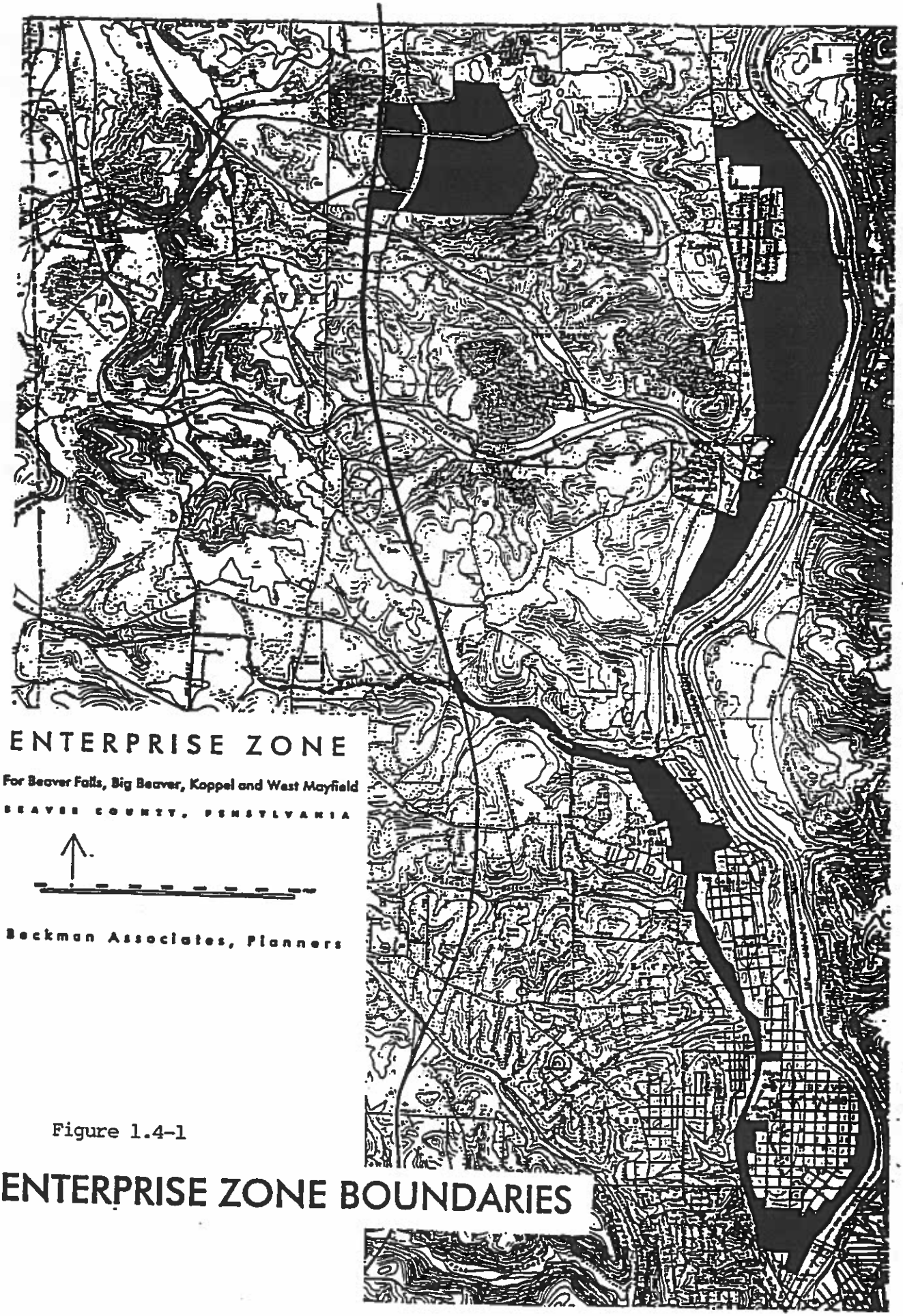


Figure 1.4-1

# ENTERPRISE ZONE BOUNDARIES

Manufacturing, industrial, light industrial, and commercial development are being marketed in these enterprise zones. At the present time, actual plans for development have not been proposed in the study area. There has been interest expressed in developing approximately 150 acres in one of the enterprise zones (Rte 351, Rte 60, and the Turnpike) into a business park but no definite plans have been made.

Homewood Borough is planning to construct several new homes, a shopping center, and an apartment building. The Borough has no zoning or subdivision ordinances that establish lot sizes for on-lot sewage disposal. The soils and slopes in the borough are unsuitable for on-lot sewage disposal. A feasibility study for sewering the entire borough should be performed.

Flow estimates for Homewood Borough and the enterprise zones were developed. Wastewater flow from Homewood Borough was based on 100 GPCD, with an ultimate population of 200 people in Homewood (current population 162), an average daily flow of 20,000 GPD was determined.

Flow estimates from Big Beaver Boroughs growth areas/enterprise zones were not determined as easily. The development within the enterprise zones will be business, commercial, or industrial, and flows will vary depending on the type of development in the zone. The areas of the enterprise zones were planimetered from the zoning map. Then, the Big Beaver Borough zoning ordinance was used to evaluate the number of EDUs to be developed within the enterprise zones. Under Big Beaver's R3 zone, a single family detached dwelling (1 EDU) requires a minimum lot area of 9,000 square feet in a municipally sewered area. The total number of EDUs in the enterprise zones is 4,334. Using 350 gal/day/EDU, the average flow is 1.55 MGD.

## TABLE 1-1 SUMMARY OF FLOWS

| MUNICIPALITY | AVERAGE DAILY FLOW | FLOWS DETERMINED FROM: |
|---|---|---|
| Homewood | 0.020 MGD | Ult. Pop x 100 gpcd |
| Koppel | 0.220 MGD | NPDES Permit |
| Beaver Falls & Surrounding Municipalities | 2.9 MGD | 1992 Max mon avg flow |
| Big Beaver | 1.55 MGD | ent. zone area/9,000 sq. ft. per EDU |
| **TOTAL** | **4.69 MGD** | |
| | | |
| Big Beaver | | |
| Rt 60/351 Ent Zone | 0.510 MGD | |
| Rt 60/551 Ent Zone | 0.053 MGD | |
| Rt 18 Ent Zone | 0.96 MGD | |
| Holiday Inn | 0.02 MGD | Measured |
| Big Beaver Plaza | 0.002 MGD | Measured |

# SECTION 2: PHYSICAL DESCRIPTION OF PLANNING AREA

## 2.1 IDENTIFICATION OF PLANNING AREA BOUNDARIES AND PHYSICAL DESCRIPTION

As illustrated on the Study Area Map, the planning area includes the City of Beaver Falls, the Boroughs of Eastvale, West Mayfield, Patterson Heights, Homewood, Koppel, and Big Beaver, and the Townships of Patterson and White. Portions of these municipalities form the natural drainage basin of the Beaver River north of Beaver Falls. The actual study area is bounded by topographical limits defining the drainage basins of streams which drain into the Beaver River and lie to the east of Pennsylvania Route 60. North Sewickley Township is working independently on an Act 537 Plan, and will supply the City with a projected flow figure to be incorporated into the plant and interceptor design.

## 2.2 ANALYSIS OF SOILS

A comprehensive soils analysis was performed for the study area. The United States Department of Agriculture, Soil Conservation Services's Soil Survey of Lawrence and Beaver Counties (issued April 1982) was used to identify the soil types and slopes within the study area. They were then evaluated to see if they were suitable for On-Lot Disposal Systems (OLDS) with the use of the Sewage Enforcement Officers (SEOs) Manual.

The soil types found in the study area are listed and defined in this section. The soil type and slope, DER Group, and OLDS limitations are tabulated on Table 2-1 and enclosed in this section.

The maps identifying areas unsuitable for OLDS can be found on Plate 3.

Ag - Allegheny silt loam - Slopes range from 2-15%. It is a deep, well drained soil on high stream terraces on major waterways. Slopes are smooth or convex, generally 100-600 feet long. Irregularly shaped areas range from 3-150 acres.

At - Atkins silt loam - It is a nearly level, deep, poorly drained soil on floodplains in long and narrow areas of 3 to 30 acres.

Bk - Brinkerton Silt Loam - Slopes range from 0-15%. It is a deep, poorly drained soil on foot slopes or benches in residual uplands. Smooth or concave slopes 100 to 600 feet long in 2 to 30 acre areas.

Ca - Canadice Silt Loam - It is a nearly level, deep, poorly drained soil on low lying flats and in depressions in glaciated uplands and along stream valleys. Areas are circular or irregular and range from 1 to 50 acres.

Cd - Canfield Silt Loam - Slopes range from 3 to 25%. It is a deep, moderately well drained soil on broad ridge tops - in glaciated uplands. Slopes are smooth, concave, or convex and are generally 200 to 800 feet long. Areas are irregular in shape and range from 3 to greater than 150 acres.

Ce - Cavode Silt Loam - Slopes range from 0-25% - It is a deep, somewhat poorly drained soil on broad ridgetops in residual uplands. Smooth or concave slopes are 200-600 feet long. Areas are irregular in shape and range from 0-100 acres.

Fn - Frenchtown Silt Loam - Slopes range from 0 to 8%. It is a deep, poorly drained soil on flats and in depressions in glaciated uplands. Slopes are smooth and are 200'-600' long. Irregular

Areas range from 2 to 100 acres.

Gn - Gilpin Silt Loam - Slopes range from 3 to 75%. It is a moderately deep, well drained soil on ridges in residual uplands. Smooth or convex slopes range from 150' to 600'. Irregular areas range from 4 to 60 acres.

GS - Gilpin-Weikert Complex - Slopes range from 3 to 70%. They are moderately deep and shallow, well drained soils on ridges and side slopes in residual uplands. Smooth or convex slopes range from 100 to 600 feet. Long, narrow, and irregular shaped areas range from 2 to 100 acres.

Ho - Holly Series - It is a nearly level, deep, poorly drained soil located on floodplains in long narrow areas of 2 to 100 acres.

Mo - Monongahela Silt Loam - Slopes range from 0 to 15%. It is deep, moderately well drained soil on high stream terraces along major waterways. Smooth, concave, and convex slopes range from 200' to 600'. Irregular shaped areas range from 2 to 20 acres.

Ph - Philo Silt Loam - It is a deep, moderately well drained, nearly level soil located on floodplains in long narrow areas of 3 to 50 acres.

Pu - Purdy Silt Loam - It is a nearly level, deep, poorly drained soil on broad terraces, low lying flats, and in depressions in residual areas are irregular in shape and from 3 to 50 acres.

Ra - Ravenna Silt Loam - Slopes range from 0 to 15%. It is a deep, somewhat poorly drained soil on broad flats and in depressions in glaciated uplands. Slopes are smooth, concave, or convex and range from 100-600 feet in length. Areas are irregular to long and narrow in shape and range from 3 to 100 acres.

Ty - Tyler Silt Loam - Slopes range from 0 to 8%. It is a deep somewhat poorly drained soil on

terraces. Smooth or concave slopes range from 200 to 400 feet in length. Irregular shaped areas range from 5 to 100 acres.

UA - Udorthents, strip mines - Slopes are gradual to steep. Soils are very shaly or very channery loamy materials on ridgetops, side slopes, benches, low flats, and flood plains. They formed in areas where the original soils and bedrock were stripped away to remove the underlying coal or limestone. Areas range from 2 to 200 acres.

Ub - Urban Land-Arents Complex - This consists of Urban land and arents on flood plains, terraces, and uplands. It is mostly along major waterways and highways. Areas are irregular and range from 2 to 200 acres.

Uf - Urban Land Conotton Complex - Slopes range from 0 to 25%. It consists of Urban Land and well drained to excessively drained conotton soil on high terraces, benches, and low lands. Areas are irregular in shape and range from 2 to 300 acres.

Uw - Urban land - Wharton Complex - Slopes range from 0 to 25%. It consists of Urban land and deep, moderately well drained soil on broad ridgetops and benches in residual uplands. Areas range from 2 to 200 acres.

We - Weikert Rock outcrop complex - Slopes range from 25-80%. It consists of steep and very steep, shallow, well drained Weikert soil and rock outcrop on hillsides in dissected residual uplands. Most areas are long and narrow and range from 10 to 100 acres.

Wh - Wharton Silt Loam - Slopes range from 0 to 15%. It is deep, moderately well drained soil on broad ridgetops and side slopes in residual uplands. Slopes are smooth or concave and are 200

to 600 feet long. Irregular shaped areas are 2-50 acres.

WnD - Wharton Gilpin Silt Loam - Slopes range from 15 to 25%. It is deep, moderately well drained on hillsides and side slopes in dissected residual uplands. Smooth or convex slopes are generally 200' to 400' long. Long and narrow areas range from 3 to 30 acres.

Wo - Wooster gravelly silt loam - Slopes range from 3 to 25%. It is deep, well drained on hillsides and uplands. Smooth or convex slopes range from 100 to 500 feet in length. Irregular shaped areas range from 2 to 20 acres.

**TABLE 2-1**

| SYMBOL | SOIL | DER GROUP | #OLDS LIMITATIONS |
|---|---|---|---|
| AgB | Allegheny Silt Loam, 3-8% | 6 | Slight |
| At | Atkins Silt Loam | 13 | Severe - flooding hazard |
| BkB | Brinkerton Silt Loam, 3-8% | 15 | Severe - high water table |
| Ca | Canadice | 15 | Severe - high water table |
| CdB | Canfield Silt Loam, 3-8% | 14 | Severe, high water table |
| CdC | Canfield Silt Loam, 8-15% | 14 | Severe, high water table |
| CeA | Cavode Silt Loam, 0-3% | 15 | Severe - high water table |
| CeB | Cavode Silt Loam, 3-8% | 15 | Severe - high water table |
| CeC | Cavode Silt Loam, 8-15% | 15 | Severe - high water table |
| FnA | Frenchtown Silt Loam, 0-3% | 15 | Severe - high water table |
| GnB | Gilpin Silt Loam, 3-8% | 9 | Severe - depth to rock |
| GnC | Gilpin Silt Loam, 8-15% | 9 | Severe - depth to rock |

## TABLE 2-1 Con't

| SYMBOL | SOIL | DER GROUP | #OLDS LIMITATIONS |
|---|---|---|---|
| GnD | Gilpin Silt Loam, 15-25% | 9 | Severe - Slope limitations, depth to rock |
| GsB | Gilpin-Weikert Complex, 3-8% | | Severe - depth to rock |
| GsD | Gilpin-Weikert Complex, 15-25% | | Severe - Slope Limitations - depth to rock |
| GsF | Gilpin-Weikert Complex, 25-70% | | Severe - Slope limitations - depth to rock |
| Ho | Holly Series | 13 | Severe - high water table |
| MoA | Monongahela Silt Loam, 0-3% | 14 | Severe - seasonal high water table |
| MoB | Monongahela Silt Loam, 3-8% | 14 | Severe - Seasonal high water table |
| MoC | Monongahela Silt Loam, 8-15% | 14 | Severe - Slope and seasonal high water table |
| Ph | Philo Silt Loam | 13 | Severe - high water table |
| Pu | Purdy Silt Loam | 15 | Severe - high water table |
| RaB | Ravena Silt Loam, 3-8% | 15 | Severe - high water table |
| TyA | Tyler Silt Loam, 0-3% | 15 | Severe - high water table |
| TyB | Tyler Silt Loam, 3-8% | 15 | Severe - high water table |
| UAB | Udorthents, strip mine, gently sloping | | Slopes |

## TABLE 2-1 Con't

| SYMBOL | SOIL | DER GROUP | #OLDS LIMITATIONS |
|---|---|---|---|
| UAD | Udorthents, strip mine, Moderately steep | | Severe - slopes |
| UAE | Udorthents, strip mine, very steep | | Severe - slopes |
| Ub | Urban land - Arents Complex | | |
| UfB | Urban land - Conotton Complex, 3-8% | 1 | Severe - rapid perculation, insufficient filtration and renovation of effluent |
| UfD | Urban land - Conotton Complex, 15-25% | 1 | Severe - rapid perculation, insufficient filtration and renovation of effluent |
| UwB | Urban land - Wharton Complex, | 14 | Moderate - seasonal high water table |
| WeF | Weikert Rock Outcrop complex 25-30% | 12 | Severe - slope limitations, depth to rock |
| WhB | Wharton Silt Loam, 3-8% | 14 | Severe - seasonal high water table |
| WhC | Wharton Silt Loam, 8-15% | 14 | Severe - slopes; seasonal high water table |
| WnD | Wharton-Gilpin Silt Loam, 15-25% | 14 | Severe - slopes; seasonal high water table |
| WoC | Wooster Gravelly Silt Loam, 8-15% | 2 | Severe - slopes |

## 2.3 IDENTIFICATION OF GEOLOGICAL FEATURES WHICH WOULD INFLUENCE SEWAGE TREATMENT OR DISPOSAL AND WATER SUPPLIES

### *A. CONSOLIDATED DEPOSITS*

The geological structures evident in the northwestern portion of Beaver County are the result of the sequential formation of bedrock and glacial deposits, and the periferal effects of the formation of the Appalachian Mountains to the east. Plate 5 illustrates the locations of the major geologic groups. The sediments forming the bedrock were deposited in the presence of sea water during the time of Pennsylvanias great coal swamps. In the study area, the youngest of these rocks is the Conemaugh, which is also the most extensively exposed group of rocks in the County. Along the Beaver River and the smaller streams, erosion has exposed rock belonging to the Allegheny Group, and in the northern reaches of the Beaver River and along the Connoquenessing Creek, the valleys have deepened to expose rock of the Pottsville Group beneath the Allegheny Group rock.

Each group contains sandstone, shale, and coal, but in the Conemaugh and Pottsville Groups, sandstone is prominent and coal is poorly developed. In the Allegheny Group, coal and shale are prominent and sandstone beds are generally thin and shaly.

The stresses which formed the Appalachian Mountains also affected the structure of Beaver County. Throughout the County, the rock has been warped into folds or structural ridges and troughs. This is important due to the water-bearing qualities of the various rock formations. Shales crumble easily while sandstone develops clean breaks that serve as conduits for water. The relatively small volume of fractured material, however, is unable to store the large quantities of

water that the spaces between grains of unconsolidated material are capable of storing. In the consolidated deposits, water may be pumped from wells located along fracture lines.

### *B. UNCONSOLIDATED DEPOSITS*

The unconsolidated deposits in Beaver County are present chiefly along the valleys and in the extreme northwest corner of the County, of which the study area is a part. Most of these deposits are remnants of materials carried by glaciers. Glaciers moved into this area at least twice and left a heterogeneous layer of clay, silt, sand, and boulders. As the glaciers melted, much of the rock debris was carried away by the meltwater streams and deposited in the stream valleys. The deposits consist chiefly of sand and gravel. Subsequent erosion deepened the valleys and removed most of the outwash deposits, so that the high terraces are marked by scattered rock left by the first glaciation while evidence of the later glaciation is evident in the lower terraces. Some terraces of streams which did not flow from the ice contain only locally derived material consisting of sand and gravel. These are known as the Carmichaels Formation and are considerably thinner than the glacial terraces, ranging from 20 to 30 feet. The alluvium deposits which form the flood plains of the existing streams contain particles ranging in size from clay to gravel. The average thickness is about 50 feet.

### *C. WATER YIELD AND QUALITY*

The sediments laid down by the ice are generally poorly permeable and are capable of yielding only enough water for a domestic supply. The outwash deposits, present today as terraces, are

highly permeable and may have excellent yields, as do the alluvial deposits. Water from the glacial deposits has an average dissolved solids content of about 425 mg/l and ranges from hard to very hard. High levels of calcium, iron, and magnesium are common, and sulfate and chloride are prominent. Higher yields are obtained from wells in unconsolidated material if the well is drilled to bedrock and screens are installed. In the alluvium, wells aligned parallel to a nearby stream will permit better recharge from the stream when the wells are pumped. Minimum well spacing is determined from the saturated thickness and permeability of the alluvium.

Wells drilled in consolidated rock or bedrock must be placed over fractures where water occurs. The quality of water found in consolidated rock is affected by the amount of flushing of the trapped sea water which has occurred over time. When precipitation has percolated through the soil and rock sufficiently to dissolve small amounts of minerals into the ground water, the resultant solution is a calcium magnesium bicarbonate water containing about 200 mg/l dissolved solids and is a good quality ground water. Below the zone of fresh water is the trapped sea water which has become concentrated so that the dissolved solids content may exceed 200,000 mg/l. This water may invade the overlying fresh water through uncapped wells or mines.

A third factor which may affect the groundwater quality is the presence of pyrite, which is an iron sulfide. Pyrite is associated with coal beds and dissolves to produce iron and sulfuric acid in the ground water, forming acid mine water. This process is accelerated when coal is mined, exposing the pyrite to air and water.

### 2.3.1 SEWAGE TREATMENT

Within the study area, the areas served by the Beaver Falls and Koppel sewage treatment plants include Beaver Falls, Eastvale, Patterson Heights, portions of Patterson Township and White Township, West Mayfield, and Koppel. Homewood and Big Beaver have no public sewers, and the estimated 1,070 households located in those boroughs utilize on-lot disposal systems . The Holiday Inn and Big Beaver Plaza, located in Big Beaver Borough, use small treatment facilities which discharge to surface waters.

For proper septic tank operation, several factors relating to the geologic structure of the soils must be considered. A seasonal high ground water table can cause on-lot systems to fail due to insufficient renovation capacity. Septic tank absorption fields must be unsaturated, permeable, and of sufficient depth to treat wastewater as it moves through the soil. Depths greater than 20 inches are evaluated for on-lot suitability. Absorption fields in hillsides can permit seepage of raw sewage as effluent saturates the soil layers above bedrock and then travels along the top of the impermeable rock to the edge of the hillside.

Treatment of septic tank effluent as it is discharged through the absorption field is accomplished by the decomposition of organic material by bacteria and other organisms in soil. These organisms require oxygen and water in order to live and to convert effluent into harmless chemical compounds. Soils must be sufficiently permeable to permit air and water to pass through. Soil textures with the proper balance of sand, silt, and clay are conducive to the growth of roots and earthworms which aerate the soil and promote the increase of the microbial population. The increased microbial level in turn, modifies the soil structure, making it more friable. When septic

tank effluent is discharged into the soil at the proper rate, the organic material in the effluent is quickly reduced; however, waterlogged soil destroys the aerobic organisms, producing anaerobic conditions. When oxygen in the soil is reduced, decomposition of waste is delayed and the soil becomes clogged with organic matter including slimes and sulfides. A septic condition results. The untreated wastewater then poses a threat to groundwater supplies from the dissolved solids, ammonia nitrogen, fecal coliforms and streptococci, and nitrites and nitrates. Residual phosphate levels may also be high in the saturated soils. Within the study area, areas of high water table exist which hinder proper septic system operation.

Groundwater contamination potential from a septic tank leaching system is determined by the soil characteristics and the depth to groundwater. The Soil Conservation Service classifies study area soils as having severe limitations for on-lot disposal of sewage due to steep slopes, shallowness, or wetness. The subclassifications termed Canfield and Cavode soils are described as severely restrictive due to slow percolation and wetness. Proposed development in unsewered areas must be evaluated on an individual basis to select the best design for existing soils and topography. Options other than individual on-lot systems include small community treatment facilities.

### 2.3.2 WATER SUPPLIES

In the Glenshaw soils, the sandstones provide a reliable source of small to moderate supplies of water. Sufficient water for domestic purposes can be obtained at most locations from wells drilled 100 to 150 feet below the water table. Yields large enough for industrial and municipal purposes are more difficult to obtain. In the Allegheny group soils, well yields may differ considerably from

place to place. Yields will be small and the well drawdown large where wells do not penetrate sandstone. The permeable sand and gravel of the Alluvium soils are typically good water sources.

## 2.4 ANALYSIS OF POPULATION INFORMATION AS RELATED TO SEWAGE FACILITIES NEEDS

### 2.4.1 EXISTING DATA COMPARISON

Area populations as given by the U.S. Census Bureau are presented in Table 2-2 as follows:

**TABLE 2-2**

STUDY AREA POPULATION PROJECTIONS

| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 |
|---|---|---|---|---|---|---|
| Beaver Falls | 16,240 | 14,375 | 12,525 | 10,687 | 9,472 | 8,334 |
| Eastvale | 513 | 421 | 379 | 328 | 296 | 263 |
| Patterson Hgts | 816 | 777 | 797 | 576 | 511 | 430 |
| Patterson Twp. | 2,930 | 3,442 | 3,288 | 3,074 | 2,941 | 2,780 |
| West Mayfield | 2,201 | 2,152 | 1,712 | 1,312 | 1,069 | 981 |
| White Twp. | 1,437 | 1,747 | 1,870 | 1,610 | 1,564 | 1,433 |
| Koppel | 1,389 | 1,312 | 1,146 | 1,024 | 924 | 833 |
| Big Beaver | 2,881 | 2,739 | 2,815 | 2,298 | 2,149 | 1,896 |
| Homewood | 305 | 212 | 188 | 162 | 144 | 126 |

Year 2000 service populations as projected by the State Comprehensive Water Quality Management Plan as compared to actual service populations taken from the above data are presented in Table 2-3 as follows:

**TABLE 2-3**

| | 2000 COWAMP | 1990 ACTUAL |
|---|---|---|
| Beaver Falls | 29,330 | 15,503 |
| Koppel | 1,440 | 1,024 |
| Homewood | 2,660 | 162 |

The COWAMP projections include Beaver Falls with Bennett Run and Eastvale service areas. Homewood includes Koppel and Bellton service areas. The Beaver Falls actual includes Eastvale, Patterson Heights, 50% of Patterson Township, West Mayfield, and 66% of White Township. The actual populations given represent residential population only, while the COWAMP populations include equivalent dwelling units for commercial and industrial populations. With that in mind, the figures given for Koppel and Homewood appear reasonable, but the Beaver Falls population has been overestimated.

Since the COWAMP Plan was completed during a time of growth and development along the Beaver and Ohio Rivers, its projections regarding the population of the Beaver Falls area are understandably optimistic. Since the population has actually declined due to the closing of local industries, the U.S. Census Bureau figures reflect a more realistic picture of population during the coming ten to twenty years. Therefore, this study will use Census Bureau projections along with anticipated development to predict sewage flows from the study areas.

## 2.4.2 RESIDENTIAL DEVELOPMENT

During the past ten years, the rate of development of residential areas has seriously declined. Information received from the municipalities involved in this study indicates that no large residential developments are planned. Actual data are somewhat sketchy, but the available information is presented in Table 2-4 as follows:

**TABLE 2-4**

PROJECTED DEVELOPMENT

| | |
|---|---|
| Beaver Falls | Normal development of light industrial and commercial property is expected to continue. A new downtown office building housing 50 to 60 employees will be built in 1993; Vesuvius-McDanel will construct a new laboratory. No major residential development is planned. |
| Patterson Township | In the Beaver Falls collection system area, Cortis Homes plan a small development involving 8 sewer taps at 16th. Street and Darlington Road. |
| Patterson Heights | Area is fully developed. |
| White Township | No development other than an occasional one- or two-family residence. |
| West Mayfield | No planned residential development; limited utilization of an existing steel mill is expected. |
| Eastvale | No planned development. |
| Homewood | 1993-5: Shopping center - 8 taps, Homes - 3, conversion of school to 6 apartments, conversion of motel to bed & breakfast. |
| Koppel | No planned development. |
| Big Beaver | Reference Section 2.4.3.E regarding the Enterprise Zone involving portions of Big Beaver. |

### 2.4.3 FACTORS INFLUENCING DEVELOPMENT

Population growth and decline is typically influenced by various factors. These factors will be discussed below along with their possible effect on the eventual sewage collection and treatment facilities which will be required in the study areas.

#### *A. DRINKING WATER SUPPLIES*

Public drinking water is presently supplied to residents by the Beaver Falls Municipal Authority and the Koppel Water Company. Areas without public water are supplied by wells. The geology throughout the study area is well suited to supply well water to residences. Along the Beaver River and Connoquenessing Creek terraces, the soils are of the Pottsville Group, which is an excellent source of water of satisfactory quality. Wells in this group provide an average yield of 30 gallons per minute.

Allegheny Group soils are found along stream valleys in the Beaver River Basin. This formation supplies average well yields of over 15 GPM. The Allegheny Group soils may contain residual sea water, and deep drilling may produce water high in dissolved solids and sodium chloride, potassium, bicarbonate, or sulfate.

The balance of soils in the study area consist of the Conemaugh Group. Like the Allegheny Group soils, they may contain residual sea water, with the resultant high dissolved solids levels. Well yields are somewhat lower than in the Allegheny Group.

This information indicates that lack of potable water will not restrict the development of individual residences. However, water in sufficient quantities to support higher demands may

not be available from wells in the inland areas away from the Beaver River and its tributary streams. In order for this area to fully develop, it will be necessary to provide a source of supply of finished, pumped water, probably from a treatment plant located on the Beaver River. There is also the option of purchasing water; however, this may prove to be prohibitively expensive.

## *B. GEOLOGY AND TOPOGRAPHY*

Soils along the river and stream terraces are of the Pottsville Formation, composed more specifically of Tyler silt loam with scattered areas containing more sand and gravel. The Tyler soils are poorly drained, and runoff is slow. The seasonal water table is high. These conditions create severe limitations for on-site waste disposal and construction of roads and buildings due to wetness and low soil strength. Nevertheless, the Beaver River terraces are sites for industries and residential settlement along the gently sloping areas above the more severe slopes and rock outcroppings which characterize the immediate river banks. The maintenance of natural drainageways and installation of subsurface drains permit construction. Along the terraces, development is possible where slopes are not a restriction.

Along the river and stream valleys, broad areas of Allegheny Group soils follow the drainage basins. In the Allegheny soils, the surface layer consists of silt loam about 7 inches thick. The subsoil extends 44 inches, with friable silt loam in the upper levels gradually becoming more gravelly and sandy. The substratum is very gravelly sandy loam. Permeability is moderate and runoff is medium to rapid depending on the severity of the slopes. Because of

the gravelly substratum, groundwater contamination is possible where on-lot waste disposal is used. Severe slopes may also prohibit on-lot systems. During construction activities, erosion control measures must be used. In general, the Allegheny soilsare well suited to development if waste disposal is provided.

The Conemaugh Group soils making up the balance of soil structures in the study area break down further into Cavode, Gilpin silt loam, and Gilpin-Weikert complex soils. The Cavode soils are sloping, deep, somewhat poorly drained soils on side slopes and benches in residual uplands. The seasonal high water table is only 6 to 18 inches below the surface for a good part of the year. Erosion is a hazard, and if the soil is disturbed, measures are needed to control runoff and sediment. On-lot waste disposal is restricted by these limitations.

The Gilpin silt loam soils, also on side slopes and benches in residual uplands, are better drained than the Cavode soils. The 20" to 40" typical depth to bedrock, however, is a limitation to construction. These soils also present a severe erosion hazard and limitations to on-site waste disposal.

The Gilpin-Weikert soils present similar restrictions to construction and habitation, with the most limiting being the depth to bedrock and severe slopes.

Strip mines also exist in several areas of Big Beaver Borough. During mining activities, the formation of sulfate, or acid-mine water, is accelerated. Pyrite or iron sulfide is normally associated with coal beds, and mining exposes the surfaces of broken rock containing pyrite to water and air. The chemical reactions which take place between the pyrite, air and water produce acid-mine water. Thus, surface water supplies may become contaminated.

The topography in the study area is typical of the western part of the Appalachian Plateaus province. The surface is characterized by rounded hills and steep valleys. Flat upland surfaces are small. Flood plains are present along the Beaver River and Connoquenessing Creek. Much of the upland area lies between 1100 and 1200 feet above sea level. Existing development follows lowland stream and river valleys where roads have been constructed. State Route 18 and State Route 60 travel in a north-south direction. Route 18 between Beaver Falls and Lawrence County is somewhat developed, with the boroughs of Koppel and Homewood adjacent to the state route. State Routes 551 and 351, the Pennsylvania Turnpike, and township roads 631 (Hollowvue Road), 655 (Homewood-New Galilee Road), and 667 (Foxwood Road), and Friendship Road run in an east-west direction. All these roads have experienced some development alongside, but large portions of Big Beaver Borough remain undeveloped. If further development occurs, it is reasonable to assume that close access to roads would be a major factor in the choice of locations.

## *C. WATER AND WASTEWATER TREATMENT CAPACITY*

### *1. WATER TREATMENT CAPACITY*

Water treatment facilities within the study area are situated in the City of Beaver Falls. The Beaver Falls Municipal Authority maintains an intake on the Beaver River to serve an estimated 1970 population of 48,249. The total system GPCD in 1970 was 158 gallons per capita per day, and the average daily water use was 7.81 MGD. The maximum yield possible is 107 MGD. Water allocation permitted was 16 MGD, water storage capacity was 13.9 MG;

filtration plant capacity was 16 MGD.

The Koppel Water Company purchases water from the Western Pennsylvania Water Company, Ellwood District. The State Water Plan predicted no deficiencies in yield, allocation, storage or plant capacity for Koppel or Beaver Falls through the year 2020. Should the development of the central portions of Big Beaver Borough and of Homewood accelerate, new sources of potable water and/or additional pumping and distribution systems from existing or new facilities will be necessary.

### *2. WASTEWATER TREATMENT CAPACITY*

Public wastewater treatment facilities are located in the Borough of Koppel and the City of Beaver Falls. The Koppel plant was designed to treat flows originating in the Borough and has a 220,000 gallon per day permitted capacity The Koppel plant accepts flows originating in the Borough of Koppel only. The Beaver Falls plant treats flows originating in the City, Patterson Heights Borough, portions of Patterson and White Townships, West Mayfield Borough, and Eastvale Borough. The plant is permitted to accept flows of 2.5 million gallons per day.

Both plants have experienced overflows resulting from excess inflow/infiltration. Koppel has performed some rehabilitation to its collection system and has reduced peak flows somewhat. The City of Beaver Falls and its sewer users are under a Corrective Action Plan & Schedule to reduce I/I, and the allocation of new sewer taps is restricted by the PA Department of Environmental Resources. This condition will be in effect as long as a raw sewage bypass at

23rd. Street and 6th. Avenue in the City is active. The City also performed rehabilitative work to its collection system during 1992; however, it is unlikely that I/I work alone could significantly reduce peak flows in the extensive collection system extending throughout the City and surrounding municipalities. The City submitted a plan to construct a relief line between the bypass manhole and the 24" trunk line running to the treatment plant, but the PADER did not approve the plan. An analysis of the capacity of that line and other major conveyor lines is included as part of this report.

Additional factors to be considered under this topic include the treatment of industrial wastewater and septage. At present, the City of Beaver Falls Water Pollution Control Plant accepts no industrial waste or septage. Should the analyses contained in this report, however, determine that a regional approach to wastewater treatment with the Beaver Falls and/or Koppel plants expanded to take in additional flows from the study area or modified, these factors will be considered.

Further information on the Beaver Falls and Koppel plants is contained in Sections 3.1.1 and 3.1.2 of this report.

## *D. ZONING*

The City of Beaver Falls and adjacent municipalities and the Boroughs of Big Beaver and Koppel have enacted zoning ordinances. Homewood Borough is not zoned at present. Homewood, with its location near the Route 18-PA Turnpike interchange, has become a focus for the motel/restaurant business, and indications are that this trend will continue. Control of

land use through zoning is normally a positive factor for businesses and families considering relocation. The revision of existing zoning patterns and the enactment of a zoning ordinance in Homewood would further encourage planned development in the study area.

## *E. ENTERPRISE ZONE DESIGNATION*

In 1993, an Enterprise Zone was designated by the Commonwealth of Pennsylvania involving Beaver Falls, Big Beaver, Koppel, and West Mayfield. The Enterprise Zone program provides an agenda for encouraging private businessmen - entrepreneurs - to invest in the local economy of hard-pressed areas such as the Beaver Valley. Designation as an enterprise zone involves incentives and assistance to form partnerships between public and private entities to create jobs and revitalize the economy. With the decline of the steel industry, population and employment in the Beaver Valley also declined sharply between 1980 and 1985. From a 1979 peak of 80,400, total employment dropped to 51,700 by 1982. In 1960, 48% of employment was in manufacturing, while in 1990, only 14.6% of employment was in the manufacturing area. By 1990, the ratio of families living below the poverty line varied from 13.2% to 24.4% within the Enterprise Zone municipalities.

The plan for development of the Enterprise Zone involves several stratagies:

### *1. BIG BEAVER BUSINESS PARK*

An area of about 300 acres east of the Route 60-PA Turnpike interchange is proposed to be developed as a business park. The 49 sites of 6 acres each are projected as being utilized

during both the short-term and long-range future. Water and sewage line to serve the park are estimated to require a $1.75 million investment to be obtained through tax increment financing.

### *2. STRENGTHENING OF EXISTING INDUSTRIES*

Financial incentives for the expansion of local industries are a stated priority, as well as the attraction of additional industries and businesses.

### *3. ESTABLISHMENT OF AN INCUBATOR*

An incubator for industry is a facility which provides space and business advice for start-up enterprises. A host community provides low rent, management advice, centralized services, and flexible leases to entrepreneurs. Incubators are currently located in Vanport and Chippewa and are operated by the Beaver County COOP. The B & W Laboratory Building and adjacent buildings in West Mayfield are proposed to be utilized.

### *4. DEVELOPMENT OF THE ROUTE 18 CORRIDOR*

The Beaver River terrace between Koppel and Beaver Falls is proposed to be developed as an industrial corridor. The land is zoned for industrial use, is available, and is adjacent to rail and highway transport. Installation of trunk line sewer connecting with the Beaver Falls sewer system to serve the area would be required. A 234 acre site is available. Tracts of land south of the interchange are proposed for a regional distribution center.

### *5. RE-USE OF VACANT BUILDINGS*

Vacant and under-utilized buildings within the zone will be promoted for new uses by

small businesses.

The proposals will require subdivision, land use, and zoning regulation review, which is also included in the Enterprise Zone plan.

Extension and improvement of water and sewerage availability is cited as a critical need for the success of the plan. The $1.75 million investment in utilities would occur during 1994, with total investments of $2,300,000 extending through 1997.

## *F. TRANSPORTATION ROUTES*

The Route 60 link between Beaver and Lawrence Counties was completed in 1992. The link also connects with the Pennsylvania Turnpike in Big Beaver Borough. The new interchange could create a corridor of developmental activity between Routes 60 and 18 and Route 351 and the Turnpike. Plans for a light industrial park in this area are in the very preliminary planning stages, according to the Beaver County Corporation for Economic Development. With the coordinated development of water and wastewater facilities, this area could rapidly develop into a major center for business, industry, and residential development.

# SECTION 3 - EVALUATION OF EXISTING WASTEWATER TREATMENT AND CONVEYANCE SYSTEMS

## 3.1 DESCRIPTION OF WASTEWATER TREATMENT SYSTEMS

### 3.1.1 CITY OF BEAVER FALLS WATER POLLUTION CONTROL PLANT

The City of Beaver Falls owns and operates the Water Pollution Control Plant located on the Beaver River at the southernmost City limit. The plant, permitted under N.P.D.E.S. number PA0026883, has the following permit limits; as shown in Table 3-1:

**TABLE 3-1**
BEAVER FALLS WATER POLLUTION CONTROL PLANT
PERMIT LEVELS

| | |
|---|---|
| Flow Through Plant | 2.5 MGD monthly average<br>no daily maximum |
| Suspended Solids, effluent | 30 mg/l, monthly average<br>45 mg/l max. weekly average |
| Fecal Coliform, effluent | 2000/100 ml monthly,<br>geometric mean |
| CBOD5, effluent | 25 mg/l monthly average<br>37.5 mg/l max. weekly average |

The average hydraulic loading over a five-year period is 2.0 MGD, with a maximum monthly flow of 3.37 MGD in June of 1989 and minimum monthly flow of 1.34 in October of 1991. As is to be expected where the existing collection and conveyance system is old and is

composed of materials such as terra cotta pipe with loose joints, the amount of inflow and infiltration into the sanitary system from rain and groundwater is significant, and plant flows reflect the amount of precipitation occurring over a given time period.

No industrial waste or septage is treated at the Beaver Falls plant.

The point of discharge is the Beaver River. The Beaver River is also the receiving stream of the only existing overflow bypass located at 6th. Avenue and 23rd. Street. The plant is currently under a Corrective Action Plan & Schedule imposed by the PA Department of Environmental Resources. The goal of the CAP & S is the reduction of excess inflow and infiltration into the collection system and the subsequent reduction of overflows and closing of the bypass. There is also a plant emergency bypass where excess flow can be discharged from the primary clarifiers directly to the chlorine contact tank, bypassing the trickling filter and secondary settling facilities. A complete report of the unit process capacities is attached to this report as Appendix B. At present, no work is underway to increase any of those capacities.

The plant is a secondary treatment facility using a trickling filter to remove suspended solids and organic matter from the wastewater. Incoming wastewater undergoes the following unit processes before discharge to the river: barscreening to remove large objects, primary settling to remove settleable solids, biological secondary treatment in the trickling filter, secondary settling, and chlorination. Sludge is removed from the primary settling tanks, pumped to anaerobic (in the absence of oxygen) digesters where the remaining organic matter is decomposed, and then dried on sand and gravel beds prior to disposal at a landfill.

## *BEAVER FALLS TRUNKLINE SURVEY*

The Beaver Falls trunkline was surveyed to evaluate the existing hydraulic capacity of the line. The survey was from the treatment plant's influent line to MH40-5 on 9th Avenue and 25th Street. Some manholes could not be located and some could not be opened. Elevations were set at the treatment plant with as-built invert elevations. Trig leveling was used to set elevations of the manholes in the sewer system. Manholes were opened and depths to inverts were measured. Manholes 125-4 and 124-4 could not be located. Manholes 24-5 and 25-5 could not be opened. The overflow manhole, 16-5, had a large amount of debris accumulated inside of it. The invert readings may be slightly off.

Manhole 130-132, manhole 120 c - 120 b, and manhole 16 - 17A are sections of line that were calculated to have negative slopes. This is probably not true. The errors built into the method of surveying combined with the extremely flat slopes of the interceptor line are the probable reason that the slopes are negative. This shows a need for the redesign of the interceptor. Survey information is presented in Table 3-6.

Tax maps were used in conjunction with the sewer maps to evaluate the total flow each manhole should be receiving. Each property was counted as one EDU. At manhole 18A, a total average flow of 1.07 MGD from 3,050 EDUs is entering a section of line capable of handling a maximum flow of 2.55 MGD. Using a peaking factor of 2.5, the maximum flow at manhole 18A is 2.73 MGD. This could be causing an over-accumulation of sewage resulting in the overflow manhole being in operation.

### 3.1.2 BOROUGH OF KOPPEL WASTEWATER TREATMENT FACILITY

The Koppel Wastewater Treatment Plant is permitted under N.P.D.E.S. Permit Number 0023434 at 220,000 gallons per day hydraulic loading and 400 pounds per day BOD5 organic loading. The Borough has projected a 1993 equivalent population of 931 EDUs as the service population. This figure includes the effect of the Babcock and Wilcox company located in Koppel. This will result in a projected flow of 137,000 GPD flow and 144 ppd organic loading. The average 1989 flow was 156,000 GPD, and the average organic loading was 159 pounds per day.

No industrial waste is treated at the Koppel plant.

In 1989, the Holiday Inn in Big Beaver Borough on SR 18 requested connection to the Koppel system due to malfunctioning of the Inns treatment facility. The request was denied on the basis of flooding in sections of the collection system.

### 3.1.3 HOLIDAY INN WASTEWATER TREATMENT PLANT

The Holiday Inn located in Big Beaver Borough on SR 18 maintains an extended aeration sewage treatment plant with a rated capacity of 30,000 GPD. The plant is more than 20 years old and has been cited with a Notice of Violation by the PA Department of Environmental Resources due to inadequate treatment. The extended aeration process is used extensively for prefabricated package plants and requires a relatively low organic loading and long aeration time. Primary sedimentation is usually omitted from the process to simplify the sludge treatment and disposal. Separate sludge wasting is generally not provided but operating experience indicates that problems develop more readily in plants where these facilities have not been provided. A 1989 engineering

study of the plant recommended an analytical program to characterize wastewater and aid in the design of sludge wasting facilities. This program was not conducted, but maintenance improvements were made. Following a Notice of Violation in late 1989, the analytical program was performed using a flow recorder and composite samplers. The results of the study are as follows:

1. The average plant flow is 18,400 GPD as compared to The permitted average flow of 23,000 GPD. Flows were much higher on weekends, and daily peaks occurred at 9:00 pm
2. There is no flow equalization facility to counter surges.
3. Morning surges are caused by normal activity of customers, laundry flows, kitchen discharges, and pool filter backwashing. Oil and grease are not excessive. Residual chlorine from the pool backwashing had no adverse effect, and the pH levels were acceptable.
4. BOD removal is improved by sludge removal, as are suspended solids levels. Effluent BOD and solids levels were unacceptable.
5. A recommendation was made to run the aerators continuously during the day and intermittently at night. To minimize surges, it was recommended that the pool filter be backwashed in the afternoon and laundry be washed in the afternoon or night.
6. If Beaver Falls or Koppel were unable to accept the Inn flows, the plant should be upgraded with the installation of a holding tank, a sludge wasting tank, and a filter on the discharge. A new plant was also recommended as a replacement.

### 3.1.4 BIG BEAVER PLAZA TREATMENT PLANT

The extended aeration treatment plant servicing the Big Beaver Plaza on State Route 18 north of Beaver Falls was permitted by the PADER on September 16, 1980, to treat up to 0.023 MGD. The permit expired on September 16, 1985, but on October 22, 1992, the PADER extended the permit by letter pending permit issuance. The plant treats raw sewage generated at the Plaza and at the adjacent restuarant, currently averaging 1,640 gallons per day. The plant design capacity is 13,185 GPD.

## 3.2 DESCRIPTION OF SEWER SYSTEM COMPONENTS

Within the study area, only Beaver Falls and its surrounding communities and Koppel are sewered.

### 3.2.1 BEAVER FALLS AND SEWER USERS SYSTEMS COLLECTION AND CONVEYANCE SYSTEM

All structures having sanitary facilities within the City of Beaver Falls are required by City ordinance to tap into the public sewers. The collection system therefore, networks throughout the entire City. For mapping purposes, the system is divided into mini-systems (see Appendix A). Exclusive of the 24" conveyor line running along the Beaver River from 11th. Street to the treatment plant, the following lines compose the collection system, as shown in Table 3-2:

## TABLE 3-2

CITY OF BEAVER FALLS SANITARY SEWER SYSTEM

| Mini-System | 8" | 10" | 12" | 15" | 18" | 20" | MH |
|---|---|---|---|---|---|---|---|
| 3 | 43,925 | 3,515 | 1,400 | 4,100 | | | 147 |
| 4 | 45,715 | | 500 | | 800 | 4,375 | 136 |
| 5 | 35,176 | 1,475 | 2,738 | 875 | 2,550 | | 120 |
| 6 & 7 | 2,100 | 2,250 | | | | | 10 |
| 8 | 22,750 | | 5,800 | | | | 110 |
| 9 | 8,900 | 1,600 | | | | | 40 |
| **TOTAL** | **158,566** | **8,840** | **10,438** | **4,975** | **3,350** | **4,375** | **563** |

A total of 190,544 feet or 36 miles of sewer line comprise the Beaver Falls system.

Acquisition of information on the Joint Sewer Users systems including line lengths and diameters is not within the scope of this study, but the following information on contributory flows has been compiled and presented in Table 3-3:

## TABLE 3-3

JOINT SEWER USERS CONTRIBUTORY FLOWS

Average Monthly Gallons Per Day During 1992

| Month | Eastvale | Patterson Heights | Patterson Township | White Township | West Mayfield |
|---|---|---|---|---|---|
| 7 | 29,164 | 96,670 | 158,526 | 119,505 | 163,628 |
| 8 | 32,734 | 184,370 | 204,334 | 163,861 | 162,511 |
| 9 | 29,350 | 142,585 | 244,454 | 192,788 | 160,058 |
| 10 | 28,403 | 76,945 | 131,983 | 188,731 | 160,767 |
| 11 | 31,523 | 124,609 | 326,651 | 251,787 | 232,533 |
| 12 | 30,425 | 137,087 | 286,040 | 238,831 | 154,687 |

For the listed months, the Joint Sewer Users flows comprised the following percentages of total plant flow shown in Table 3-4:

**TABLE 3-4**

COMPOSITION OF BEAVER FALLS
WATER POLLUTION CONTROL PLANT FLOWS

Gallons per Day During 1992

| Month | Average Daily Plant Flow | Average Daily Sewer Users Flow | Percentage of Sewer Users Flow |
|---|---|---|---|
| 7 | 2,030,000 | 567,493 | 28% |
| 8 | 2,215,800 | 747,810 | 34% |
| 9 | 2,031,300 | 769,235 | 38% |
| 10 | 1,673,500 | 586,829 | 35% |
| 11 | 2,101,300 | 967,103 | 46% |
| 12 | 2,011,300 | 847,070 | 42% |

The Beaver Falls and Joint Sewer Users sanitary sewer systems are illustrated in Appendix A.

### 3.2.2 BOROUGH OF KOPPEL COLLECTION AND CONVEYANCE SYSTEM

The Borough of Koppel is completely sewered with all flows conveyed to the treatment plant. The following data give the approximate line lengths of the various-sized pipe, and are presented in Table 3-5:

**TABLE 3-5**

| | |
|---|---|
| 4,5,6" | 7,290 |
| 8" | 8,955 |
| 10" | 780 |
| 12" | 1,430 |
| 14" | 2,025 |

The Koppel Borough sewer system is illustrated in Appendix C. Specific data on the capacities of the collectors and conveyor lines is unavailable, but the Borough has experienced flooding during rainfall. In the summer of 1989, lines along Sixth Avenue overloaded, possibly due to surcharging at manhole 6, a confluence point at the end of Arthur Avenue. The effluent line from this manhole is a 12" line, and influent lines include a 14", an 8", and a 4" force main from the Luria Brothers property which was formerly B & W property. The flooding was relieved following cleaning of the affected lines. The Borough also began a program of televised inspections and flow monitoring. Also, smoke testing of the entire system was performed during 1989, identifying sources of extraneous inflow which were then eliminated.

## 3.3 IDENTIFICATION OF AREAS USING ON-LOT SUBSURFACE SEWAGE DISPOSAL SYSTEMS

Areas using on-lot sewage disposal systems have been identified in Section 4.1.

TABLE 3 - 6

Evaluation of Existing Sewer Line Capacity

| From Manhole | To Manhole | Length | From Invert | To Invert | Diameter (Inches) | Slope | Capacity (MGD) |
|---|---|---|---|---|---|---|---|
| 16 | 17a | 46.88 | 750.11 | 749.61 | 18 | 0.0107 | 7.0796 |
| 17a | 17b | 213.25 | 749.75 | 748.88 | 24 | 0.0041 | 9.4389 |
| 17b | 18a | 170.64 | 748.73 | 747.89 | 24 | 0.0049 | 10.3682 |
| 18a | 50 | 238.53 | 747.22 | 746.89 | 18 | 0.0014 | 2.5498 |
| 50 | 79a | 444.18 | 746.63 | 745.71 | 20 | 0.0021 | 4.1334 |
| 79a | 80b | 446.12 | 745.1 | 744.1 | 20 | 0.0022 | 4.3000 |
| 80b | 123 | 522.78 | 743.88 | 742.27 | 20 | 0.0031 | 5.0402 |
| 123 | 126 | 712.26 | 741.97 | 736.1 | 20 | 0.0082 | 8.2450 |
| 126 | 127 | 190.56 | 736.06 | 735.66 | 20 | 0.0021 | 4.1611 |
| 127 | 128 | 363.06 | 735.07 | 734.03 | 20 | 0.0029 | 4.8609 |
| 128 | 129 | 361.86 | 733.99 | 732.48 | 20 | 0.0042 | 5.8669 |
| 129 | 130 | 72.86 | 732.45 | 732.48 | 20 | -0.0004 | ERR |
| 130 | 132 | 20.38 | 732.25 | 732.2 | 20 | 0.0025 | 4.4986 |
| 132 | 133 | 288.05 | 732.18 | 730.95 | 20 | 0.0043 | 5.9349 |
| 133 | 135a | 358.01 | 730.95 | 729.7 | 20 | 0.0035 | 5.3666 |
| 135a | 135 | 352.34 | 729.7 | 728.32 | 24 | 0.0039 | 9.2484 |
| 135 | 136 | 151.47 | 728.3 | 727.46 | 24 | 0.0055 | 11.0048 |
| 136 | 110 | 378.33 | 729.47 | 728.41 | 24 | 0.0028 | 7.8221 |
| 110 | 109 | 275.56 | 728.31 | 727.59 | 24 | 0.0026 | 7.5538 |
| 109 | 108 | 658.25 | 727.59 | 725.52 | 24 | 0.0031 | 8.2870 |
| 108 | 107 | 566.29 | 725.44 | 723.86 | 24 | 0.0028 | 7.8058 |
| 107 | 106 | 395.3 | 723.77 | 722.72 | 24 | 0.0027 | 7.6162 |
| 106 | 106a | 39.1 | 722.45 | 722.39 | 24 | 0.0015 | 5.7889 |
| 106a | 47 | 643.11 | 722.31 | 720.55 | 24 | 0.0027 | 7.7307 |
| 47 | 48 | 40.33 | 720.36 | 720.17 | 24 | 0.0047 | 10.1431 |
| 48 | 49 | 172.56 | 720.13 | 719.68 | 24 | 0.0026 | 7.5464 |
| 49 | 49a | 79.89 | 719.7 | 719.65 | 24 | 0.0006 | 3.6970 |
| 49a | 251 | 415.9 | 719.26 | 718.16 | 24 | 0.0026 | 7.5999 |
| 251 | 120e | 410.33 | 717.93 | 716.93 | 24 | 0.0024 | 7.2952 |
| 120e | 120d | 60.75 | 716.73 | 716.46 | 24 | 0.0044 | 9.8518 |
| 120d | 120c | 249.18 | 715.97 | 715.07 | 24 | 0.0036 | 8.8812 |
| 120c | 120b | 59.77 | 714.87 | 715.47 | 24 | -0.0100 | ERR |
| 120b | 120a | 45.45 | 714.97 | 714.45 | 24 | 0.0114 | 15.8067 |
| 120a | 1 | 248.1 | 713.25 | 713.17 | 24 | 0.0003 | 2.6536 |

## 3.4 IDENTIFICATION OF UNPERMITTED COLLECTION AND DISPOSAL SYSTEMS

Unpermitted collection and disposal systems have been identified in Section 4.5

## 3.5 IDENTIFICATION OF SLUDGE GENERATION, TRANSPORT, AND DISPOSAL METHODS

### 3.5.1 CITY OF BEAVER FALLS

The Beaver Falls Water Pollution Control Plant produces 1.4 dry tons of sludge per day. The sludge is wasted from the digesters at approximately 5% solids and then is dried on sand and gravel drying beds to over 20% solids. The sludge is landfilled following removal from the drying beds. The treatment plant is owned and operated by the City of Beaver Falls, which is responsible for sludge disposal.

### 3.5.2 BOROUGH OF KOPPEL

The Koppel Wastewater Treatment Plant produces 3,500 gallons of sludge per year. Sludge is digested in aerated settling tanks until it reaches an approximate 3.2% solids level. The sludge is pumped from the holding tank as required. The treatment plant is owned and operated by the Borough of Koppel, which is responsible for sludge disposal.

### 3.5.3 HOLIDAY INN TREATMENT PLANT

The extended aeration treatment servicing the Holiday Inn in Big Beaver produces

approximately 3,500 gallons of sludge per month during periods of low occupancy. During the months of July, August, and September when occupancy is highest, as much as 7,000 gallons of sludge may be disposed each month. During May, June, and November of 1992, no sludge was disposed. The sludge is pumped by a private hauler and disposed at a permitted agricultural utilization site in Morgantown, West Virginia.

### 3.5.4 BIG BEAVER PLAZA

Between 3,000 and 4,000 gallons of sludge at a range of 0.4% to 6.4% solids is removed each month from the Big Beaver Plaza treatment plant. Since the plant has no sludge holding facility, the sludge is removed by a private hauler and disposed at an agricultural utilization site in West Virginia.

### 3.5.5 BOROUGH OF BIG BEAVER SEPTAGE SLUDGE

The Borough has a 1990 population of 2,298 persons, with all households using septic systems for sewage disposal. Individual homeowners are responsible for arranging for pumping and disposal of septage, with the hauler contracting for disposal at a land application site or treatment plant. Using a sludge generation rate of 90.9 gallons per person per year as calculated in the Beaver County Municipal Waste Management Plan of 1991, the total residential septage sludge generation in the Borough is 208,888 gallons per year. Septic tanks should be pumped every 3 to 5 years, normally by a septage hauler equipped with a vacuum tank truck. Information in the Waste Management Plan indicates that the septage is either applied to land for disposal or agriultural

utilization or is disposed at a treatment plant. Both the Monaca Wastewater Treatment Plant and the New Castle Sewage Treatment Plant accept septage sludge. With all waste haulers required to have a County license as of 1992, the County will be better able to oversee and regulate septage haulers and disposal methods. Since many septage haulers operating in Beaver County are located out-of-state, it is not yet possible to track the quantities and disposal sites of septage sludge.

### 3.5.6 BOROUGH OF HOMEWOOD SEPTAGE SLUDGE

With a 1990 population of 188, the Borough of Homewood generates 17,090 gallons of septage sludge per year, as calculated using the methods of 3.5.4 above. Homewood septage is similarly pumped and trucked by haulers for disposal on land or at a sewage treatment plant. As in Big Beaver, the individual is responsible for arranging for pumping and disposal.

# SECTION 4 - EVALUATION OF WASTEWATER TREATMENT NEEDS

## 4.1 IDENTIFICATION OF AREAS USING ON-LOT DISPOSAL TECHNOLOGY

Big Beaver Borough and Homewood Borough utilize on-lot disposal technology almost exclusively. The exceptions are the Holiday Inn (north of the Turnpike interchange with Route 18 and west of Route 18) and the Big Beaver Plaza (north of Wallace Run and east of Route 18). These two businesses have small flow sewage treatment plants which ultimately discharge to the Beaver River. Beaver Falls, Eastvale, Patterson Heights, Patterson Township, West Mayfield, and White Township are extensively sewered to the Beaver Falls sewage treatment plant. The Borough of Koppel is also sewered to its own sewage treatment plant. Beaver Falls and Koppel discharge effluent to the Beaver River.

Homewood Borough and the area of Big Beaver just west of Koppel are the most densely populated unsewered areas. The businesses along Route 18 from Beaver Falls to Koppel are also unsewered. Some of these businesses are motels, restaurants, and a truck stop, which are large consumers of water.

## 4.2 ANALYSIS OF MALFUNCTIONING ON-LOT SYSTEMS

Any household that utilizes on-lot sewage disposal technology must obtain a permit from the local Sewage Enforcement Officer (SEO). Individual lots are checked for soil type, slope, isolation distances, percolation rates, depth to shallowest indication of the water table, and depth to bedrock. The type of on-lot system used would depend on the above site conditions.

A list of the permit applications for approximately the past three years for the study area was obtained from Dan Baker, Jr. He is the SEO for Big Beaver Borough and Homewood. Examination of these applications indicates that denials for new and repair systems are scattered throughout the study area. The depth to first indication of the water table was as low as 6" and the depth to bedrock was as low as 8". Absorption fields must also maintain minimum isolation distances from water supply wells (100 feet), swimming pools (10 feet), driveways (10 feet), surface drainage ways (10 feet), property lines (10 feet), surface water (50 feet), slopes greater than 25% (10 feet), rock outcrops (10 feet), other absorption fields (20 feet), and pressurized water lines (10 feet). The SEO manual severely restricts the use of septic tanks on slopes greater than 25%. This makes the repair of malfunctions in Homewood difficult because the lot sizes are small, many houses were constructed without sewage facilities planning, and the slopes are extremely steep. In addition, Homewood does not have any zoning or subdivision ordinances dictating lot sizes when on-lot systems are used. Therefore, meeting the isolation distance requirements would be extremely difficult in Homewood.

Big Beaver Borough also uses on-lot disposal almost exclusively. It has the same problem as Homewood with slopes and soils. Big Beaver does have zoning and subdivision ordinances. The

zoning ordinance sets the minimum lot size for a single family detached dwelling utilizing on-lot disposal at 30,000 sq. ft. in R1 zones and 20,000 sq. ft. in R2 zones. With lots that are that small, meeting isolation distances could be difficult when repairs of malfunctions are necessary. Also, the soils and slopes in the Borough are not agreeable to on-lot disposal. Therefore, Big Beaver should consider changing its zoning ordinance to set a minimum lot size of one acre in all zoning districts when on-lot disposal is to be used. This will allow for the replacement of absorption areas and help maintain minimum isolation distances when repairs become necessary.

The problems of inadequate soils and site conditions have led to the problem of surface disposal of septic tank effluent. A drive through survey of Homewood and Big Beaver (around Homewood) revealed suspicious looking pipes discharging to road swales. These pipes were noticeably smaller than roof drain pipes. In some instances, the pipes were directly in line with the homes septic tank. In one instance behind a business along Route 18 in Big Beaver just south of Homewood, black water was observed discharging to the ground from three 6" terra cotta pipes. A letter dated May 3, 1984 from Dan Baker, Jr., the SEO, to David W. Borneman, Project Manager - DER Water Quality, documents point source discharges in Homewood and along Route 18 by the turnpike interchange. A recent field survey and discussions with Dan Baker, Jr. revealed that none of these problems have been corrected.

## 4.3 ANALYSIS OF POTENTIAL MALFUNCTIONS DUE TO SOILS OR SITE CONDITIONS

The soils present in the study area were evaluated for suitability for on-lot sewage disposal. The Department of Environmental Resources Sewage Enforcement Officers Manual lists the following soils

as unsuitable for on-lot disposal:

At - Atkins silt loam
Bk - Binkerton silt loam
Ca - Canadice silt loam
Ce - Cavode silt loam
Fn - Frenchtown silt loam
Ph - Philo silt loam
Pu - Purdy silt loam
Ra - Ravena silt loam
Ty - Tyler silt loam
UAB - Strip mine
UAD - Strip mine
UAE - Strip mine

In addition, soils with slopes greater than 15% would have severe limitations for on-lot sewage disposal.

Examination of the soil survey map for Beaver County shows that the entire study area is a potential malfunction area. Homewood Borough has a high malfunction potential. The soils are unsuitable, the slopes are steep, lot sizes are small, and ordinances regulating lot sizes do not exist. The residential development just west of Koppel is a potential malfunction area because of the population density. The homes along Friendship road, Aley Hill Road, and old Route 18 are also potential malfunction areas.

The area bounded by Beaver Falls, Route 18, the county line, and the Beaver River has been declared an enterprise zone by the Department of Community Affairs. This zone was chosen for development to take advantage of the Pittsburgh-Lake Erie rail system and Route 18. Commercial and industrial development is hoped to occur. Again, soils and slopes would limit the use of on-lot disposal. The best way for development to occur is by extending sewer service.

## 4.4 ANALYSIS OF OTHER POTENTIALLY MALFUNCTIONING SYSTEMS

Homewood Borough has been developed along steep slopes with no subdivision or zoning ordinances limiting lot sizes. If malfunctions occur, repairs will be extremely difficult because of isolation distances, soils, and slopes. For absorption fields that have reached the end of their useful life, replacement areas will be difficult to find. Additions to homes may have added excessive flows to smaller septic tanks causing malfunctions. Improper installation may have occurred because of a lack code enforcement from Homewood because of no zoning or subdivision ordinances.

Big Beaver does not have the same density of development as Homewood but it does have the same problems of soils and slopes limiting on-lot disposal. Big Beaver's zoning ordinance establishing a minimum lot size of 30,000 sq. ft. in R1 districts, 20,000 sq. ft. in R2 districts, and 20,000 sq. ft. in R3 districts may not give homeowners the ability to correct malfunctions. Also, Big Beaver does not have minimum lot requirements for commercial districts when on-lot disposal is used. This could have led to improper designs of disposal sytems along the commercial district near the turnpike interchange. These businesses are high volume water users (truck stop, motels, restaurants, etc.) and the absorption areas for the initial design of the disposal systems did not coordinate lot size with sewage flow. Without on-lot zoning requirements in the commercial districts, these problems will occur with any future commercial development along Route 18.

## 4.5 IDENTIFICATION OF AREAS UTILIZING ILLEGAL DISPOSAL SYSTEMS

In a letter dated May 3, 1984 from Dan Baker to David Borneman of the DER, Homewood Borough was documented to have numerous sewer connections to storm drains. The storm drains discharge to Clarks Run. There are also cases in Homewood and the area of Big Beaver adjacent to Homewood where sewer laterals discharge to highway/roadway berms. The extent of this practice is fairly common because of the poor soils and severe slopes. There are no known borehole disposal or community on-lot systems.

# SECTION 5 - PLANNING AND FACILITIES ALTERNATIVES

## 5.1 IDENTIFICATION OF ALTERNATIVES

### 5.1.1 COLLECTION, CONVEYANCE, AND TREATMENT ALTERNATIVES

*a. Alternative H-1*

Conventional sewers will be laid in the Borough of Homewood. For this alternative, a small pump station will be required. This alternative will serve 73 existing homes/businesses and a possible 10 future properties. This alternative is shown on Figure 5.1.1. Table 5-1 below provides a cost estimate for this layout.

TABLE 5-1

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 8" PVC Sewer | 8495 LF | 35.00 | 297,325.00 |
| Pump Station | 1 EA | 50,000.00 | 50,000.00 |
| 4" DIP Force Main | 3450 LF | 25.00 | 86,250.00 |
| Manholes | 31 EA | 2,000.00 | 62,000.00 |
| Railroad Boring | 50 LF | 150.00 | 7,500.00 |
| Highway Boring | 50 LF | 150.00 | 7,500.00 |
| Pavement Restoration | 3500 SY | 27.00 | 94,500.00 |
| Service Connections | 73 EA | 500.00 | 36,500.00 |
| | | Construction Cost | = 641,575.00 |
| | | Engineering | = 77,000.00 |
| | | Contingencies | = 64,160.00 |
| | | TOTAL PROJECT COST | = $782,735.00 |

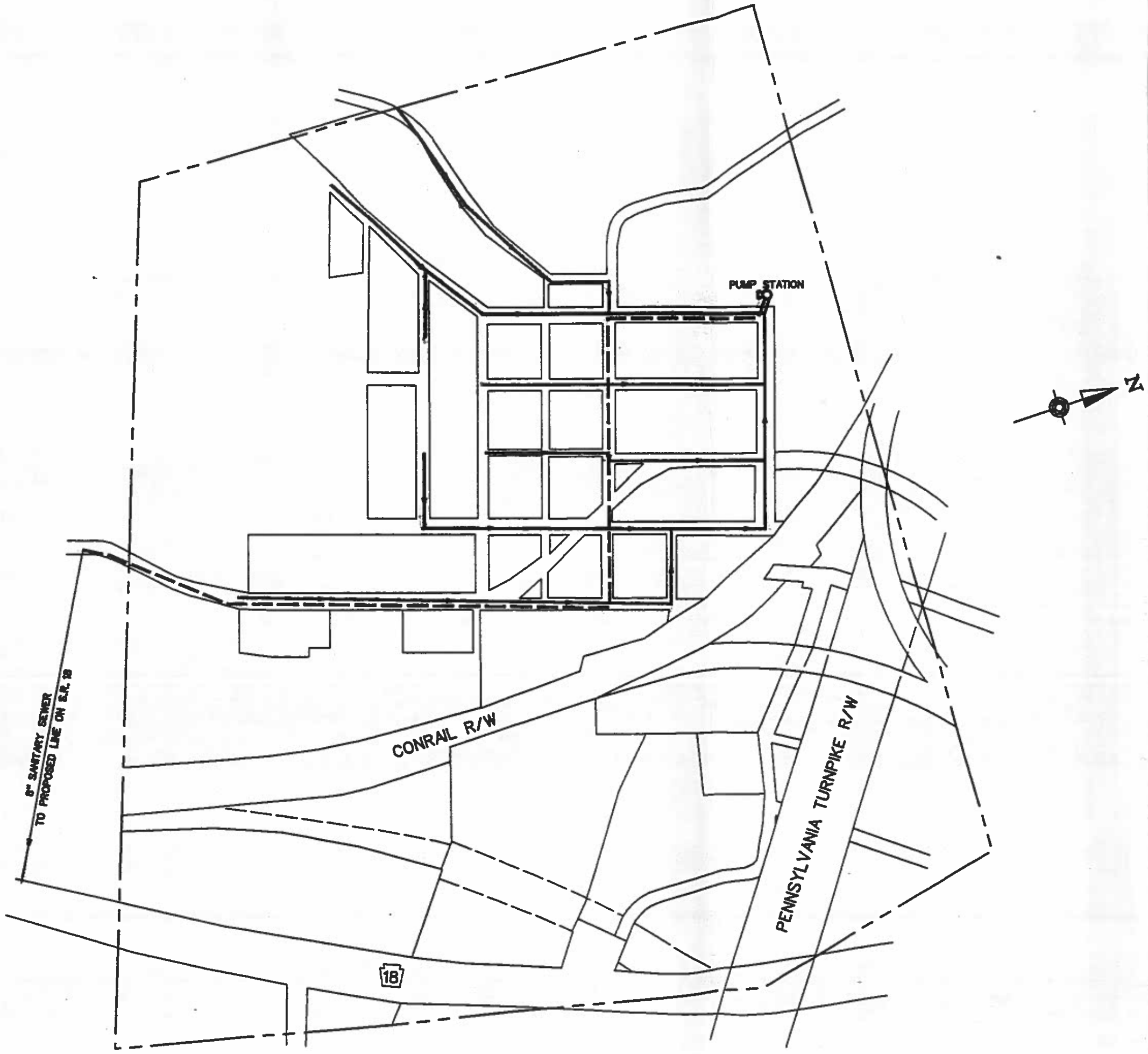


FIGURE 5.1-1 (A)
ALTERNATIVE H-1
CONVENTIONAL SEWERS AND
PUMP STATION

*b. Alternative H-2*

Small diameter sewers will be laid in the Borough of Homewood. This system will follow the same sewer layout as Alternative H-1. To provide for reduced infiltration and inflow, all existing septic tanks will be replaced. Table 5-2 provides a cost estimate for this alternative.

TABLE 5-2

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 4" PVC Sewer | 7610 LF | 25.00 | $190,250.00 |
| Cleanouts | 31 EA | 1,000.00 | 31,000.00 |
| Septic Tanks | 73 EA | 1,000.00 | 73,000.00 |
| Pump Station | 1 EA | 50,000.00 | 50,000.00 |
| 4" DIP Force Main | 3450 LF | 25.00 | 86,250.00 |
| 8" Receiving Sewer | 885 LF | 35.00 | 30,975.00 |
| Manholes | 3 EA | 2,000.00 | 6,000.00 |
| Railroad Boring | 50 LF | 150.00 | 7,500.00 |
| Highway Boring | 50 LF | 150.00 | 7,500.00 |
| Pavement Restoration | 2500 SY | 27.00 | 67,500.00 |
| Service Connections | 73 EA | 500.00 | 36,500.00 |
| | | Construction Costs | = $586,475.00 |
| | | Engineering | = 70,400.00 |
| | | Contingencies | = 58,650.00 |
| | | TOTAL PROJECT COST | = $715,525.00 |

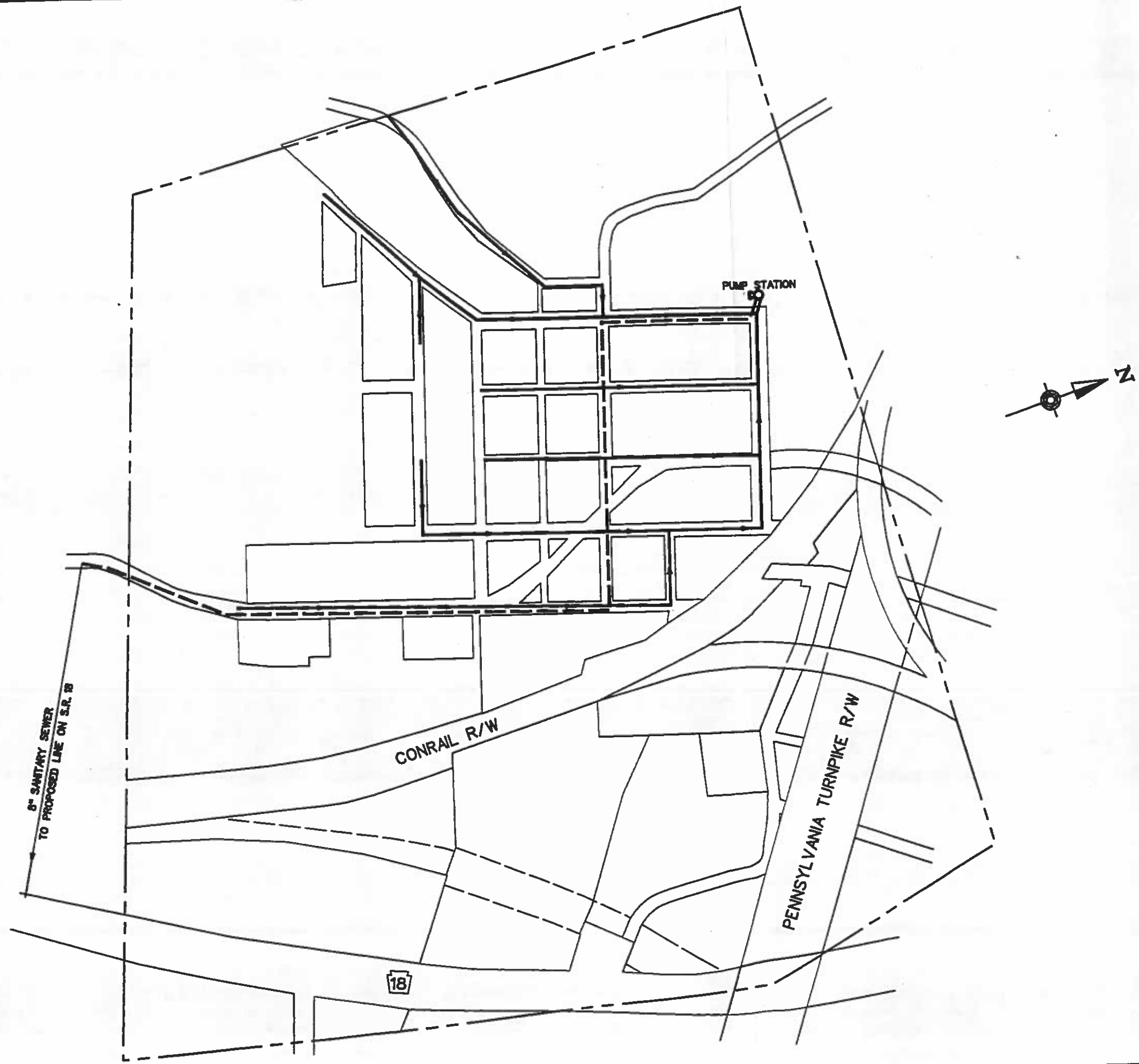


FIGURE 5.1-1 (B)
ALTERNATIVE H-2
SMALL DIAMETER GRAVITY
AND PUMP STATION

*c. Alternative H-3*

This alternative includes the use of both small diameter gravity and septic tank effluent pumping (STEP) sewers. Like alternative H-2, existing septic tanks will be replaced. It will serve 74 existing homes and a possible 10 future homes. The sewer layout is shown on Figure 5.1-2, and Table 5-3 below lists estimated costs.

TABLE 5-3

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| Septic Tanks | 74 EA | 1,000.00 | 74,000.00 |
| STEP Pumps | 43 EA | 1,000.00 | 43,000.00 |
| 2" STEP Force Main | 2,950 LF | 20.00 | 59,000.00 |
| Pump Station | 1 EA | 50,000.00 | 50,000.00 |
| 3" Force Main | 3,000 LF | 25.00 | 75,000.00 |
| 4" Sewer | 2,714 LF | 25.00 | 67,850.00 |
| Cleanouts | 11 EA | 1,000.00 | 11,000.00 |
| 8" Receiving Sewer | 885 LF | 35.00 | 30,975.00 |
| Manholes | 3 EA | 2,000.00 | 6,000.00 |
| Railroad Boring | 50 LF | 150.00 | 7,500.00 |
| Highway Boring | 50 LF | 150.00 | 7,500.00 |
| Pavement Restoration | 1,925 SY | 27.00 | 51,975.00 |
| Service Connections | 74 EA | 500.00 | 37,000.00 |
| | | Construction Cost | = $520,800.00 |
| | | Engineering | = $62,500.00 |
| | | Contingencies | = $52,080.00 |
| | | TOTAL PROJECT COST | = $635,380.00 |

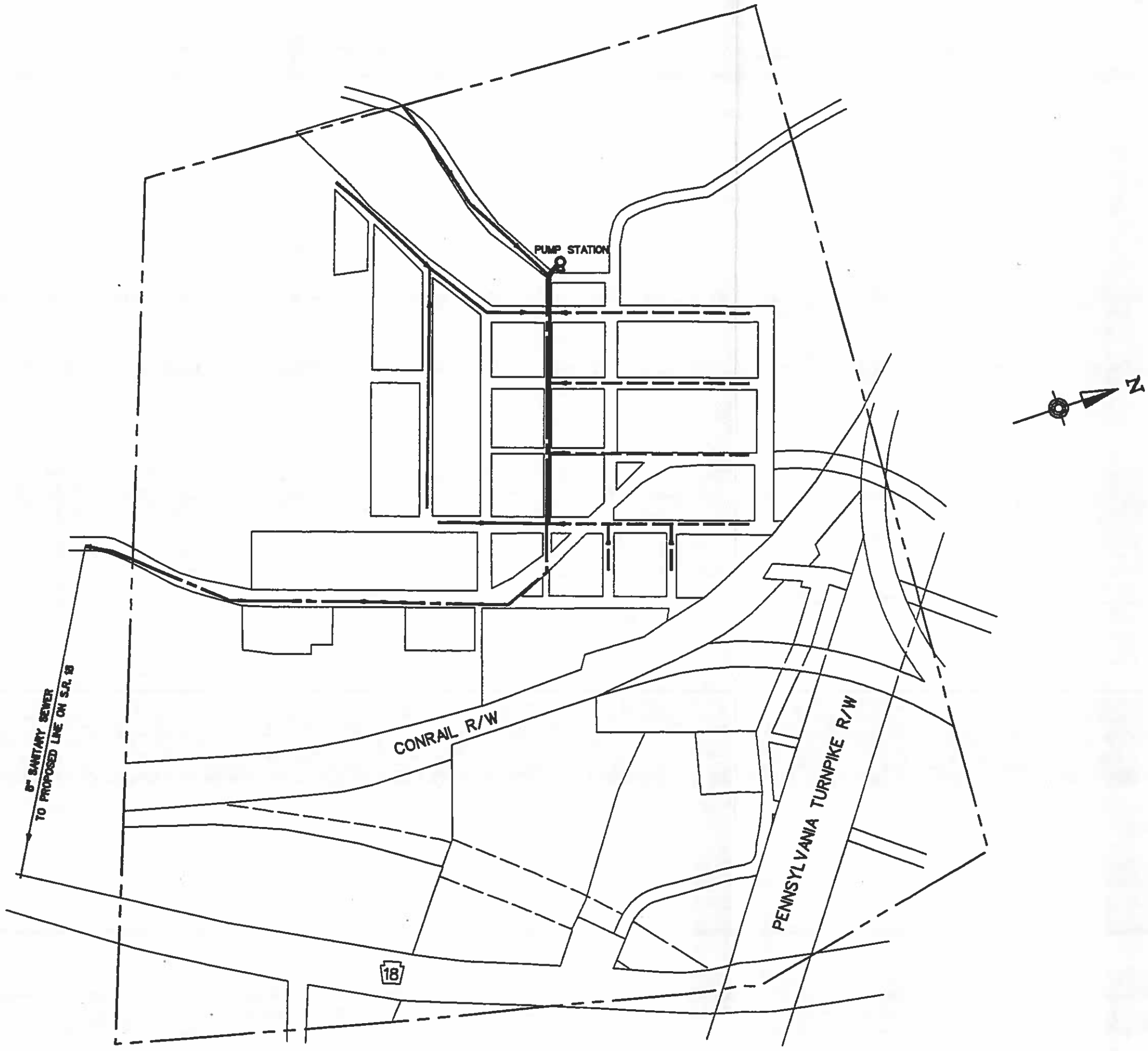


FIGURE 5.1-2
ALTERNATIVE H-3
SEPTIC TANK EFFLUENT PUM
SMALL DIAMETER GRAVITY SE
COMBINATION

*d. Alternative H-4*

The Borough of Homewood will be sewered as in Alternative H-1, but instead of a pump station to convey the sewage to Beaver Falls, the sewage will be treated in the Borough by a package treatment plant. Due to the small service area, flow equalization will be required. Clark's Run, which is the receiving stream for this alternative, has an upstream drainage area of approximately only 3.8 square miles, so advanced treatment will probably be required. The costs are presented in Table 5-4 and the layout is shown on Figure 5.1-3.

TABLE 5-4

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 8" PVC Sewer | 8,000 LF | 35.00 | 280,000.00 |
| Manholes | 32 EA | 2,000.00 | 64,000.00 |
| Pavement Restoration | 2,700 SY | 27.00 | 72,900.00 |
| Service Connections | 73 EA | 500.00 | 36,500.00 |
| Package Treatment Plant | 1 EA | 200,000.00 | 200,000.00 |
| Flow Equalization | 1 EA | 25,000.00 | 25,000.00 |
| | | Construction Cost | = $678,400.00 |
| | | Engineering | = $81,410.00 |
| | | Contingencies | = $67,840.00 |
| | | TOTAL PROJECT COST | = $827,650.00 |

*e. Alternative H-5*

Vacuum sewers were considered for Homewood Borough. Information on vacuum sewers was obtained from the EPA's October 1991 Alternative Wastewater Collection Systems manual. Vacuum sewers were recommended for areas that have at least two of the following conditions present:

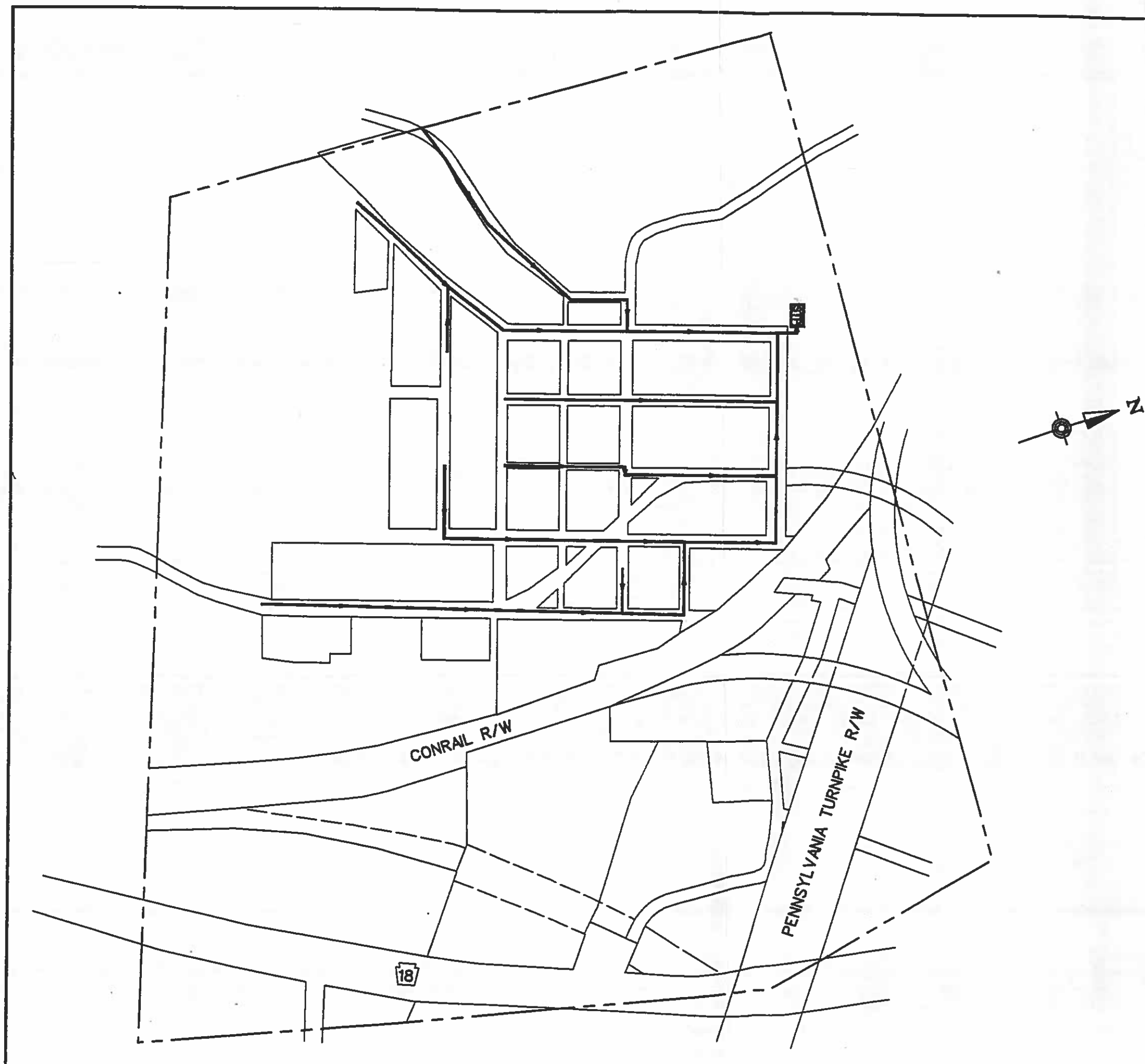


FIGURE 5.1-3
ALTERNATIVE H-4
CONVENTIONAL GRAVITY SEWERS

1. Unstable soil
2. Flat terrain
3. Rolling land with small elevation changes
4. High water table
5. Restricted construction conditions
6. Rock
7. Urban development in rural areas

Homewood has restricted construction conditions, rock, and a high water table, but it also has steep slopes. Because of the slopes, it was determined that vacuum sewers would not be practical in Homewood. It is also known that the vacuum produced by the vacuum station is capable of lifting wastewater only 15-20 feet. Since Homewood has elevation differences much greater than this which must be overcome, vacuum sewers would not be practical in Homewood.

*f. Alternative B-1*

In this alternative, sanitary sewers will be extended from the City of Beaver Falls to Big Beaver Plaza. This will allow Big Beaver Plaza to convey their sewage to the City. As detailed in Section 1.4, and based on past information, the average daily flow from the Plaza is approximately 0.002 MGD. The peak flow is approximately 0.005 MGD. Based on this flow, a 4" force main would be sufficient to carry the wastewater from Big Beaver Plaza. This alternative is shown on Figure 5.1-4 and cost data is presented in Table 5-5.

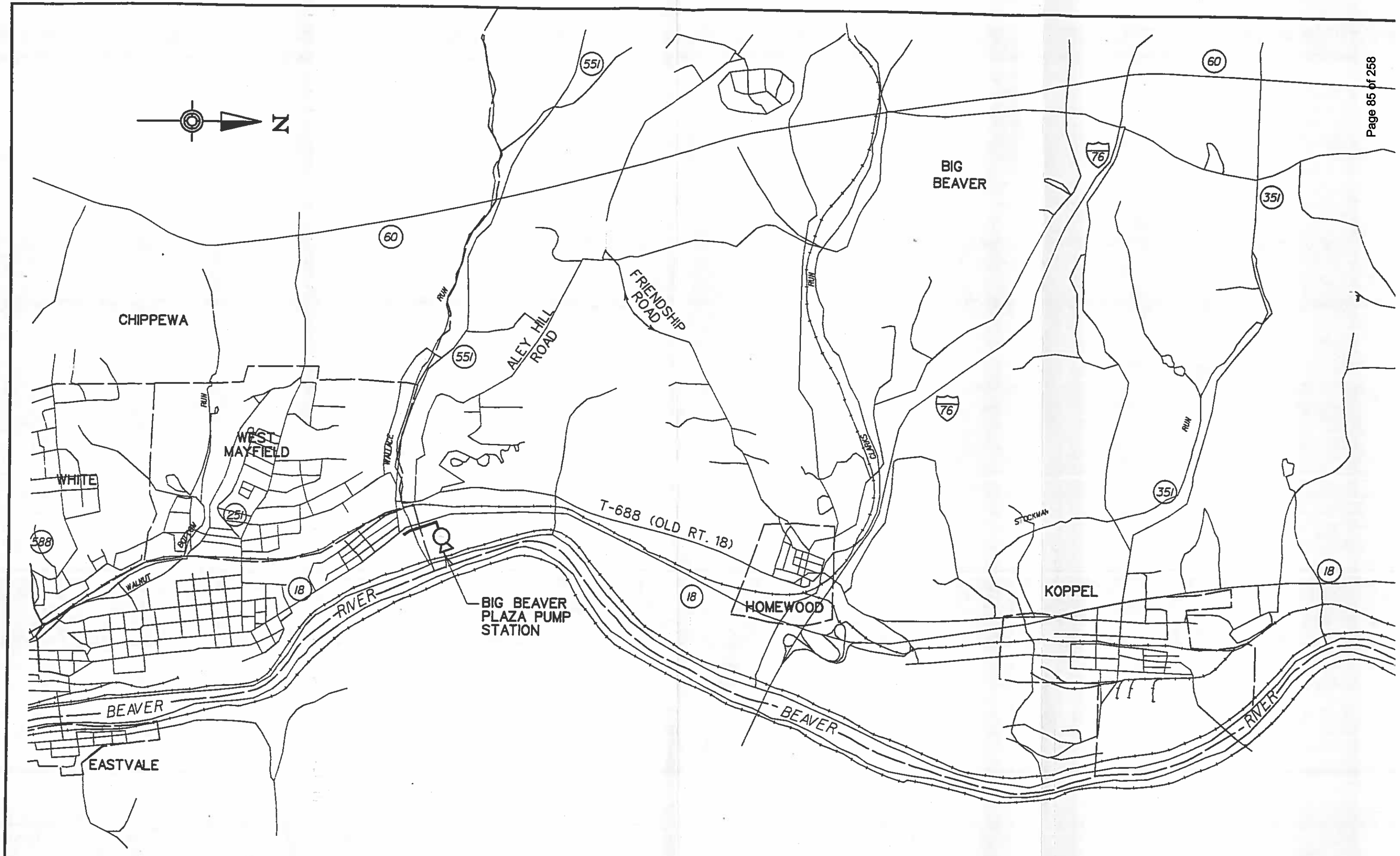


FIGURE 5.1-4
ALTERNATIVE B-1

TABLE 5-5

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| Pump Station | 1 EA | 70,000.00 | 70,000.00 |
| 4" Force Main | 2,500 LF | 25.00 | 62,500.00 |
| Pavement Restoration | 650 SY | 50.00 | 32,500.00 |
| | | Construction Cost | = $165,000.00 |
| | | Engineering | = 19,800.00 |
| | | Contingencies | = 16,500.00 |
| | | TOTAL PROJECT COST | = $201,300.00 |

*g. Alternative B-2*

Sanitary sewers will be extended to the Borough of Homewood. This will allow the Borough, Big Beaver Plaza, and approximately one-fifth of the Route 18 Enterprise Zone to convey sewage to the City of Beaver Falls. From Section 1.4, average flows will be 0.02 MGD for Homewood, 0.002 MGD for Big Beaver Plaza, and 0.192 MGD for the portion of the enterprise zone, for a total of 0.214 MGD. Peak flow is anticipated to be 0.535 MGD. This alternative is shown on Figure 5.1-5. Table 5-6 shows cost estimates for this alternative.

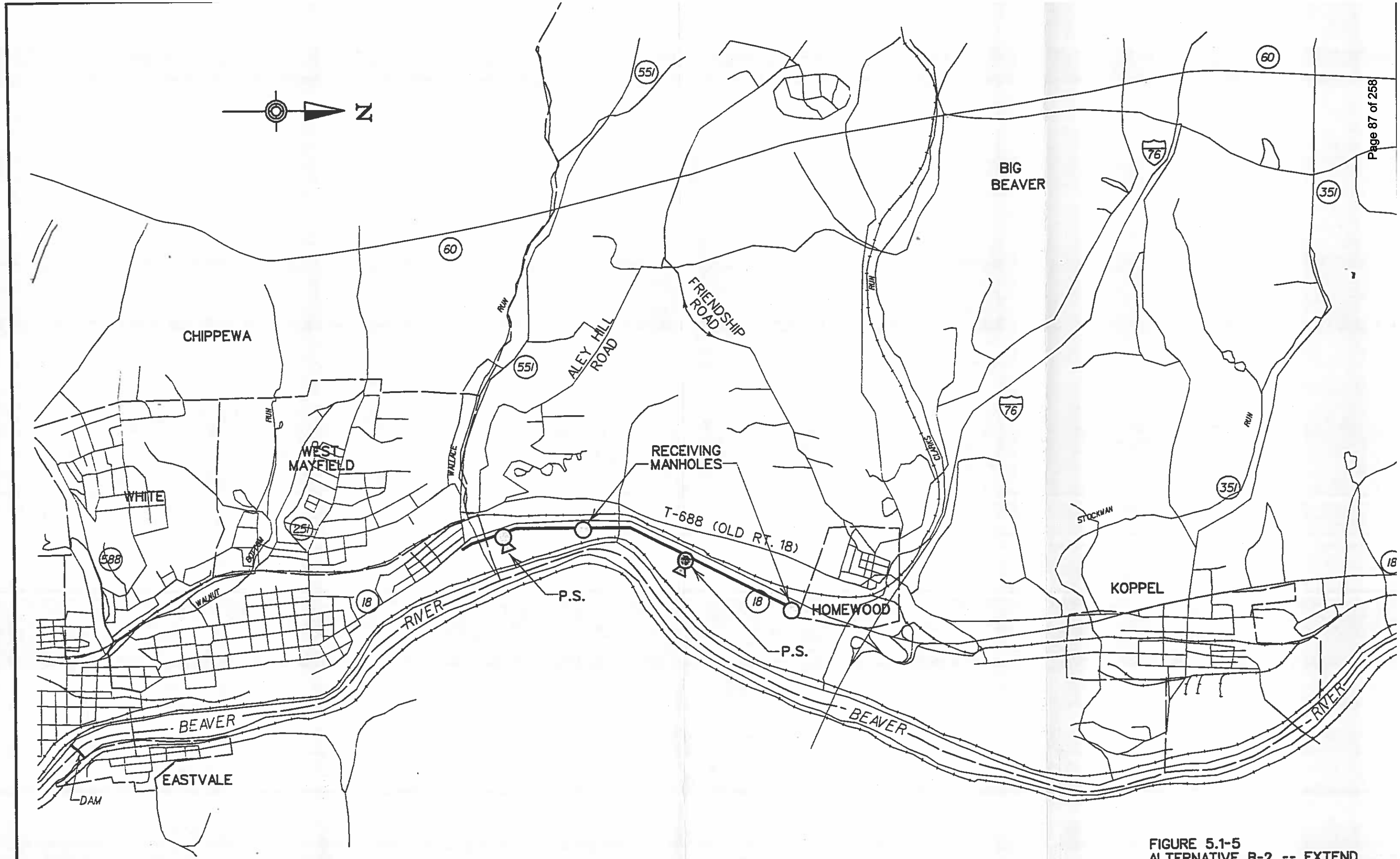


FIGURE 5.1-5
ALTERNATIVE B-2 -- EXTEND SEWER SERVICE TO THE BOROUGH OF HOMEWOOD.

TABLE 5-6

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 8" Sewer Line | 5525 LF | 35.00 | 193,375.00 |
| Manholes | 22 EA | 2,000.00 | 44,000.00 |
| Pump Station | 2 EA | 100,000.00 | 200,000.00 |
| 6" Force Main | 3,100 LF | 25.00 | 77,500.00 |
| Stream Crossings | 150 LF | 150.00 | 7,500.00 |
| Pavement Restoration | 2,710 SY | 50.00 | 135,500.00 |
| | | Construction Cost | = $657,875.00 |
| | | Engineering | = 78,950.00 |
| | | Contingency | = 65,790.00 |
| | | TOTAL PROJECT COST | = $802,615.00 |

*h. Alternative B-3*

Sanitary sewers will be extended to the Holiday Inn on Route 18. This will allow the Holiday Inn, Homewood, Big Beaver Plaza, and approximately one-half of the Route 18 Enterprise Zone to convey their wastewater to Beaver Falls. The flows are anticipated to be 0.02 MGD from the Holiday Inn, 0.02 MGD from Homewood, 0.002 MGD from Big Beaver Plaza, and 0.48 MGD from the enterprise zone, for a total flow of 0.522 MGD. The peak flow is anticipated to be 1.31 MGD. This alternative is shown on Figure 5.1-6, and costs are shown on Table 5-7.

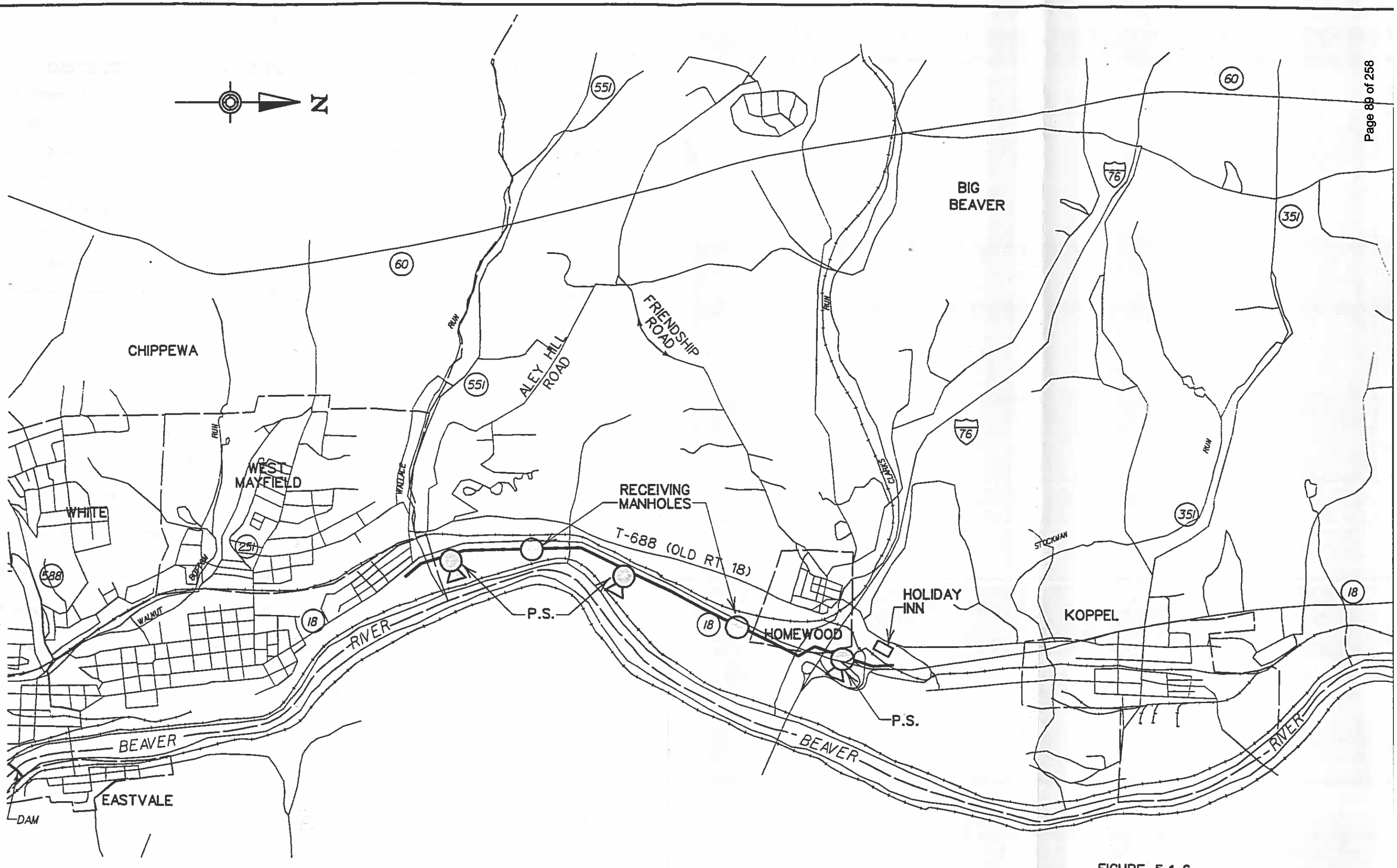


FIGURE 5.1-6
ALTERNATIVE B-3 -- EXTEND SANITARY SEWER SERVICE TO THE HOLIDAY INN SOUTH OF KOPPEL.

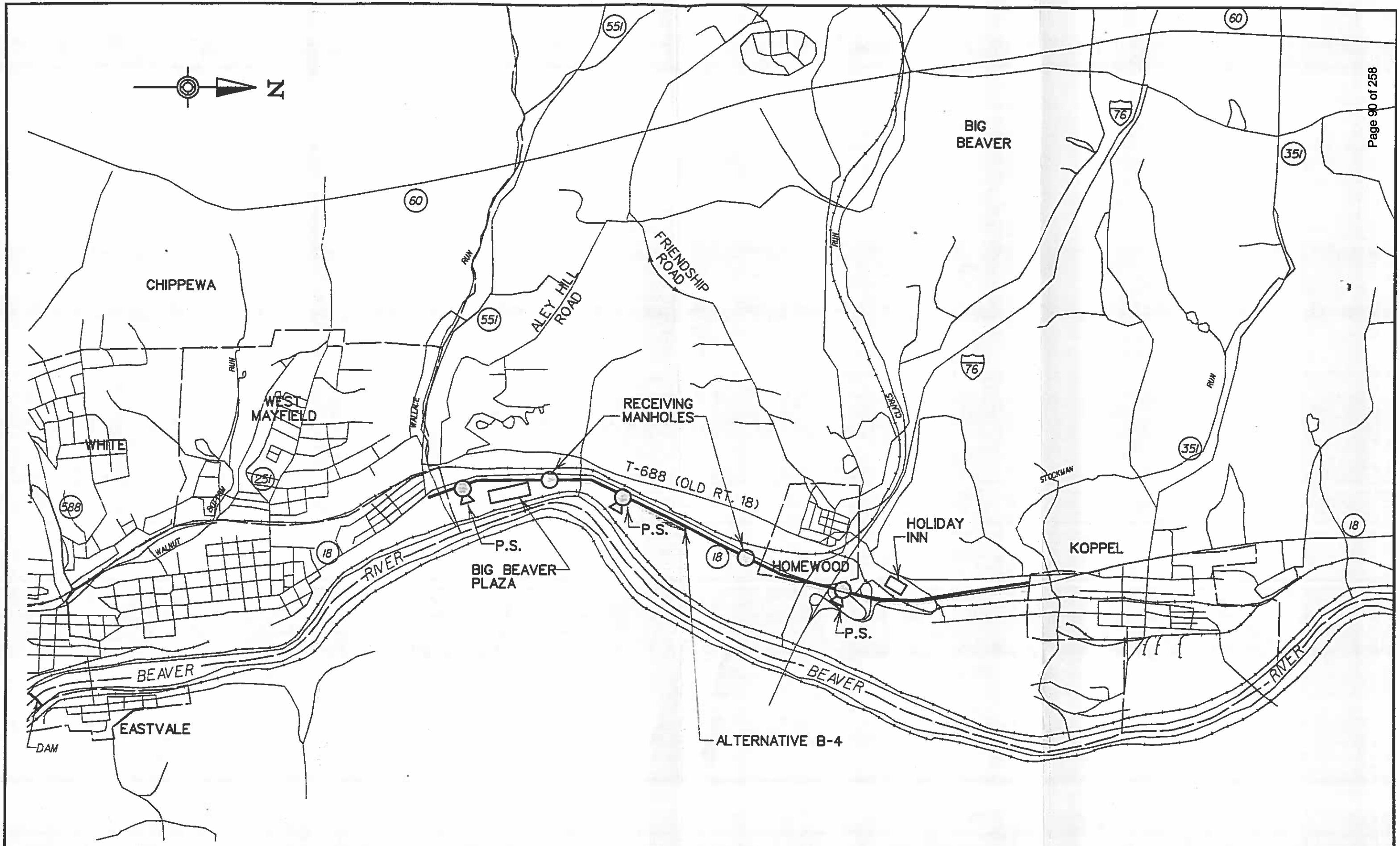


FIGURE 5.1-7
ALTERNATIVE B-4-- EXTEND SANITARY SEWERS TO THE BOROUGH OF KOPPEL.

TABLE 5-7

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 15" Sewer Line | 7,050 LF | 50.00 | 352,500.00 |
| Manholes | 28 EA | 2,000.00 | 56,000.00 |
| Pump Station | 3 EA | 100,000.00 | 300,000.00 |
| 8" Force Main | 6,000 LF | 35.00 | 210,000.00 |
| Highway Boring | 1,500 LF | 150.00 | 225,000.00 |
| Stream Crossing | 225 LF | 150.00 | 33,750.00 |
| Railroad Boring | 50 LF | 150.00 | 7,500.00 |
| Pavement Restoration | 4,350 SY | 50.00 | 217,500.00 |
| | | Construction Cost | = $1,402,250.00 |
| | | Engineering | = 168,270.00 |
| | | Contingency | = 140,225.00 |
| | | TOTAL PROJECT COST | = $1,710,745.00 |

*i. Alternative B-4*

A sanitary sewer line will be extended to the Borough of Koppel. This will allow Koppel, Homewood, Holiday Inn, Big Beaver Plaza, the Route 18 Enterprise Zone, and the Route 60/351 Enterprise Zone to convey their wastewater to the City of Beaver Falls. The anticipated flows are: Koppel, 0.22 MGD; Homewood, 0.02 MGD; Big Beaver Plaza, 0.002 MGD; Holiday Inn, 0.02 MGD; Rt 18 Enterprise Zone, 0.96 MGD; and Route 60/351 Enterprise Zone, 0.51 MGD. This will result in a total flow of 1.732 MGD with a peak flow of 4.33 MGD. This alternative is shown on Figure 5.1-7 and costs are tabulated in Table 5-8.

TABLE 5-8

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 15" Sewer Line | 7,200 LF | 50.00 | 360,000.00 |
| 18" Sewer Line | 2,400 LF | 55.00 | 132,000.00 |
| Manholes | 38 EA | 2,000.00 | 76,000.00 |
| Pump Station | 3 EA | 100,000.00 | 300,000.00 |
| 10" Force Main | 6,000 LF | 40.00 | 240,000.00 |
| Highway Boring | 1,500 LF | 150.00 | 225,000.00 |
| Railroad Boring | 50 LF | 150.00 | 7,500.00 |
| Stream Crossing | 225 LF | 150.00 | 33,750.00 |
| Pavement Restoration | 5,640 SY | 50.00 | 282,000.00 |
| | | Construction Cost = | $1,656,250.00 |
| | | Engineering = | 198,750.00 |
| | | Contingencies = | 165,625.00 |
| | | TOTAL PROJECT COST = | $2,020,625.00 |

*j. Alternative B-5*

A cost estimate was prepared for sewering the Route 60/Route 551 Enterprise Zone. The flow expected from this area is 52,500 GPD. It was determined from dividing the enterprise zone area of 1,350,000 sq. ft. by 9,000 sq. ft. per EDU. This gave a total of 150 EDU's or 52,500 GPD. Using a peaking factor of 2.5 (131,250 gal/day) and a minimum slope of 0.001 ft/ft, the size of the sewer line is 6.31". Therefore an 8" diameter line would be adequate. The sewer line would follow Wallace Run and pump to a manhole in the Beaver Falls or West Mayfield system.

A total cost breakdown is supplied in Table 5-9 below, and is shown in Figure 5.1-8.

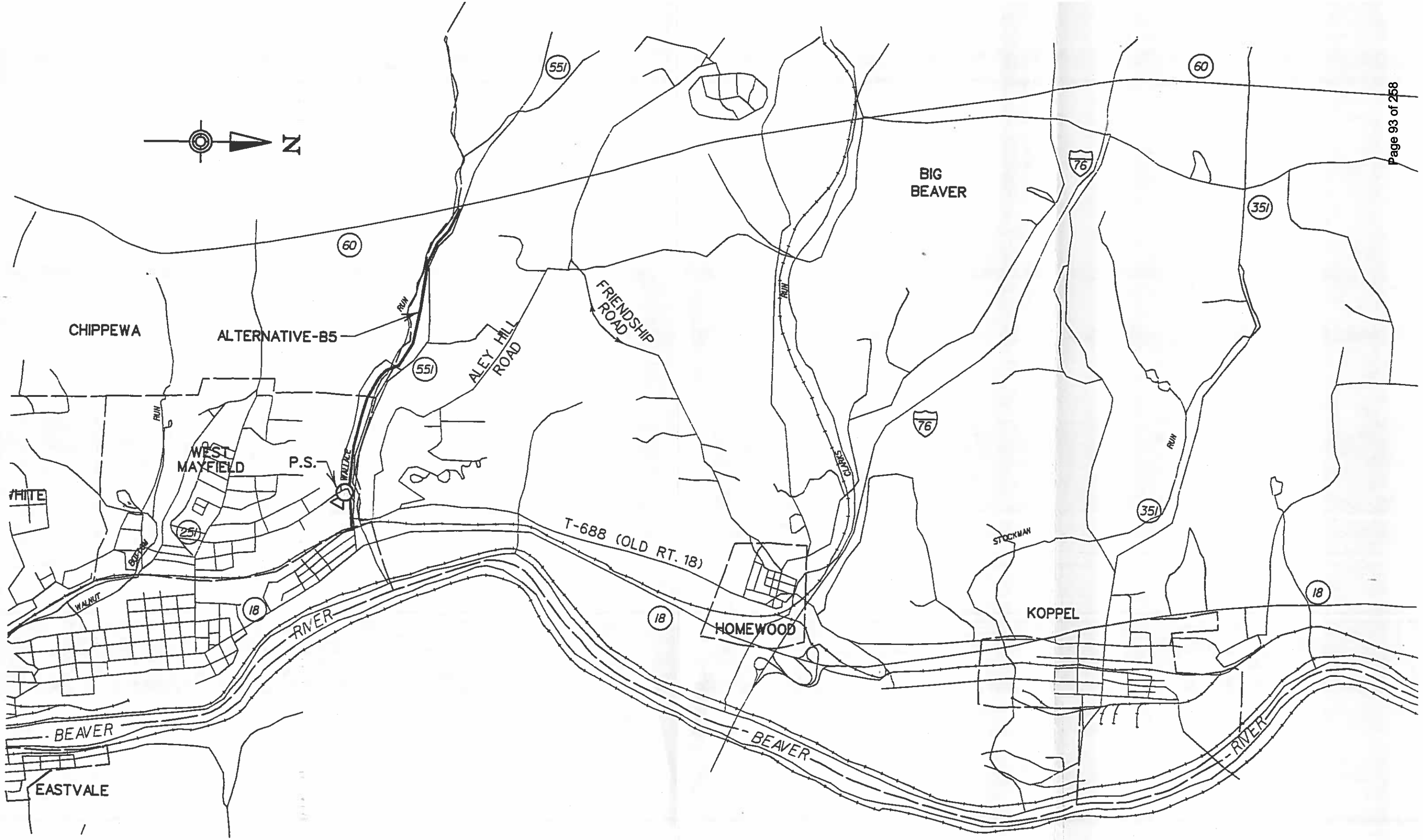


FIGURE 5.1-8
ALTERNATIVE-B5

TABLE 5-9

| ITEM | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|
| 8" DIA. PVC Sanitary Sewer | 7,250 | LF | 35.00 | 253,750.00 |
| Manholes | 29 | EA | 2,000.00 | 58,000.00 |
| Pump Station | 1 | EA | 70,000.00 | 70,000.00 |
| 6" DIA D.I.P. Force Main | 1,500 | LF | 25.00 | 37,500.00 |
| Stream Crossings | 30 | LF | 150.00 | 4,500.00 |
| Railroad Crossings | 100 | LF | 150.00 | 15,000.00 |
| Pavement Restoration | 500 | SY | 50.00 | 25,000.00 |
| | | | Construction Cost | = $463,750.00 |
| | | | Engineering | = 55,650.00 |
| | | | Contingency | = 46,375.00 |
| | | | TOTAL PROJECT COST | = $565,775.00 |

The number of manholes are based on one manhole for every 250 linear feet of sewer line. The line was originally planned to tie into the pump station on Route 18 from Koppel. The extremely steep slopes along Wallace Run made this option unrealistic. So, it was then decided for this line to have its own pump station with a force main connecting to the Beaver Falls system. The pavement restoration was estimated from some encroachment on Route 551 and on local roads in Beaver Falls.

*k. Alternative B-6*

A cost was estimated for sewering the Route 351/Route 60/Turnpike enterprise zone. The flow expected from this zone is 510,000 GPD. This flow was determined by taking the enterprise zone area of 13,070,000 sq.ft. and dividing by 9,000 sq. ft. per EDU for a total of 1452 EDU's or 510,000 GPD. Using peaking factor of 2.5 and a minimum slope of 0.01, the minimum pipe size is 9.6".

Therefore, a 10" diameter pipe is required. The sewer line would follow Stockman Run and pump to the proposed line on Route 18. An itemized cost breakdown is shown in Table 5-10 below, and the sewers are shown in Figure 5.1-9.

TABLE 5-10

| ITEM | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|
| 10" DIA. PVC Sanitary Sewer | 15,000 | LF | 40.00 | $600,000.00 |
| Manholes | 60 | EA | 2,000.00 | 120,000.00 |
| Pump Station | 1 | EA | 100,000.00 | 100,000.00 |
| 6" DIP Force Main | 1,250 | LF | 20.00 | 25,000.00 |
| Stream Crossings | 30 | LF | 150.00 | 4,500.00 |
| Railroad Crossings | 0 | LF | 150.00 | 0 |
| Highway Crossings | 0 | LF | 150.00 | 0 |
| Pavement Restoration | 1,333 | SY | 50.00 | 66,650.00 |
| | | | Construction Cost | = $916,150.00 |
| | | | Engineering | = 109,940.00 |
| | | | Contingency | = 91,615.00 |
| | | | TOTAL PROJECT COST | = $1,117,705.00 |

The number of manholes are based on one manhole for every 250 lf of sewer line. The pavement restoration is estimated from some encroachment along Route 351.

*l. Alternative B-7*

The Holiday Inn treatment plant will be expanded to accommodate Homewood. The total flow will average 0.04 MGD and the peak flow will be approximately 0.10 MGD. Due to the small size of the sewered population and the great variance in flows from the Holiday Inn, flow equalization

N

551

60

CHIPPEWA

RUN

551

ALEY HILL ROAD

FRIENDSHIP ROAD

RUN

BIG BEAVER

76

60

351

76

ALTERNATIVE-B6

RUN

WEST MAYFIELD

WALLACE

STARR

351

STOCKMAN

251

BOCKOM

WALNUT

18

T-688 (OLD RT. 18)

18

HOMEWOOD

P.S.

KOPPEL

18

BEAVER RIVER

BEAVER RIVER

EASTVALE

FIGURE 5.1-9
ALTERNATIVE-B6

will be required. The costs associated with this alternative are shown in Table 5-11, and the alternative is shown on Figure 5.1-10.

TABLE 5-11

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| Treatment Plant | 1 EA | 500,000.00 | 500,000.00 |
| Flow Equalization | 1 EA | 75,000.00 | 75,000.00 |
| Sludge Holding Tank | 1 EA | 75,000.00 | 75,000.00 |
| 4" Sewers | 7,610 LF | 25.00 | 190,250.00 |
| Septic Tanks | 73 EA | 1,000.00 | 73,000.00 |
| Pump Station | 1 EA | 50,000.00 | 50,000.00 |
| 4" Force Main | 1,750 LF | 25.00 | 43,750.00 |
| 8" Receiving Sewer | 500 LF | 35.00 | 17,500.00 |
| Cleanouts | 31 EA | 1,000.00 | 31,000.00 |
| Manholes | 2 EA | 2,000.00 | 4,000.00 |
| Pavement Restoration | 2,250 SY | 27.00 | 60,750.00 |
| | | Construction Cost | = $1,120,250.00 |
| | | Engineering | = 134,430.00 |
| | | Contingency | = 112,025.00 |
| | | TOTAL PROJECT COST | = $1,366,705.00 |

*m. Alternate BF-1*

In this alternative, the main interceptor in the City of Beaver Falls will be replaced from the raw sewage overflow manhole at the corner of 6th Avenue and 23rd Street to the treatment plant. Replacement of the existing vitrified clay line with a larger diameter PVC line will allow greater flow by providing a larger hydraulic radius and by providing a smoother pipe, resulting in lower friction losses. In addition, the PVC sewer line and precast concrete manholes have fewer joints, and will

Alternate BF-1

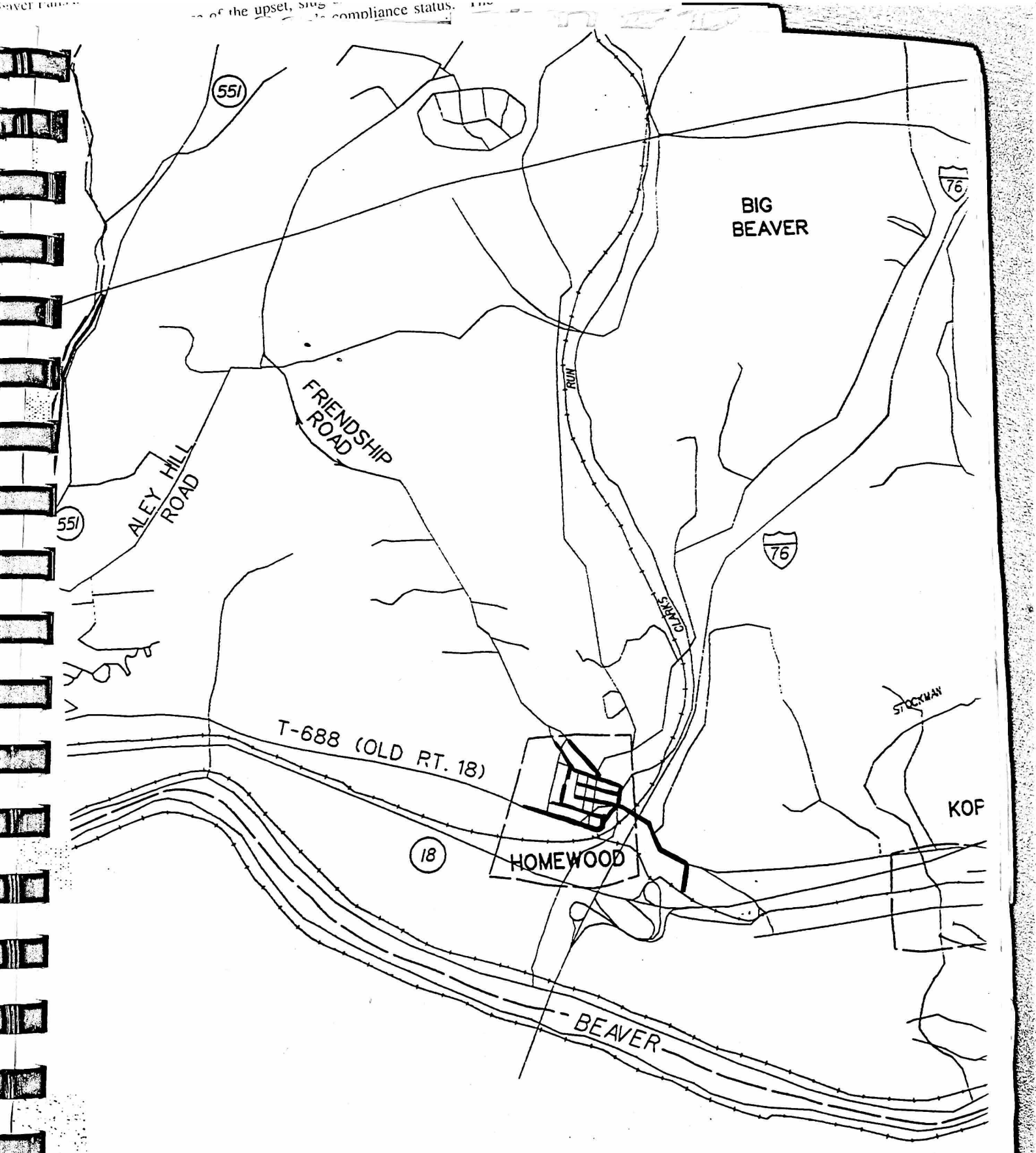


FIGURE 5.1-1
ALTERNATIVE

provide for a reduction in infiltration and inflow. The cost estimate for this alternative is given in Table 5-12 below.

TABLE 5-12

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 24" PVC Sewer | 9555 LF | 65.00 | $621,075.00 |
| Manholes | 39 EA | 2,000.00 | $78,000.00 |
| Railroad Crossing | 75 LF | 150.00 | $11,250.00 |
| Stream Crossing | 50 LF | 150.00 | $7,500.00 |
| State Road Restoration | 477 SY | 50.00 | $23,850.00 |
| Local Road Restoration | 2314 SY | 27.00 | $62,478.00 |
| Unpaved Restoration | 1506 SY | 10.00 | $15,060.00 |
| Reconnect Laterals | 30 EA | 150.00 | $4,500.00 |
| | | Total Construction Cost | $823,713.00 |
| | | Engineering | $98,845.00 |
| | | Contingencies | $82,371.00 |
| | | TOTAL PROJECT COST | $1,004,929.00 |

*n. Alternative BF-2*

The East Trunk Line in the City of Beaver Falls will be replaced from the city line to Manhole No. 40 at 25th Street and 9th Avenue. From the overflow manhole to be the plant, the line will be replaced with a 24" line and from Manhole 40-8 to the overflow manhole, the line will be replaced with 20" line. This alternative involves increasing the capacity of the line to eliminate the overflow by replacing 275' of 18" line and 4650' of 20" line with 24" line, and replacing 895' of 15" line and 870' of 18" line with 20" line. The East Trunk line is a major source of inflow and infiltration due to its old construction, leaking joints, and cracked and broken pipes. This alternative will serve to

reduce infiltration/inflow and to eliminate a raw sewage overflow. The cost estimate for this alternative is given in Table 5-13.

TABLE 5-13

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| 12" PVC Sewer | 9206 LF | 50.00 | $460,300.00 |
| 20" PVC Sewer | 1765 LF | 60.00 | $105,900.00 |
| 24" PVC Sewer | 9555 LF | 65.00 | $621,075.00 |
| Manholes | 100 EA | 2,000.00 | $200,000.00 |
| Railroad Borings | 75 LF | 150.00 | $11,250.00 |
| Local Road Restoration | 5050 SY | 27.00 | $136,350.00 |
| State Road Restoration | 30 SY | 50.00 | $1,500.00 |
| Unpaved Restoration | 2750 SY | 10.00 | $27,500.00 |
| Stream Crossings | 400 LF | 150.00 | $60,000.00 |
| Reconnection of Laterals | 480 EA | 150.00 | $72,000.00 |
| | | Total Construction Cost | $1,695,875.00 |
| | | Engineering | $203,500.00 |
| | | Contingencies | $169,600.00 |
| | | TOTAL PROJECT COST | $2,068,975.00 |

o. *Alternative BF-3*

The East Trunk Line in the City of Beaver Falls will be replaced as redesigned and previously permitted by the Department of Environmental Resources. This project had received PennVest funding and bids were obtained for the northern portion. This alternative also requires enlargement of portions of the interceptor, from Manhole 40 at 25th Street and 9th Avenue to the plant. The enlargements will be as per Alternative BF-2. Cost estimates are shown in Table 5-14 below.

TABLE 5-14

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| Redesigned Line | 1 LS | 531,000.00 | $531,000.00 |
| 12" PVC Sewer | 2010 LF | 50.00 | $100,500.00 |
| 20" PVC Sewer | 1765 LF | 60.00 | $105,900.00 |
| 24" PVC Sewer | 9555 LF | 65.00 | $625,075.00 |
| Manholes | 53 EA | 2,000.00 | $106,000.00 |
| Railroad Borings | 75 LF | 150.00 | $11,250.00 |
| Local Road Restoration | 3991 SY | 27.00 | $107,757.00 |
| State Road Restoration | 30 SY | 50.00 | $1,500.00 |
| Unpaved Restoration | 2072 SY | 10.00 | $20,720.00 |
| Stream Crossing | 400 LF | 150.00 | $60,000.00 |
| Reconnection of Laterals | 480 EA | 150.00 | $72,000.00 |
| | | Total Construction Cost | $1,741,702.00 |
| | | Engineering | $209,000.00 |
| | | Contingencies | $174,170.00 |
| | | TOTAL PROJECT COST | $2,124,872.00 |

*p.* *Alternative BF-4*

In this alternative, the sewer line from the north city line to the treatment plant will be enlarged to accommodate flows from Homewood, Big Beaver and Koppel. This was bid as an alternate in the East Trunk Line Project. Cost estimated are shown in Table 5-15.

Chosen By D.E.R.

4-4-94


Chosen By
D.E.R.

**TABLE 5-15**

| DESCRIPTION | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|
| Redesigned Line | 1 LS | 576,025.00 | $576,025.00 |
| 18" PVC Sewer | 2010 LF | 55.00 | $110,550.00 |
| 20" PVC Sewer | 1765 LF | 60.00 | $105,900.00 |
| 24" PVC Sewer | 9555 LF | 65.00 | $621,075.00 |
| Manholes | 53 EA | 2,000.00 | $106,000.00 |
| Railroad Borings | 75 LF | 150.00 | $11,250.00 |
| Local Road Restoration | 3991 SY | 27.00 | $136,350.00 |
| State Road Restoration | 30 SY | 50.00 | $1,500.00 |
| Unpaved Restoration | 2072 SY | 10.00 | $27,500.00 |
| Stream Crossing | 400 LF | 150.00 | $60,000.00 |
| Reconnection of Laterals | 480 EA | 150.00 | $72,000.00 |
| | | Total Construction Cost | $1,828,150.00 |
| | | Engineering | $219,400.00 |
| | | Contingencies | $182,815.00 |
| | | TOTAL PROJECT COST | $2,230,365.00 |

*q. Alternative STP-1*

This alternative proposes to expand the Beaver Falls Water Pollution Control Plant to accommodate present and planned flow by making the process changes identified in the Water Pollution Control Plant Study prepared by Widmer Engineering Inc. The Study is included as Appendix B, and the estimated costs are presented in Table 5-16 below:

Chosen By D.E.R. 4-4-94

TABLE 5-16

| ITEM | AMOUNT |
|---|---|
| Pretreatment Improvements | $100,000.00 |
| Primary Treatment Improvements | $60,000.00 |
| Secondary Treatment Improvements | $1,435,000.00 |
| Biosolids Treatment Improvements | $1,005,000.00 |
| Miscellaneous (Pumps, Piping, etc.) | $1,750,000.00 |
| Ultraviolet Disinfection | $250,000.00 |
| Contingency | $200,000.00 |
| Total Construction Cost | $4,800,000.00 |
| Engineering | $500,000.00 |
| Administration & Legal | $55,000.00 |
| TOTAL PROJECT COST | $5,355,000.00 |

*r. Alternative STP-2*

This alternative proposes to convert the Beaver Falls Water Pollution Control Plant to sequencing batch reactors. The existing oxidation tower and final clarifiers will be demolished to provide space for the three SBR units. Due to the change in treatment processes, biosolids production will increase, and biosolids handling facilities will be increased in size. The estimated project costs are presented in Table 5-17 below:

TABLE 5-17

| DESCRIPTION | AMOUNT |
|---|---|
| Pretreatment Improvements | $100,000.00 |
| Secondary Treatment Improvements | $1,220,500.00 |
| Biosolids Treatment Units | $1,344,000.00 |
| Miscellaneous | $1,750,000.00 |
| Ultraviolet Disinfection | $250,000.00 |
| Contingency | $200,000.00 |
| Total Construction Cost | $4,864,500.00 |
| Engineering | $500,000.00 |
| Administration & Legal | $55,000.00 |
| TOTAL PROJECT COST | $5,419,500.00 |

*s. Alternative STP-3*

This alternative proposes to convert the Beaver Falls Water Pollution Control Plant to bioaerated filters. This alternative will require the demolition of the existing oxidation tower, the construction of aeration basins, and the addition of blowers. Biosolids generation is anticipated to be approximately equal to that of the oxidation tower in Alternative STP-1. The estimated costs are shown in Table 5-18.

TABLE 5-18

| DESCRIPTION | AMOUNT |
|---|---|
| Pretreatment Improvements | $100,000.00 |
| Primary Treatment Improvements | $60,000.00 |
| Secondary Treatment Improvements | $1,606,400.00 |
| Biosolids Handling Improvements | $1,005,000.00 |
| Miscellaneous | $1,750,000.00 |
| Ultraviolet Disinfection | $250,000.00 |
| Contingency | $200,000.00 |
| Total Construction Cost | $4,971,400.00 |
| Engineering | $500,000.00 |
| Administration & Legal | $55,000.00 |
| TOTAL PROJECT COST | $5,526,400.00 |

## 5.1.2 INDIVIDUAL AND COMMUNITY ON-LOT ALTERNATIVES

*a) Alternative 0-1*

This alternative proposes the continued use of individual on-lot disposal systems. As discussed previously, the vast majority of the soils in the unsewered areas of the study area are unsuitable for on-lot systems. However, it must be realized that the soil survey is very general, and does not necessarily reflect site-specific soil conditions. With the services of a good Sewage Enforcement Officer, and with the help of public education on on-lot disposal systems, individual on-lot disposal systems may continue to provide adequate sewage disposal in these rural areas. The SEO will have a working knowledge of sewage treatment fundamentals and Chapter 73 requirements. His knowledge will allow replacement and repair of malfunctioning systems in rural areas. Public education will consist of informing OLDS owners about proper operation and maintenance procedures

for their systems. This includes fundamentals of operation, recommended frequency of pumping, water conservation practices, and limiting the use of toxic cleaners. This information is available in the DER publication "Consumers Guide to On-Lot Sewage Disposal System Operation and Maintenance". This guide is attached as Appendix D. Owners of OLDS will be made aware of the publication and how they may receive a copy. In addition, the Borough can exercise its duty to assure proper sewage disposal within its borders by adopting an OLDS Management Ordinance. The ordinance should be consistent with Subchapter E of Chapter 71 of the Rules and Regulations of the Department.

*b) Alternative O-2*

This alternative proposes the use of small flow treatment facilities, land treatment alternatives, or package treatment facilities to serve individual homes or clusters of homes. At the current time, there are no small flow facilities serving clusters of homes, and this alternative should not be encouraged in the future as a method of long-term sewage disposal. A policy allowing this type of development may generate a large number of these facilities for which the municipality is ultimately responsible. This type of sewage disposal method is best restricted to an interim method of sewage disposal in areas scheduled for sewer service within 10 years or to repairs of existing OLDS systems. In this way, higher density development can occur in designated growth areas which will make providing the area with sewers more feasible.

To permit this type of sewage disposal in future sewer service areas, the municipality should require an operation and maintenance agreement and bond to assure adequate care of the system. The municipality may amend the subdivision ordinance to accommodate these requirements, as well as

define the areas in which these systems will be permitted. It should be required that a homeowners association be formed to operate and maintain the treatment facility in residential areas.

*c) Alternative O-3*

This alternative examines the future use of community on-lot disposal systems. Since the vast majority of soils in the study area are unsuitable for on-lot sewage disposal, it is highly unlikely that an area large enough for a community absorption field could be found. In addition, this type of system should have an available replacement absorption area. This requirement further raises the unlikelihood that such an area will be found. Due to the technical and administrative problems associated with this type of system in this location, it is not recommended that this alternative receive further consideration.

*d) Alternative O-4*

This alternative examines the future use of holding tanks to provide sewage disposal. Holding tanks are a very expensive method of sewage service. With a 1000 gallon holding tank, the average homeowner generating 275 gpd of sewage would have to have the tank pumped every 3.6 days. If the pumping fee is $0.07/gal, the homeowner must pay $70 to have the tank pumped. This would average $577.50/month. It is not recommended that this alternative receive further consideration.

*e) Alternative O-5*

This is the No Action Alternative. This alternative would allow raw sewage to discharge to the Beaver River from the overflow manhole in Beaver Falls. It would allow a discharge of inadequately treated wastewater from treatment plants located at the Holiday Inn and Big Beaver Plaza as well as from the Beaver Falls Water Pollution Control Facility. The storm sewers in Homewood would continue to carry raw sewage into Clark's Run. These discharges are a threat to public health. The treatment plants at the Holiday Inn and Big Beaver Plaza, as well as Homewood's sewers discharge inadequately treated wastewater and degrade water quality upstream of the Beaver Falls Municipal Authority's water intake. Since there are no sewers in Big Beaver, if this alternative is implemented, economic growth in the Borough will be inhibited. In addition, the City and DER are negotiating a Consent Order/Agreement. This will require the City to eliminate the raw sewage overflow and secondary treatment bypass. In view of the hefty fines which may be imposed for failing to eliminate these problems (up to $25,000.00/day), this alternative is environmentally, economically, and administratively unacceptable.

## 5.2 EVALUATION OF SEWAGE MANAGEMENT PROGRAM ALTERNATIVES

*a. Alternative 1*

This alternative will establish an inspection schedule for on-lot disposal systems. This will allow the Borough to more adequately enforce ordinances related to OLDS system operation and maintenance, and to require the upgrade or repair of any system found to be malfunctioning. While this alternative will provide for increased enforcement of ordinances, it will not necessarily require a

greatly increased administration on the part of the municipalities. The successful administration will require the identification of each OLDS, continued monitoring of the performance of the systems, recordkeeping of inspection reports, notifications to owners of malfunctioning systems, and requiring the repair of malfunctioning systems. It should be noted that the population density in Big Beaver Borough is very low (approximately 0.2 persons per acre) and decreasing, it is not anticipated that this program will be cost-effective for the protection of public health and the environment. In the Borough of Homewood, it is known that there are numerous connections of septic tank effluent to storm sewers. In such a case, this alternative will serve no useful purpose. It is not recommended that this alternative be implemented in either Homewood or Big Beaver.

*b. Alternative 2*

This alternative will require scheduled maintenance for on-lot disposal systems. This will allow the Borough to more adequately assure proper operation of the systems. Since it is commonly required for septic tanks to be pumped every 3 years in this type of program, the municipality may be divided into thirds, with one third of the municipality being required to pump their septic tanks in any given year. After 3 years, all residents will have had their septic tanks pumped, and the cycle will begin again. Residents are required to submit a copy of their receipt as proof of the required maintenance. In Big Beaver, the number of systems in each district should be known. Generic notices may be sent out with tax bills notifying each system owner as to the year in which they are required to have their tanks pumped. Enforcement may be as simple as counting the number of receipts received. These procedures will be identified in an OLDS Management Ordinance. In Homewood, the number of systems is small, and the additional administrative requirements will be minimal. It is recommended

that this alternative be implemented in both Homewood and Big Beaver.

*c. Alternative 3*

This alternative proposes municipal ownership or management of individual on-lot disposal systems. In this case, the municipality would arrange for operation, maintenance, and repair of individual on-lot disposal systems. The municipality would then bill the system owner for the costs incurred to the municipality. Due to the additional administrative requirements, and the uncertainty of the collection of reimbursements, it is not recommended that this alternative be implemented.

*d. Alternative 4*

This alternative proposes the aggressive enforcement of ordinances which require operation and maintenance. At the current time, there are no such ordinances in effect. When these ordinances are adopted, aggressive enforcement is recommended to ensure adequate performance of the on-lot systems.

*e. Alternative 5*

This alternative proposes the repair, replacement, or upgrading of malfunctioning systems. At the current time, this alternative is being implemented. As malfunctions are discovered, they are repaired to the specifications of Chapter 73, where possible. This alternative is very important in the protection of human health and the environment. It is recommended that this practice be continued.

*f. Alternative 6*

This alternative proposes the establishment of a joint municipal sewage management program. Although not done by a formal arrangement, this alternative is already being implemented. Both Big Beaver and Homewood currently utilize the same Sewage Enforcement Officer, Daniel Baker. Mr. Baker is doing an excellent job as SEO, has served as SEO for a number of years, and is intimately knowledgeable about conditions in the area. This alternative should be continued in its current form.

## 5.3 IDENTIFICATION OF NONSTRUCTURAL PLANNING ALTERNATIVES

Comprehensive plans have been prepared for Beaver Falls and Big Beaver Borough. Beaver Falls is fully developed and fully sewered and has little need for revision of the sewage facilities section of its plan. Big Beaver Borough is in the process of developing a new comprehensive plan. In the development of this plan, zoning and land use changes should be made to accommodate the enterprise zone designations. The Borough should update the zoning ordinance to increase the minimum lot size for on-lot sewage disposal from 20,000 sq. ft. to one acre. This way, if malfunctions occur, there is a greater chance for finding a replacement area for an absorption field. This will also reduce the density of the unsewered population and improve the drinking water quality from privately owned wells. An on-lot management program should also be implemented. This program should specify and require proper planning, permitting installation, operation and maintenance, and enforcement procedures. For instance, requiring sewage disposal permit to be obtained from the SEO before a building permit can be issued would be an example of proper planning and permitting. Establishment of an on-lot

maintenance ordinance specifying that septic tanks be pumped and cleaned once every three years would be an example of proper operation and maintenance. Since the soils in the Borough are generally unsuitable for on-lot sewage disposal, the Borough may wish to consider requiring a replacement absorption area before permit issuance. A review of some past on-lot permit applications shows that the sewage enforcement officer is doing on outstanding job of approving and denying applications in Big Beaver, so enforcement is adequate.

Homewood Borough has no comprehensive plans, zoning ordinances, or subdivision ordinances. It is recommended that zoning and subdivision ordinances be adopted by Homewood. The zoning ordinance should set a minimum lot size for on-lot sewage disposal at one acre for a single family residence. The zoning ordinance should also state that a sewage permit must be obtained prior to receiving a building permit. Homewood should adopt an on-lot maintenance ordinance to ensure proper performance of the individual on-lot disposal systems.

## 5.4 EVALUATION OF LOCAL AGENCY PROGRAM

### 5.4.1 REGIONAL LOCAL AGENCY PROGRAM

Big Beaver Borough and Homewood Borough are the two municipalities in the study area that will continue to use on-lot sewage disposal systems. These municipalities currently use Dan Baker, Jr., as their sewage enforcement officer. Therefore, Homewood and Big Beaver already have a quasi-regional local agency through Dan Baker, Jr. The regional local agency program does not need to be expanded beyond what is already in place.

### 5.4.2 TECHNICAL OR ADMINISTRATIVE NEEDS

Big Beaver and Homewood currently rely on Dan Baker, Jr. to keep all on-lot records (permit issuances, denials, and repairs). The Boroughs should start to keep records on file at their offices and keep track of known malfunctioning on-lot disposal systems. This way, if something happens to the SEO's files, a backup file will be on hand at the Borough's office. Also, files will be more accessible to the public if they are kept in the municipal offices.

## 5.5 EVALUATION OF ALTERNATIVES

*a) UPGRADE THE BEAVER FALLS STP AND EXPAND TRUNKLINE SEWER FROM OVERFLOW MANHOLE TO THE TREATMENT PLANT*

This option involves no sewer extensions outside of the City of Beaver Falls. It does not provide any capacity for Big Beaver or Homewood. This will involve alternatives BF-1 and STP-1. These alternatives are the bare minimum that Beaver Falls will be required to do in order to eliminate the 6th Avenue/23rd Street overflow. The total project cost of $6,360,000 is evaluated as a Pennvest loan, a bond issue, and a combination of 50% Pennvest and 50% bond issue and estimated users fee are presented in Table 5-19. There will not be any tapping fees because the sewer line is already in service. Grants were not figured into the financing because of the lack of grants available. However, grants should be actively pursued. Available grants are identified in Section 5.6.

TABLE 5-19

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $6,360,000.00 | $6,360,000.00 | $6,360,000.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Annual Cost | $357,783.00 | $481,424.00 | $419,603.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Interceptor O & M | $211,214.00 | $211,214.00 | $211,214.00 |
| Total Annual Cost | $1,610,428.00 | $1,734,069.00 | $1,672,248.00 |
| Total EDU's | 6,441 | 6,441 | 6,441 |
| Annual Charge/EDU | $250.03 | $269.22 | $259.63 |
| Monthly Charge/EDU | $20.84 | $22.44 | $21.64 |

This option considers only the 6441 EDU's that are currently being served by the Beaver Falls STP in Beaver Falls, Eastvale, West Mayfield, Patterson Heights, Patterson Township and White Township. The Pennvest loan annual cost was determined at a 1.79% interest rate for a term of 20 years. The bond annual cost was determined at a 7% interest rate for 30 years.

The advantages of implementing this option would be the elimination of a raw sewage overflow at 6th Avenue and 23rd Street, backup secondary treatment capabilities at the Beaver Falls STP, and elimination of an overflow at the Beaver Falls treatment plant. This would improve surface water quality in the Beaver River.

There would be some disadvantages to this alternative. First, it will not allow for any flow allowances for Big Beaver and Homewood. Second, it would increase the monthly sewer bill to the individual homeowner. Finally, it will not eliminate any malfunctioning on-lot systems or small flow

treatment plants.

### b) *UPGRADE THE BEAVER FALLS STP, EXPAND TRUNKLINE SEWER FROM OVERFLOW MANHOLE TO THE TREATMENT PLANT, AND REPLACE EAST TRUNKLINE*

This option involves no sewer extensions outside the City of Beaver Falls. It does not provide any capacity for Big Beaver or Homewood. This will involve alternatives BF-2 and STP-1. These alternatives are the bare minimum plus added work which will greatly reduce infiltration and inflow from the rapidly deteriorating East Trunkline. The financing of the total project cost of $7,423,975.00 is evaluated by a Pennvest loan, a bond issue, and a combination of 50% bond and 50% Pennvest loan. Estimated user fees are presented in Table 5-20. No tapping fees will be assessed because the sewer line is already in service. Grants were not figured into the financing because of the lack of grants available. However, grants should be actively pursued. Grant programs are identified in Section 5.6.

TABLE 5-20

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $7,423,975.00 | $7,423,975.00 | $7,423,975.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Annual Cost | $421,515.00 | $567,180.00 | $494,348.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Interceptor O & M | $216,883.00 | $216,883.00 | $216,883.00 |
| Total EDU's | 6,441 | 6,441 | 6,441 |
| Annual Cost/EDU | $260.80 | $283.42 | $272.11 |
| Monthly Cost/EDU | $21.73 | $23.62 | $22.68 |

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'B'

BF-2 & STP-1

This option only considers the 6441 EDU's that are currently being served by the Beaver Falls treatment plant in Beaver Falls, Eastvale, West Mayfield, Patterson Heights, Patterson Township, and White Township. The Pennvest annual cost was determined at a 1.79% interest rate for a term of twenty years. The bond annual cost was determined at a 7% interest rate for a term of 30 years.

The advantages of implementing this option would be the elimination of a raw sewage overflow at 6th Avenue and 23rd Street, back-up secondary treatment capabilities of the Beaver Falls STP, elimination of an overflow at the treatment plant, and I & I reduction from replacing old vitrified clay pipe with PVC pipe. This alternative will improve surface water quality in the Beaver River.

There would be some disadvantages to this option. First, it will not allow for any flow capacity for Big Beaver and Homewood. Second, it would increase the monthly sewer bill to the homeowner. Finally, it will not eliminate any malfunctioning on-lot systems or small flow treatment plants.

### *c) EXPAND THE TREATMENT PLANT, REPLACE EAST TRUNK LINE WITH REDESIGNED LINE, EXPAND INTERCEPTOR FROM MH-40 TO THE PLANT*

This option involves alternatives BF-3 and STP-1. It includes replacing the East Trunk Line with a redesigned line, expansion of the interceptor from MH-40 to the treatment plant, and expansion of the treatment plant. The financing of this option will be evaluated with a Pennvest Loan, a bond issue, and a 50-50 combination Pennvest and bond. Costs are shown on Table 5-21. Grants were not figured into the financing, but they should be actively pursued. Grant agencies are listed in Section 5.6. Tapping fees were not assessed because there will be no new connections with this option.

TABLE 5-21

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $7,479,872.00 | $7,479,872.00 | $7,479,872.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Annual Cost | $424,863.00 | $571,685.00 | $498,274.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Interceptor O & M | $217,181.00 | $217,181.00 | $217,181.00 |
| Total Annual Cost | $1,683,475.00 | $1,830,297.00 | $1,756,886.00 |
| Total EDU's | 6,441 | 6,441 | 6,441 |
| Annual Cost/EDU | $261.37 | $284.16 | $272.77 |
| Monthly Cost/EDU | $21.78 | $23.68 | $22.73 |

The Pennvest loan was evaluated at 1.79% for twenty years. The bond was evaluated at 7% for a period of thirty years. The option only considers the 6441 EDUs that comprise the joint sewer users.

There are a couple of advantages to this option. First, a raw sewage bypass will be eliminated. Second, a treatment plant bypass will be eliminated. Third, I & I will be reduced. Finally, back up secondary treatment will be provided at the sewage treatment plant.

This option also has certain disadvantages. First, the replacement of the interceptor does not provide extra flow capacity for Big Beaver and Homewood. Secondly, it does not eliminate any existing malfunctioning septic tanks or small flow treatment plants.

### d) *UPGRADE TREATMENT PLANT, EXPAND TRUNK LINE FROM CITY'S BORDER TO TREATMENT PLANT*

This option involves no sewer extensions outside of the city's border. It does provide flow allowances for Big Beaver and Homewood. It also provides capacity for Koppel Borough. This will involve alternatives BF-4 and STP-1. These alternatives will give surrounding municipalities the opportunity to enter the Beaver Falls system when they can afford to construct the sewer lines. The financing of the total project cost of $7,585,365.00 is evaluated with a Pennvest loan, a bond issue, and a 50/50 combination of a Pennvest loan and a bond issue. Estimated user fees are presented in Table 5-20. Tapping fees will not be assessed to the EDU's that are currently connected to the Beaver Falls treatment plant. Tapping fees will be assessed to any future customers in Big Beaver or Homewood. Grants were not figured into the financing because of the lack of grant money available. However, grants should actively be pursued. Grant programs are identified in Section 5.6.

TABLE 5-22

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $7,585,365.00 | $7,585,365.00 | $7,585,365.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Annual Cost | $431,182.00 | $580,188.00 | $505,685.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Interceptor O & M | $217,743.00 | $217,743.00 | $217,743.00 |
| Total Annual Cost | $1,690.356.00 | $1,839,362.00 | $1,764,859.00 |
| Total EDU's | 6,441 | 6,441 | 6,441 |
| Annual Cost/EDU | $262.44 | $285.57 | $274.00 |
| Monthly Cost/EDU | $21.87 | $23.80 | $22.83 |

This option is financed by the 6441 EDUs that are currently connected to the Beaver Falls treatment plant but provides capacity for 11,600 EDUs. The 5159 EDUs, when and if they connect, will be assessed a tapping fee to pay for the larger interceptor and treatment plant expansion in Beaver Falls. The Pennvest loan was evaluated at a 1.79% interest rate for a term of twenty years and the bond was evaluated at a 7% interest rate for a term of thirty years.

There are several advantages to this option. First, it will eliminate the raw sewage overflow at 6th Avenue and 23rd Street. Second, it will provide back-up secondary treatment at the Beaver Falls plant. Third, it will eliminate the treatment plant overflow. Fourth, I & I will be reduced with the installation of the new line. Finally, it will provide plenty of capacity for Homewood, Big Beaver and Koppel.

There would be two disadvantages to this option. First, it will not immediately eliminate any existing malfunctioning septic tanks or small flow treatment plants in Big Beaver and Homewood. Second, it will raise the user's monthly sewer bill.

### *e) EXPANSION OF THE HOLIDAY INN TREATMENT PLANT*

This option will require that Homewood be sewered and that the Holiday Inn expand its treatment plant. The cost breakdown is shown in Table 5-11. The total project cost of $1,366,705.00 is evaluated as a PennVest loan with a tapping fee of $2,500 per EDU, and a total of 126 EDUs. It is also evaluated as a bond issue and a combination of bond issue and Pennvest loan. Costs are shown in Table 5-23. The issuance of grant money was not considered because of the lack of grant programs. However, grant money should still be aggressively pursued.

TABLE 5-23

| | PENNVEST | BONDS | PV/BONDS |
|---|---|---|---|
| Total Project Cost | $1,366,705.00 | $1,366,705.00 | $1,366,705.00 |
| Less Tapping Fees | ($182,500.00) | ($182,500.00) | ($182,500.00) |
| Financed Amount | $1,184,205.00 | $1,184,205.00 | $1,184,205.00 |
| Plant O & M | $62,500.00 | $62,500.00 | $62,500.00 |
| Pump STA. O & M | $5,156.00 | $5,156.00 | $5,156.00 |
| Collector Line O & M | $2,969.00 | $2,969.00 | $2,969.00 |
| Financing Annual Cost | $70,934.00 | $ 95,447.00 | $83,190.00 |
| Total Annual Cost | $141,559.00 | $166,072.00 | $153,815.00 |
| Total EDU's | 126 | 126 | 126 |
| Annual Cost/EDU | $1,123.00 | $1,318.03 | $1,220.76 |
| Monthly Charge/EDU | $93.62 | $109.84 | $101.73 |

This option considers 73 EDUs in Homewood and 53 EDUs from the Holiday Inn. The PennVest loan annual cost was determined at a 1.79% interest rate over twenty years. The bond annual cost was determined at a 7% interest rate over thirty years.

The advantages of implementing this option would be the elimination of untreated sewage discharges in Homewood, the improvement of groundwater quality in Homewood and Big Beaver, and the elimination of any malfunctioning septic systems in Homewood.

There would be some disadvantages to this alternative. First, it would be a large financial burden on the homeowner. Second, the plant would have to be owned and operated by Big Beaver Borough. Presently, the Borough does not own or operate any treatment plants and the borough (or an authority created by the borough) would have to start out with $1,257,205.00 in debt. Third, the

expansion of the Holiday Inn treatment plant opposes the state's comprehensive water quality management plan. Finally, the treatment plant will have limited capability of extending sewer service to the Rte 60/Rte 351/Turnpike enterprise zone area.

### *f) UPGRADE THE TREATMENT PLANT, PROVIDE EXTRA CAPACITY, EXTEND SEWER LINES TO BIG BEAVER PLAZA*

This option involves extending sewers along Rte 18 to the Big Beaver Plaza just north of the city's border. This involves alternatives STP-1, BF-4, and B-1. This will provide capacity for Big Beaver, Homewood, and Koppel. The financing of the total project cost of $7,625,275.00 is evaluated with a Pennvest Loan, a bond issue, and a 50-50 combination of Pennvest and bond. Grants were not figured into the financing, but they should be actively pursued. Grant programs are identified in Section 5.6. Estimated user fees are shown in Table 5-24 below.

TABLE 5-24

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $7,786,665.00 | $7,786,665.00 | $7,786,665.00 |
| Joint Sewer Users Fee | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Tapping Fee | ($12,500.00) | ($12,500.00) | ($12,500.00) |
| Total Cost Financed | $7,387,165.00 | $7,387,165.00 | $7,387,165.00 |
| Annual Cost | $442,491.00 | $595,405.00 | $518,948.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Pump Sta. O & M | $9,075.00 | $9,075.00 | $9,075.00 |
| Sewer O & M | $217,743.00 | $217,743.00 | $217,743.00 |
| Total Annual Cost | $1,710,740.00 | $1,862,654.00 | $1,787,197.00 |
| Total EDUs | 6,446 | 6,446 | 6,446 |
| Annual Cost/EDU | $265.40 | $288.96 | $277.26 |
| Monthly Cost/EDU | $22.12 | $24.08 | $23.11 |

This option provides capacity for the current joint sewer users and Big Beaver Plaza. The Pennvest Loan was evaluated at 1.79% for twenty years and the bond was evaluated of 7% for thirty years.

There are several advantages to this option. First, water quality in the Beaver River will improve because sewage bypasses at the treatment plant and on 6th Avenue and 23rd Street will be eliminated. Second, the Big Beaver Plaza's discharge will be eliminated. Also, I & I will be reduced when the interceptor is replaced.

There would also be some disadvantages to this option. Malfunctioning on-lot systems will not be eliminated. A small flow treatment plant of the Holiday Inn will not be eliminated. The individual homeowner's monthly sewer bill will increase. Also, this option does not provide added

capacity for future extensions along Route 18.

### *g) EXTEND INTERCEPTOR TO HOMEWOOD, SEWER HOMEWOOD, EXPAND THE TREATMENT PLANT*

This option involves the extension of sewers to Homewood, sewering Homewood, expanding the capacity of the interceptor in Beaver Falls, and expanding the treatment plant. The alternatives used for this are B-2, H-3, BF-4, and STP-1. The total project cost of $9,023,360.00 will be evaluated for financing with a Pennvest loan, a bond issue, and a 50-50 combination bond issue and Pennvest loan. Grants were not figured into the financing, but they should be actively pursued. Grant programs are listed in Section 5.6. A cost breakdown for this project is shown below in Table 5-25.

TABLE 5-25

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $9,023,360.00 | $9,023,360.00 | $9,023,360.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Tapping Fees | ($197,500.00) | ($197,500.00) | ($197,500.00) |
| Total Cost Financed | $8,438,860.00 | $8,438,860.00 | $8,438,860.00 |
| Annual Cost | $505,488.00 | $680,172.00 | $592,830.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Pump Sta. O & M | $25,383.00 | $25,383.00 | $25,383.00 |
| Sewer O & M | $223,184.00 | $223,184.00 | $223,184.00 |
| Total Annual Cost | $1,795,486.00 | $1,970,170.00 | $1,882,828.00 |
| EDUs | 6,520 | 6,520 | 6,520 |
| Annual Cost/EDU | $275.38 | $302.17 | $288.78 |
| Monthly Cost/EDU | $22.94 | $25.18 | $24.06 |

This option considers 5 EDUs for the Big Beaver Plaza, 74 EDUs for Homewood, and 6441 EDUs for the joint sewer users. The Pennvest loan was evaluated at 1.79% over twenty years and the bond issue was evaluated at 7% over thirty years. Tapping fees were assessed at $2,500.00 per EDU and 79 new EDU's.

This option has several advantages. First, a large number of malfunctioning septic systems will be eliminated. Second, a small flow treatment plant will be eliminated. Third, a raw sewage bypass will be eliminated. This option will improve ground and surface water quality.

There are several disadvantages to this option. First, this option does not provide for any future growth in the area. Second, this option does not eliminate an existing malfunctioning small flow treatment plant. Finally, this will increase the homeowner's monthly sewer bill.

### *b) EXTEND INTERCEPTOR TO THE HOLIDAY INN, EXPAND BEAVER FALLS STP*

This option involves alternatives B-3, H-3, BF-4, and STP-1. This involves extending a 15" sewerline to the Holiday Inn on Route 18, sewering Homewood, and expanding the trunkline and treatment plant in Beaver Falls. The total project cost is $9,931,490.00. Financing will be evaluated for a Pennvest Loan, a bond issue, and a 50-50 bond issue Pennvest loan combination. Grants were not figured into the financing, but they should be actively pursued. Grant programs are listed in Section 5.6. A cost breakdown for the project is shown below in Table 5-26.

TABLE 5-26

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $9,931,490.00 | $9,931,490.00 | $9,931,490.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Tapping Fees | ($305,830.00) | ($305,830.00) | ($305,830.00) |
| Total Financed Cost | $9,238,660.00 | $9,238,660.00 | $9,238,660.00 |
| Annual Cost | $553,395.00 | $744,636.00 | $649,016.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Pump Sta. O & M | $38,170.00 | $38,170.00 | $38,170.00 |
| Sewer O & M | $226,053.00 | $226,053.00 | $226,053.00 |
| Total Annual Cost | $1,859,049.00 | $2,040,290.00 | $1,954,670.00 |
| Total EDU's | 6,593 | 6,593 | 6,593 |
| Annual Cost/EDU | $281.97 | $310.98 | $296.48 |
| Monthly Cost/EDU | $23.50 | $25.92 | $24.71 |

The Pennvest Loan was set at a 1.79% interest rate over twenty years and the bond was evaluated at 7% for thirty years. This option considers 6,441 EDUs currently being served, 74 EDUs in Homewood, and 78 EDUs in Big Beaver. The Holiday Inn comprises 53 EDUs. All EDUs were assessed a $2,500.00 per EDU fee. Existing connections were not charged a tapping fee.

This option has several advantages. First, it eliminates malfunctioning septic systems and small flow treatment plants. Second, it eliminates a raw sewage bypass. Third, it provides the Beaver Falls treatment plant with back up secondary treatment. Finally, it will improve ground and surface water quality.

This option also has two disadvantages. First, it will increase the monthly cost to the homeowner. Second, it will not provide for future flow from Big Beaver, enterprise zones, or Koppel.

### *i) EXTEND INTERCEPTOR TO KOPPEL, EXPAND TREATMENT PLANT*

This option involves the extension of an interceptor to Koppel, expansion of the interceptor line in Beaver Falls, and expansion of the sewage treatment plant. It is made up of alternatives B-4, H-3, BF-4, and STP-1. The total project cost is $10,241,370.00. Financing will be evaluated for a Pennvest loan, a bond issue, and a 50-50 combination of Pennvest and a bond. Grants were not figured into the financing, but they should be actively pursued. Grant programs are listed in Section 5.6. A cost breakdown for this option is shown below in Table 5-27.

TABLE 5-27

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $10,073,844.00 | $10,073,844.00 | $10,073,844.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Tapping Fees | ($332,500.00) | ($332,500.00) | ($332,500.00) |
| Total Cost Financed | $9,354,344.00 | $9,354,344.00 | $9,354,344.00 |
| Annual Cost | $560,325.00 | $753,960.00 | $657,143.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Pump Sta. O & M | $39,820.00 | $39,820.00 | $39,820.00 |
| Sewer O & M | $150,000.00 | $150,000.00 | $150,000.00 |
| Total Annual Cost | $1,791,576.00 | $1,985,211.00 | $1,888,394.00 |
| Total EDU's | 6,614 | 6,614 | 6,614 |
| Annual Cost/EDU | $270.88 | $300.15 | $285.52 |
| Monthly Cost/EDU | $22.57 | $25.01 | $23.79 |

The Pennvest loan was set at 1.79% interest for twenty years and the bond was set at 7% for thirty years. The tapping fees were set at $2,500.00 per EDU. Current sewer users were not assessed any tapping fee.

The biggest advantage of this option is that capacity for the entire study area will be provided. The malfunctioning and potential malfunctioning on-lot disposal system will be eliminated and two small flow treatment plants will be eliminated. The raw sewage bypass in Beaver Falls will be eliminated. Backup secondary treatment at the plant will be provided.

### *j) EXTENDING SEWER LINES TO KOPPEL AND THE ENTERPRISE ZONES*

This option involves extending sewers out to the Rte. 60/Rte 351/Turnpike and The Rte 60/Rte 551 enterprise zones, expansion of the interceptor in Beaver Falls, and expansion of the Beaver Falls treatment plant. It is comprised of alternatives B-4, B-5, B-6, H-3, BF-4, and STP-1. The total cost for the project is $11,924,850.00. It will be evaluated for financing with a Pennvest loan, a bond issue, and a 50-50 combination of Pennvest and a bond. Grants were not figured into the financing, but they should be actively pursued. Grant programs are listed in Section 5.6. A cost breakdown for this option is shown below in Table 5-28.

TABLE 5-28

| | PENNVEST | BOND | PV/BOND |
|---|---|---|---|
| Total Project Cost | $11,924,850.00 | $11,924,850.00 | $11,924,850.00 |
| Joint Sewer Users Fund | ($387,000.00) | ($387,000.00) | ($387,000.00) |
| Tapping Fees | ($332,566.00) | ($332,566.00) | ($332,566.00) |
| Total Financed Cost | $11,205,284.00 | $11,205,284.00 | $11,205,284.00 |
| Annual Cost | $671,197.00 | $903,146.00 | $787,171.00 |
| Plant O & M | $1,041,431.00 | $1,041,431.00 | $1,041,431.00 |
| Pump Sta. O & M | $52,608.00 | $52,608.00 | $52,608.00 |
| Sewer O & M | $235,425.00 | $235,425.00 | $235,425.00 |
| Total Annual Cost | $2,000,661.00 | $2,232,610.00 | $2,116,635.00 |
| Total EDU's | 6,614 | 6,614 | 6,614 |
| Annual Cost/EDU | $302.49 | $337.56 | $320.02 |
| Monthly Cost/EDU | $25.21 | $28.13 | $26.67 |

This option provides sewer service for the enterprise zones, Big Beaver along Rte 18, and Homewood. Plus, capacity for Koppel is provided. The Pennvest loan was evaluated at 1.79% for twenty years and the bond was evaluated at 7% for thirty years. Tapping fees were assessed at $2,500 per EDU for new connections. The 6441 EDUs that are currently connected were not assessed a tapping fee.

This option will sewer the enterprise zones, eliminate potential malfunctions, eliminate small flow treatments plants, eliminate a raw sewage bypass, provide backup secondary treatment at the Beaver Falls plant, and improve ground and surface water quality. It also provides the capacity for Koppel Borough to tie into the Beaver Falls system. It is also consistent with the state's comprehensive water quality management plan.

This option also has disadvantages. Sewer service will be provided to areas that presently do not have a great need for service. These areas have the potential need for sewer service, but the population is not large enough to help offset the cost per EDU. As a result, a high monthly charge will be assessed to the customers that are connected or will be connected.

## 5.6 EVALUATION OF CAPITAL FINANCING PLAN

Improvements to the existing sewage facilities within the study area will inevitably involve the financing of rather considerable capital costs. To some extent, these financing activities will be influenced by the type of municipal management selected to oversee those facilities, in that municipal entities are bound by law to acquire funds by prescribed means and up to certain debt limits. Assuming that the necessary administrative structure has the means to acquire the proper financing for the recommended program, the alternatives available to finance the capital improvements must be explored. The following evaluation will compare the effectiveness of each of those alternatives.

### 5.6.1 TAX INCREMENT FINANCING PROGRAM

The Strategy Plan for the Big Beaver Falls Area Enterprise Zone, which includes most of the Sewage Facilities Plan study area, suggests using a tax increment financing program to construct a $1.75 million project involving water and sewer line installation from Beaver Falls to the Route 60 - Turnpike interchange area. In this type of program, money is borrowed for construction of facilities in the anticipation that the cost of the facilities will eventually be repaid from tax revenues to be generated from new growth which will use those facilities. In effect, it is a tax anticipation loan based on property development not yet in existence. As development progresses, the additional tax revenues increase each year, with increased debt repayments also made each year. The Strategy Plan predicts expenditures of $1.75 million in 1994 for infrastructure improvements, and $110,000.00 annually between 1993 and 1997 for industrial, incubator, and administration and planning expense. The

funding sources are broken down into tax increment financing (loans) of $1.75 million in 1994, and a total of $800,000.00 in enterprise zone funding. Debt service would be $250,000.00 per year for the 10-year $1.75 million loan. New taxes from the projected annual new market value added of $1.67 million would total $64,000.00 the first year and would increase to $700,000.00 by the tenth year. An enterprise zone grant would pay the shortfall in debt service until the rising taxes meet and exceed the debt service in the fifth year. The subsidy would be repaid by the tenth year, and the debt would be retired after eight years. Except for noting the role of the Beaver County Corporation for Economic Development in assisting with loan and grant applications, the Strategy Plan does not specify the implementing entity which would be responsible for the required infrastructure loans and grants; this function could be fulfilled by a non-profit organization.

### 5.6.2 FARMERS HOME ADMINISTRATION PROGRAM

The Farmers Home Administration (FmHA) is a credit agency of the U.S. Department of Agriculture which provides financial assistance for water and wastewater systems to rural areas. Rural is defined as any area in any city or town having a population under 10,000. This criterium excludes the City of Beaver Falls; however, Homewood and Big Beaver Boroughs are eligible for funding assistance for portions of a project serving their populations. Their applications could be given a low priority due to those Boroughs close proximity to Beaver Falls.

FmHA loans have a maximum term of 40 years, and are secured by bonds or notes pledging taxes, assessments, or revenues as security. The interest rate is adjusted quarterly and is assigned when funds are obligated for a project, but will remain unchanged for the term of the loan. Rates vary in

accordance with the average Bond Buyers Index. Grants varying from 50% to 55% may also be awarded to eligible communities. FmHA also bases awards on the median household income within the applicants community, with income limits being set each fiscal year.

FmHA guidelines for the design of facilities do not necessarily follow those of the PA Department of Environmental Resources. For instance, sewage design flows are based on 2.5 to 2.8 persons per household and 160 to 250 gallons per day per family average, whereas the PADER specifies a flat 100 gallons per capita per day.

Since FmHA grants have become increasingly difficult to obtain due to program cuts, and the loan interest rates have risen, these loans and grants are not considered to be a promising funding source.

### 5.6.3 PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

PENNVEST awards grants and low interest loans for eligible water and wastewater projects to municipalities or agencies or to a group of governmental units. PENNVEST works closely with the PA Department of Environmental Resources to determine project eligibility. The Board meets semi-annually to review projects and award funding, considering only projects which have received prior approval from PADER, usually in the form of a Part II construction permit. PENNVEST projects are subject to both state and federal guidelines, including the federal wage rates, compliance with requirements for erosion and sedimentation control measures, wetland, Fish and Wildlife, and Historical Preservation investigations. Due to the demand for these low interest loans in recent years and the lower priority assigned to wastewater rather than water projects, applicants have typically been awarded one-half the funding requested, with applicants required to complete the funding from other

sources. Even with these restrictions, however, the low interest rate makes this option attractive.

### 5.6.4 COMMUNITY FACILITIES PROGRAM

The Department of Commerce Bureau of Grants of the State of Pennsylvania offers competitive grant awards to municipalities for sewage facilities. The program provides funds for collection lines only; sewage treatment facilities are ineligible. Projects must not exceed $2.0 million per municipality, and grants are awarded in amounts up to $75,000 or 75% of the project cost, whichever is less, to distressed communities. All of the municipalities in the study area are classified as distressed.

Applications are reviewed annually. A letter of intent must be received by April 15, with notices of award sent to communities by July 30. During 1992, one of every three applicants was awarded a grant. The awards are based on the number of persons affected and the severity of the problem. The phasing of a construction project over several years may enable a municipality to fund a portion each year through this program.

### 5.6.5 SITE DEVELOPMENT AND BUSINESS INFRASTRUCTURE GRANTS

The Department of Commerce also administers a grant program for the improvement of public facilities deemed essential for industrial growth and expansion. Grants are awarded to municipalities for projects which will increase private sector industrial employment. Eligible projects include sanitary sewer lines, but not storm sewers or sewage treatment facilities. There is no cap on the total project cost a municipality can claim, although the grant award for distressed communities is limited to $100,000 or 50% or the project cost. Grants cover construction, design and engineering, and legal

costs. Competition for these grants is considerably less than for the Communities Facilities Grants.

The Business Infrastructure Grant Program is a similar program also administered by the Department of Commerce, to the same end of creating jobs. Grant funds are available for projects involving private companies in Enterprise Zones or distressed communities. Private companies must match each dollar of State funding with two dollars in private investment.

### 5.6.6 ECONOMIC DEVELOPMENT ADMINISTRATION

This program of federal grants and loans for sanitary sewer systems is geared toward infrastructure projects which impact economic growth, specifically, industrial development which creates or preserves jobs. Municipalities designated as distressed are eligible for funding in amounts up to 80% of project costs. The program is administered by EDA under the Public Works and Development Facilities Grants Program.

### 5.6.7 HUD URBAN DEVELOPMENT ACTION GRANT (UDAG) PROGRAM

Grants for infrastructure development or rehabilitation and site improvements are available through this program to distressed communities. This program encourages joint public and private developments in unique projects which will increase private investment and aid in economic recovery. $2.50 must be contributed by private interests for each $1.00 requested of UDAG.

### 5.6.8 COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

This program geared toward small communities is a federally funded HUD program similar to the UDAG program. A wide range of projects are eligible including wastewater collection and transmission and tapping fees, however, the grants are limited to $50,000 and must be supported by individual income data in the specific neighborhood to be sewered. Some communities have extended sewer lines each year using Block Grant funding.

### 5.6.9 BOND ISSUES

There are three types of bond issues which a municipality could consider for financing a sewage facilities plan: general obligation bonds which are repaid from the entire community's property taxes; special assessment bonds repaid from only the benefitted property owner's taxes; and revenue bonds payable from fees received from the services provided. Revenue bonds are the most commonly used means of financing large sewage projects since they are not considered as debts and therefore are not limited by a community's debt limits. They are generally issued by an authority rather than by a municipality due to the fiscal policies and practices which may be required by the trust indenture. Issuance of bonds involves additional costs and a 20 to 30 year commitment is required. Interest costs may be reduced through the use of credit enhancements such as bond insurance or bank letters of credit. Private bond insurance has been employed quite extensively over the years in Pennsylvania. The cost of the insurance must be balanced against the savings realized through interest rates. The issuer can best decide this by requesting that underwriters bid with and without insurance. A present worth analysis can then be performed to determine its economic feasibility. A bank letter of credit

places responsibility for the credit risk on the bank by pledging the banks credit to make principal and interest payments of a specific amount and term on an issuers debt. The size and type of issue for which the letter of credit can be secured is generally unrestricted. Banks usually charge an annual fee for this service while bond insurance premiums are a one-time cost paid at the time of purchase.

### 5.6.10 LONG TERM BANK FINANCING

Bank financing of a portion of project construction costs may be considered if financing is not completely acquired elsewhere. Municipal interest rates are usually lower than the prime rate, and loans are typically paid off within a five to ten year period. Bank loans are subject to a municipality's debt limit.

### 5.6.11 CONNECTION FEES

Connection fees such as impact fees and front foot assessments can help pay operating costs. These charges are better suited for facilities constructed to serve large future populations. Rates too high will slow development, cause idle capacity, and burden present users. This idle capacity must be paid for by present users. This plan does not adopt front foot assessments, and a connection fee of $2,500.00/EDU has been established.

### 5.6.12 ACT 339

Act 339 offers a subsidy program to assist eligible applicants in offsetting the annual expenses of operating and maintaining their sewage treatment facilities. The grant is requested annually and is

calculated to be 2% of the eligible local costs of acquisition or construction of the sewage treatment facilities.

# SECTION 6: INSTITUTIONAL EVALUATION AND RECOMMENDED ALTERNATIVES

## 6.1 IDENTIFICATION OF PUBLIC ORGANIZATIONS PROVIDING WASTEWATER SERVICE

Public sewers are available within the communities of Beaver Falls and all or portions of its currently existing sewer users in West Mayfield, White Township, Patterson Township, Patterson Heights Borough, and Eastvale Borough, and within the Borough of Koppel. Homewood and the area of Big Beaver Borough within the study area are currently unsewered and no public structures exist in those municipalities to manage wastewater treatment. Residents of Homewood and Big Beaver manage the treatment and disposal of sewage on an individual basis. Permitted municipal wastewater treatment plants are located in Beaver Falls and in Koppel.

## 6.2 ANALYSIS OF EXISTING WASTEWATER TREATMENT AUTHORITIES

The Koppel Sewage Treatment Plant treats wastewater originating in the Borough of Koppel only and bills its residents for that service directly. The Beaver Falls Water Pollution Control Plant treats City wastewater and wastewater flowing from the outlying communities having public sewers. Both plants are municipally owned and operated.

Beaver Falls outlying communities comprise a loosely organized entity known as the Joint Sewer Users. Municipal ordinances enacted prior to the connection of the outlying

districts specify that the district shall construct, operate, and maintain the sewer lines within the City of Beaver Falls through which the district's sewage flows. Under these conditions, Beaver Falls bills the districts for wastewater treated at its plant at a slightly higher rate in order to pay for maintenance costs to the joint sewer users lines and to the sewage treatment plant. This is common practice for utility owners providing service to non-owners and provides the City a reasonable return from non-owner customers based on the value of its plant required to serve those customers. Beaver Falls budgets these revenues and costs under its Joint Sewer Users Fund. City customers are accounted for under the regular Sewer Fund in the City budget. All billing is based on water usage. This method has functioned well over the years, with Beaver Falls managing all maintenance and improvements to the joint lines and the treatment plant from the revenues in the Joint Sewer Users Fund.

## 6.3 IDENTIFICATION OF INSTITUTIONAL ALTERNATIVES NECESSARY FOR PLAN IMPLEMENTATION

The purpose of the Act 537 Sewage Facilities Plan is to objectively examine alternatives available to the municipalities in the study area and to make recommendations to those municipalities regarding the best alternative in a given set of circumstances. The existing conditions in the study area are such that those communities having public sewers are much better able to provide for the health and welfare of their citizens and for the general environment than those communities without sewers. While development in the sewered communities is not completely unrestricted, potential developments, whether industrial,

commercial, or residential, can locate in those communities with more confidence that sewage disposal will not be an overriding concern. Therefore, this study will assume at this point that a regional approach to wastewater management will provide for public sewering in some currently unsewered areas.

To manage such a regional facility, an implementing entity is required to oversee items such as construction, operation, maintenance, and capital improvements. There are several options available to provide an institutional entity capable of implementing a regional sewage treatment approach.

### 6.3.1 MUNICIPAL MANAGER - SATELLITE SYSTEM

Under this method, one municipality would assume a leadership and management role, with the satellite communities benefiting from and contributing support toward the regional sewage facilities developed pursuant to this Plan. The satellite communities would, as in the existing Joint Sewer Users system revolving around the Beaver Falls facilities and management staff, be responsible only for sewer lines and appurtanances within their boundaries. Their financial support to the operation and maintenance of the joint facilities would be commensurate with the populations connected to the joint sewers and would provide for a fair rate of return for maintenance and improvement of the joint facilities.

This type of arrangement would fall under the Intergovernmental Cooperation Law, Act 180, of 1972. This Act allows any government responsibility, power, or function to be transferred to another governmental entity such as a municipal or district government unit or

a new unit. An ordinance must be adopted by each municipality specifying the conditions and length of time of the agreement, its purpose, method of financing, and organizational structure, and the powers of ownership and contracting of agreements. In designating a government entity as the implementing entity for the Sewage Facilities Plan, that entity becomes responsible for the implementation, management, and financing of programs and projects. The financing would be through the means the entity has available, and those means generally include personal property, occupation, and per capita taxes, and bond issues and loans. Any bond issues or loans would be subject to the debt limit of the designated entity. For instance, if the City of Beaver Falls were to assume responsibility for the construction, operation, and maintenance of new sewage facilities for the municipalities of Homewood and Big Beaver, the project construction and initiation costs could not exceed $12,600,000.00, which is the City's current debt limit. Other financing options are explored elsewhere in this report, and may present more feasible options for this type of intergovernmental agreement.

### 6.3.2 COUNCIL OF GOVERNMENTS

A council of governments or COG is a voluntary approach requiring no ordinances and may be structured as participants desire. It may have no specified purpose; however a COG may own and operate facilities. Funds to conduct planning studies or projects are contributed by the members. Financing of a major project or facility would require a more binding form of agreement. COGs are not authorized to issue bonds and therefore are seldom the implementing agency for major capital projects.

### 6.3.3 MUNICIPAL AUTHORITY

One or a group of municipalities may form a municipal authority to provide services to its own and outside customers or may be organized on a multi-municipal or regional basis. Such an authority is subject to the requirements of the Municipality Authorities Act of 1945. An authority is a board or commission outside of the regular structure of local government given the power to own property, incur debt and finance projects and activities through user charges.

Authorities must operate and finance projects within the municipalities debt limits as provided by any law of the Commonwealth. The authority sells bonds or makes loans if capital is required, operates a project, and discharges the debt from project revenues. An authority may also accept grants. A municipal authority would be an effective vehicle for handling projects requiring a cooperative municipal arrangement. The authority's members are appointed by the municipalities involved for a specified number of years and cannot be removed except by a Court of Common Pleas. This arrangement protects the authority somewhat from political pressure and enables its members to focus on the specific tasks.

In the creation of an authority, specific powers to regulate the installation and operation of sewage facilities must be granted by the municipalities. An authority, to be truly effective, must have municipal agreements to ensure proper control. When properly structured, authorities have financed, planned and operated a wide variety of project management systems and facilities.

## 6.4 EVALUATION OF ALTERNATIVES

In order to evaluate the three alternatives for an implementing entity for the Sewage Facilities Plan, an evaluation criteria matrix is used. In the matrix, a number of factors are listed with a weighted rating. The rating assigned to each factor is a number between one and three and weights the factor according to its relative importance. The three alternatives are listed on the left. Each alternative is evaluated for its ability to satisfy each factor. For instance, if an alternative is being rated for its ability to satisfy requirements for capital improvements, the rater would consider that particular management option's ability to finance and manage a major capital improvements program. An authority would probably deserve a higher rating than a COG, simply due to its acceptability within financing agencies such as banks. Authorities have a long history of successfully financing and repaying loans and bond issues, whereas COGs do not. Therefore, on a scale of one to five, the authority would receive a rating closer to five and the COG a rating closer to one. When all the ratings for each alternative have been assigned, each number rating is multiplied by the appropriate rating factor and the results are summed for each alternative. The alternative with the highest total rating would be considered to be the best choice to implement the Sewage Facilities Plan.

### 6.4.1 RESULTS OF EVALUATION

The three alternatives described above were evaluated by the Consultants, and the results are listed below in tabulated form.

TABLE 6-1

EVALUATION OF MUNICIPAL MANAGEMENT ALTERNATIVES

| Rating Factor | Manager-Satellite | Council of Governments | Municipal Authority |
|---|---|---|---|
| Impact on Existing Systems | 2.4 | 2.8 | 2.5 | 2.0 |
| Political Acceptability | 2.3 | 2.5 | 2.2 | 1.9 |
| Public Acceptability | 2.5 | 2.7 | 2.5 | 2.2 |
| Cost to Operate | 2.6 | 2.8 | 2.0 | 2.2 |
| Cost Stability | 2.3 | 2.6 | 2.4 | 2.5 |
| Capital Investment | 1.9 | 2.3 | 1.5 | 2.8 |
| Administrative Requirements | 1.3 | 2.7 | 1.0 | 2.8 |
| Municipal Control | 2.2 | 2.5 | 2.4 | 1.7 |
| Use of Existing Facilities | 2.6 | 2.6 | 2.5 | 2.6 |
| Technical Reliability | 2.2 | 2.3 | 2.1 | 2.4 |
| Flexibility | 2.1 | 2.0 | 2.3 | 2.3 |
| Dependability | 2.4 | 2.5 | 1.7 | 2.8 |
| **TOTAL RATING** | | 67.9 | 57.5 | 62.4 |

## 6.5 IDENTIFICATION OF RECOMMENDED MUNICIPAL MANAGEMENT ALTERNATIVE

The Manager-Satellite method achieves the highest rating, followed closely by the Municipal Authority method. These two methods are both well able to manage the

implementation of any facilities and systems developed pursuant to the Sewage Facilities Plan. The final decision on the selection of a management system will be made by the participating municipal officials and will be based in large part on the financial requirements of the final recommendations of this Plan. In the Consultant's opinion, however, the Manager-Satellite system could best serve the existing and future needs of all parties, unless the financing requirements of the recommended Plan are beyond its capabilities. In that case, the greater flexibility in exploring financial options of a joint municipal authority would favor the selection of that alternative.

## 6.6 IDENTIFICATION OF ADMINISTRATIVE AND LEGAL ACTIVITIES NECESSARY FOR PLAN IMPLEMENTATION

Under the proposed Sewage Facilities Plan, the implementing entity will be a local municipality capable of implementing the Plan and of operating and maintaining facilities. The logical choice of the municipality is the City of Beaver Falls, since the City has a history of successfully owning and operating a system of public sewers and a sewage treatment plant as well as supplying services to outlying districts.

### 6.6.1 IMPLEMENTING DOCUMENTS

The affected parties must each enact a formal resolution to ratify and adopt the Beaver Falls Regional Sewage Facilities Plan as each municipality's Plan.

For the City to assume responsibility for two additional municipal districts, formal

agreements must be executed between the City and the Boroughs of Homewood and Big Beaver. These agreements should be similar to those in existence between the City and the districts already served. In addition, Homewood and Big Beaver will enact ordinances requiring residents in the affected areas to connect to public sewers. The ordinances will entail regulations governing the sewer tap installations and tap-in fees. Zoning and subdivision ordinances and regulations will be revised to distinguish the sewered areas, and building permit and planning module regulation will include requirements for acquiring sewer taps in those areas. The satellite municipalities will be required to coordinate the issuance of building permits and sewer taps with the City of Beaver Falls, and the appropriate regulations to effect that must be put in place.

### 6.6.2 ADMINISTRATIVE REQUIREMENTS FOR PLAN IMPLEMENTATION

The City of Beaver Falls has in place the necessary administrative structure to construct and manage any additional sewage facilities. The Boroughs of Homewood and Big Beaver will join the existing Joint Sewer Users. The Borough Councils of Homewood and Big Beaver will be invited to attend the Joint Sewer Users meetings.

## 6.7 CONCLUSIONS

If the recommendations of this Plan are implemented, the City of Beaver Falls will continue as manager of sewage facilities, with expanded responsibilities involving the Boroughs of Big Beaver and Homewood. If this is not feasible due to reasons discussed above, then a municipal or joint municipal authority may be formed to implement the Plan. The legal and administrative requirements in that case will involve the organization of the authority and its administrative, technical, and maintenance staffing. The organization of such an authority will involve initial costs such as legal expenses, transfer of property, purchase of equipment, and hiring of staff. The financing of these initial costs is an item which must be discussed prior to the acceptance of the recommendations of this Plan.

# SECTION 7: SELECTED WASTEWATER TREATMENT AND INSTITUTIONAL ALTERNATIVES

## 7.1 SELECTED WASTEWATER TREATMENT ALTERNATIVE

Three wastewater treatment alternatives were examined in this plan: an oxidation tower, a sequencing batch reactor, (SBR) and an aerated biological filter (ABF). All of these alternatives have been combined with a general plant expansion to 4.7 MGD. The estimated costs of the three alternatives are: oxidation tower, $4,800,000 construction cost and $1,041,431 annual operation and maintenance (O & M) costs; SBR, $4,864,000 construction cost and $1,049,431 annual O & M costs; and ABF, $4,971,400 construction cost and $1,512,856 annual O & M costs.

The oxidation tower alternative was chosen because of its lower construction cost as well as its lower O & M costs.

## 7.2 SELECTED ON-LOT TREATMENT ALTERNATIVES

Several alternatives were evaluated to provide sewage service for areas not served by sewers. These include individual on-lot systems, community on-lot systems, small flow treatment facilities/package plants, and holding tanks. A no action alternative was also considered. The no action alternative was rejected due to environmental and public health reasons. The holding tank alternative was rejected due to administrative and economic

reasons. The community on-lot alternative was rejected due to administrative and technical reasons. The individual on-lot system was selected as the sewage disposal method of choice in areas not serviced by sewers. Small flow treatment facilities/package plants may be utilized only as repairs to existing on-lot systems which cannot be adequately repaired with on-lot methods, or as interim systems in areas scheduled to be sewered within 10 years.

## 7.3 SELECTED WASTEWATER COLLECTION AND CONVEYANCE ALTERNATIVE

This plan recommends the extension of the Beaver Falls sewer system to Koppel Borough border, and that sewer lines be constructed in the Borough of Homewood. This plan also recommends that Koppel construct a pump station and tie into the system. This alternative will provide sewer service to the identified needs areas of Homewood, the Holiday Inn, and Big Beaver Plaza. In addition, this alternative will provide the most flexibility in that the enterprise zone at the Route 60/Route 351 interchange can be developed and can tie into the sewer system, reducing the user charges. These alternatives are shown in Figures 5.1-2 and 5.1-7.

The Borough of Koppel has expressed a strong desire not to participate in the project. If they did participate, the additional cost to connect the Borough will be offset by the number of additional EDUs (931), and would result in lower user costs. If neither Koppel or the enterprise zone commit to the recommendations in the plan, it will not be cost effective for the City to extend the sewer line into Big Beaver Borough.

## 7.4 SELECTED INSTITUTIONAL ALTERNATIVE

Three institutional alternatives were investigated in Section 6 of this study. The alternatives were assigned points indicating their effectiveness in each of 12 categories. The categories were then weighted by the application of a rating factor. The alternative with the highest weighted score will be the most appropriate institutional alternative for the case which was evaluated.

In this case, the Municipal Manager - Sattelite system was rated highest, with 67.9 total points, and leading in 6 of the 12 categories. The Municipal Authority ranked second, with 62.4 points and leading in 5 categories. The Council of Governments ranked last with 57.5 points, and not leading in a single category.

To implement this alternative, all municipalities must adopt this plan, and execute agreements with the City of Beaver Falls which designate that the City will assume responsibility for the operation and maintenance of joint portions of the sewerage system. In addition, Big Beaver and Homewood must revise their zoning and subdivision ordinances to require connection to the sewerage system, as well as coordinating the issuance of building permits and sewer taps with the City, furthermore, all planning modules requesting sewer taps should be reviewed by the City to assure that capacity exists in the sewerage system.

## 7.5 FINANCING METHODS AVAILABLE

Available sources of funding for the selected alternatives have been identified in Section 5.6 of this plan. The financing method of choice will be PennVEST, since the Farmers Home Administration does not consider Beaver Falls to be a rural area, and a bond issue will have higher annual costs. Section 5.6 also identifies numerous grants sources which may be utilized to help defray some of the costs associated with wastwater projects. It is recommended that all affected municipalities apply for as many grants as possible to lower the cost of the project.

## 7.6 GROWTH AREAS

Since the collapse of the steel industry in the 1970s, the project area has not been growing, rather it has been experiencing a population decline. With the designation as an enterprise zone, and with sanitary sewage made available, it is possible that growth may occur in the study area. Growth is expected to develop in accordance with the schedule below.

### 7.6.1 5-YEAR GROWTH AREAS

Since sewers will be extended along Route 18, it is anticipated that growth will occur in this area first. The new development is expected to be located within the enterprise zone designation along Route 18 where sewers are provided. The enterprise zone area along Route 18 is shown in Figure 1.4-1. The enterprise zone is bounded by steep slopes, and development is not expected outside of the designated areas.

### 7.6.2 10-YEAR GROWTH AREA

As the Route 18 corridor begins to develop, and the study area becomes a sought-after location for industry, it is anticipated that the enterprise zone along Route 551 and the enterprise zone at the Route 60/Route 351 intersection will begin to develop. As these areas begin to develop, sewers will be extended into the areas to stimulate further development and job creation for this economically distressed area. The sewage flow from these areas has been considered in the sizing of the sewer lines and the treatment plant.

# SECTION 8 - IMPLEMENTATION

## 8.1 DESIGN AND CONSTRUCTION SCHEDULE

| ACTION | DATE |
|---|---|
| Submit NPDES Application | Immediately after Plan Approval |
| Begin Design | 30 days after Plan Approval |
| Receive NPDES Application | 120 days after Plan Approval |
| Complete Design | 6 months after Plan Approval |
| Submit Part II Application | 190 days after Plan Approval |
| Submit PennVest Application | 7 months after Plan Approval |
| Advertise for Bids | 30 days after PennVEST Notification |
| Award Bids | 10 days after PennVEST Closing |
| Begin Construction | 10 days after award of bids |
| Progress Reports | Quarterly |
| End Construction | 24 months after Plan Approval |
| Compliance with Permit Limits | 24 months after Plan Approval |

## 8.2 ADMINISTRATIVE ACTIVITIES SCHEDULE

| ACTION | DATE |
|---|---|
| Execute Intermunicipal Agreements | 120 days from Plan Approval |
| Revise Subdivision Ordinances | 180 days from Plan Approval |
| Revise Zoning Ordinances | 180 days from Plan Approval |

# SECTION 9 - PENNVEST REQUIREMENTS

## 9.1 I & I STUDY OF THE BEAVER FALLS COLLECTION SYSTEM

On August 20, 1991, Widmer Engineering Inc. completed an Infiltration/Inflow study of the Beaver Falls wastewater collection system. The collection system is broken down into nine mini-systems. (See the City of Beaver Falls Collection System Map). Physical inspections of manholes and flow monitoring at strategic manholes was performed. Flow monitoring results were obtained for wet weather and dry weather flows. Infiltration and inflow were calculated as the difference between expected flows and actual flows. I & I estimates were made for both wet weather and dry weather flows. A summary of the estimated I & I for each mini-system is as follows.

**Mini-System #1** - Located in Patterson Township not included in the study.

**Mini System #2** - Located in Patterson Township not located in the study.

**Mini System #3** - Mini-system #3 contains 147 manholes, 43,925 linear feet of 8" dia. sewer, 3,515 linear feet of 10" dia. sewer, 1,400 linear feet of 12" sewer line, and 4,100 linear feet of 15" dia. sewer line. This computes to 88.04 inch-miles of sewer line.

Manholes 136-3, 146-3, 150-3, 159-3, and 221-3 had portable flow meters installed. Tabulated below are the results of the flow meter evaluation:

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 36-3 | 4,983 GPD | 11,883 GPD | 243,337 GPD | 6,900 GPD | 238,354 GPD |
| 46-3 | 20,730 GPD | 70,921 GPD | 202,488 GPD | 50,191 GPD | 181,758 GPD |
| 50-3 | 17,617 GPD | 51,899 GPD | 313,114 GPD | 34,282 GPD | 295,497 GPD |
| 59-3 | 10,191 GPD | 63,223 GPD | 177,824 GPD | 53,032 GPD | 167,633 GPD |
| 21-3 | 24,574 GPD | 50,336 GPD | 506,635 GPD | 25,762 GPD | 482,061 GPD |

The expected sewage flow rate was determined by taking 80% of the volume of the average daily metered water sales for the study area.

*RECOMMENDATIONS*

MH 136-3 - In this service area, manholes 120-3, 130-3, 131-3, 132-3, 133-3, 134-3, and 135-3 were observed to be seeping groundwater. It is proposed to rehabilitate these manholes and the sewer line connecting them.

MH 146-3 - In this service area, repairs to a section of line between MH 120-3 and MH 117 are proposed. This includes replacing 795 linear feet of sewer line and 5 manholes.

MH 150-3 - There are no proposed repairs to this service area. It should be noted that MH 150-3 receives flow from MH 146-3 and MH 136-3.

MH 159-3 - In this service area, 421 linear feet of sewer line and seven manholes from MH 184 to MH 159 are proposed to be reconstructed.

MH 221-3 - In this service area, 336 linear feet of sewer line and 2 manholes are proposed to be replaced from MH 195 to MH 193.

NOTE: Manhole 136-3, Lines from manhole 188 to manhole 184, from manhole 193 to manhole 195, and from manhole 117A to manhole 120 were replaced during 1992

**Mini-System #4** - Mini-System #4 contains 136 manholes, 45,715 linear feet of 8" dia. sewer line, 500 linear feet of 12" dia. sewer line, 800 linear feet of 18" dia. sewe line, 4,375 linear feet of 20" dia. sewer line, and 4,275 linear feet of 24" dia. sewer line. This computes to 109.13 inch-miles of sewer line.

Flow monitoring was performed in manholes MH 19-4, MH 51-4, MH 105-4, and MHs 111-4 to 112-4. Tabulated below are the results of the flow meter study:

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 9-4 | 26,928 GPD | 26,724 GPD | 31,702 GPD | -- | 4,774 GPD |
| 51-43 | 2,165 GPD | 61,441 GPD | 123,840 GPD | 29,276 GPD | 91,675 GPD |
| 05-4 | 24,352 GPD | 47,388 GPD | 59,519 GPD | 23,036 GPD | 35,167 GPD |
| 11-4 & 12-4 | 42,052 GPD | 88,294 GPD | 129,380 GPD | 46,242 GPD | 87,328 GPD |

*RECOMMENDATIONS*

MH 19-4 - There appears to be very little I/I in this service area. No major work is proposed.

MH 51-4 - Although there appears to be I/I in this study area, no major work is proposed.

MH 105-4 - Although there appears to be I/I in this study area, no major work is proposed.

MHs 111-4 and 112-4 - It is recommended that televising of this service area be performed to determine problem areas.

**Mini-System #5** - Mini-System #5 consists of 120 manholes, 35,176 linear feet of 8" dia. sewer line, 1,475 linear feet of 10" dia. sewer line, 2,738 linear feet of 12" dia. sewer line, 875 linear feet of 15" dia. sewer line, and 2,550 linear feet of 18" dia. sewer line. This computes to 73.49 inch-miles of sewer line.

Flow monitoring was performed in manholes MH 47-5, MH 41-5, and MH 91A-5. Tabulated below are the results of the flow meter study.

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 47-5 | 4,113 GPD | 20,669 GPD | 213,977 GPD | 16,556 GPD | 209,864 GPD |
| 41-5 | 37,904 GPD | 89,109 GPD | 941,998 GPD | 51,205 GPD | 904,094 GPD |
| 91A-5 | 98,896 GPD | 310,343 GPD | 1,582,083 GPD | 211,447 GPD | 1,483,187 GPD |

*RECOMMENDATIONS*

MH 41-5 - This manhole appears to have an I/I problem. It receives flow from the East Trunk Line. The Trunk Line is proposed to be replaced. Once it is replaced, the I/I in this manhole should be reduced.

MH 47-5 - It is recommended that 63 linear feet of sewer (and the two manholes) that cross Walnut Bottom Run be replaced. It is believed that the majority of the I/I occurs in mini systems 6 & 7.

MH 914-5 - It is recommended that 375 linear feet of sewer line (MH 34 - MH 33) be replaced. Again, once the East Trunk Line is replaced, I/I will be reduced.

NOTE: Line from manhole 33 to manhole 34 were rehabiliatated during 1992.

**Mini System 6 & 7** - Mini System 6 & 7 consist of 10 manholes, 2100 linear feet of 8" dia. sewer line, and 2250 linear feet of 12" dia. sewer line. This computes to 8.29 inch-miles of sewer line.

Flow monitoring was performed in MH-79. The results are tabulated below.

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 79 | 2,687 GPD | 19,156 GPD | 506,164 PD | 16,469 GPD | 503,477 GPD |

*RECOMMENDATIONS*

MH 79 - This manhole receives flow from mini-system 9. Proposed improvements to mini-system 9 should alleviate some of the I/I. This manhole also receives flow from White Township. It is recommended that White Township perform a survey to try and eliminate I/I.

NOTE: Line between manhole 255 and manhole 81 was sliplined and manhole 255 was replaced during 1992.

**Mini-System #8** - Mini-System #8 is entirely contained within the Beaver Falls city limits. It consists of 110 manholes, 22,750 linear feet of 8" dia. sewer line, and 5,800 linear feet of 12" dia. sewer line. This becomes 47.65 inch miles of sewer pipe.

Flow monitoring was performed in manholes MH 54-8, MH 85-8, and MH 91-8. The results of the flow meter study are tabulated below.

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 54-8 | 54,652 GPD | 118,283 GPD | 148,934 GPD | 63,631 GPD | 94,282 GPD |
| 85-8 | 25,557 GPD | 63,937 GPD | 432,413 GPD | 38,380 GPD | 406,856 GPD |
| 91-8 | 13,017 GPD | 156,416 GPD | 418,282 GPD | 143,399 GPD | 405,265 GPD |

## *RECOMMENDATIONS*

A survey of the Babcock and Wilcox Steel Mills connections was recommended. During this survey several connections were found that are no longer in use. Several roof drains entered the ground. It is recommended that these roof drains empty above the ground to eliminate the possibility of stormwater entering the system.

It is recommended that the East Trunk Line be replaced. Once the replacement has occurred, it is recommended that another flow monitoring study be performed on all three manholes

simultaneously to see if the I/I has been alleviated.

**Mini-System #9** - Mini-System #9 consists of 40 manholes, 8900 linear feet of 8" dia. sewer, and 1600 linear feet of 12" dia. sewer. This gives a total of 17.12 inch-miles of sewer line.

Flow monitoring was performed in manholes MH 129-9, MH 148-9, and MH 158-9. The results of the flow monitoring study are tabulated below.

| MH | EXPECTED SEWAGE FLOW | AVG DRY WEATHER FLOW | AVG WET WEATHER FLOW | DRY WEATHER I/I | WET WEATHER I/I |
|---|---|---|---|---|---|
| 158-9 | 6,870 GPD | 10,298 GPD | 16,346 GPD | 3,428 GPD | 9,476 GPD |
| 129-9 | 2,157 GPD | 48,866 GPD | 215,132 GPD | 46,709 GPD | 212,975 GPD |
| 148-9 | 12,096 GPD | 39,111 GPD | 37,241 GPD | 27,015 GPD | 14,919 GPD |

*RECOMMENDATIONS*

MH 148-9 - Replacement of 3 manholes and 368 linear feet of sewer line crossing Walnut Bottom is recommended. (Between MH 148-9 and MH H7-9).

MH 158-9 - Replacement of two manholes and the line crossing Walnut Bottom Run should be replaced.

MH 129-9 - The majority of I/I in this line appears to be coming from West Mayfield. It is recommended that West Mayfield perform an I/I survey of their collector lines.

NOTE: Manhole 144 and lines between manholes 128 and 158, 135 and 147 were replaced during 1992. A City-wide manhole frame and cover replacement program was also performed during 1992. West Mayfield also completed an I/I survey. The study determined that flows into the Beaver

Falls sewer system increased during rainfall by a factor of 8.09, indicating excessive inflow and infiltration. A peaking factor of 6.25 would be reasonable considering the existing condition of the West Mayfield sewer system. Following completion of the study, inspections of suspect areas were performed and recommended for rehabilitation of selected areas of sewer lines were made.

For all mini-systems, the flow meters were installed for a one month period. The days in which precipitation occurred were considered wet days and days in which no precipitation occurred were considered dry days. The average of the flows received are recorded as the average wet weather flow and the average dry weather flow.

## 9.2 INNOVATIVE AND ALTERNATIVE TECHNOLOGIES

Innovative and alternatives were identified in Section 5.1, Identification of Alternatives, and evaluated in Section 5.5, Evaluation of Alternatives. Specifically, the alternative sewer technologies identified included: small diameter gravity sewers, step systems, and vacuum sewers. Alternative treatment technologies identified included sequencing batch reactors, aerated biological filters, ozonation disinfection, and ultraviolet disinfection. These technologies were considered to serve the areas of Homewood and Beaver Falls. It was not possible to consider these alternative technologies for Big Beaver, since the area is very sparsely populated, and due to the fact that development in Big Beaver will be largely non-residential, and the wastewater generated may not be amenable to these technologies.

## 9.3 OPEN SPACE AND RECREATIONAL OPPORTUNITIES

The objective of this item is to evaluate the recommended project's potential to enhance the open space and recreational opportunities of the community. A community facilities map of the study areas was obtained and studied for possible ways in which the proposed project could enhance these areas. It was noted that there were no cultural facilities within the project area with the exception of Homewood Falls. Due to the location of the Falls, it would nto be possible to enhance the recreation opportunities of the community through construction of the project.

It should also be noted that, with the exception of one sewer line from Homewood, the project will be constructed entirely within existing rights-of-way of roadways. In this respect, construction of the project can provide no greater enhancement to recreational opportunities than are currently provided by the existing roadways.

## 9.4 ALTERNATIVES EVALUATION/COST EFFECTIVE ANALYSIS

Alternatives have been identified in Section 5.1 of this report. Cost data was analyzed in Section 5.5 along with the population served and funding methods to be used. Based on this analysis, the most cost-effective alternative which was environmentally acceptable was chosen.

## 9.5 ENVIRONMENTAL ASSESSMENT

### 9.5.1 AIR QUALITY

This project should have minimal impact on air quality. Some dust may be released to the air during construction, but this will be a short term effect and it will be kept to a minimum by using

proper construction techniques. This project will not cause any adverse long term effects on air quality.

### 9.5.2 NOISE

There will be an increase in noise level during construction as a short term impact. Every effort will be made to minimize the noise level during construction. This project will not increase or reduce the current ambient noise level in the long run.

### 9.5.3 ENDANGERED OR THREATENED SPECIES

The PA DER - Bureau of Forestry was contacted and a Pennsylvania Natural Diversity Inventory (PNDI) search was requested for the study area. Any comments received on this topic will be included in this report. A copy of the letter requesting the PNDI search can be found in the correspondence appendix.

### 9.5.4 FISH AND WILDLIFE RESOURCES

Fish and wildlife resources should benefit from the proposed construction. Raw sewage by-passes will be eliminated. This will improve the quality of surface water in the project area. Wherever possible, sewer lines will be placed in roads and highways to minimize impact on wildlife in the area. This project proposes replacing sewers and sewering existing homes.

### 9.5.5 WETLANDS, FLOODPLAINS, AND COASTAL AREAS

Wetlands and floodplains have been illustrated on Plate 4 for the study area. The construction proposed by this report will not encroach on any known wetlands. Some sewer lines may encroach on floodplains, but since they are below ground, and will be backfilled to preconstruction levels, this will not increase the likelihood of downstream flooding or increase flood elevations. Appropriate permits will be obtained for the encroachment into the floodplains by the sewer lines. Coastal areas will not experience any impacts from the construction proposed by this report.

### 9.5.6 SURFACE WATER AND GROUNDWATER RESOURCES

Surface water and groundwater quality should see a great improvement in the long run. Raw sewage that is currently entering streams through storm sewer connections and through manhole overflows will be eliminated. Malfunctioning septic systems will be eliminated which will improve groundwater quality. Elimination of malfunctioning small flow treatment plants will also improve long term surface water quality. Negative short term impacts from construction will be minimized by an approved erosion and sedimentation pollution control plan and any stream encroachment permits that may be required.

### 9.5.7 SLUDGE DISPOSAL

Since the Beaver Falls Treatment Plant will be expanded, more sludge will be generated at the plant. This also means that less sludge will be generated in individual septic tanks and the package plants or piped directly into streams. For sludge generation in unsewered areas, the on-lot disposal

systems maintenance ordinance adopted as part of this plan will ensure that septage will be collected and disposed of routinely and properly. Sludge produced at the Beaver Falls Water Pollution Control Facility is hauled to a landfill.

### 9.5.8 LOSS OF PRIME AGRICULTURAL LAND

The construction proposed in this report will not encroach upon any prime agricultural land. The prime agricultural soils are highlighted on Plate 3. For development to occur on these soils, the Department of Agriculture should be contacted for a determination on whether or not the land can be developed. The address is:

Department of Agriculture
Agriculture Office Building
2301 N. Cameron Street
Harrisburg, PA 17110

### 9.5.9 EXCESSIVE ENERGY CONSUMPTION

This project will not excessively increase energy consumption. The pump stations will increase electrical consumption. The Beaver Falls treatment plant will be replacing many of its pumps and motors with variable frequency drives (VFDs). These are more energy efficient and will reduce energy consumption from pumping.

### 9.5.10 VISUAL AFFECTS AND COMMUNITY AMENITIES

This project will not have any long term impact on visual affects and community amenities.

### 9.5.11 SOCIO-ECONOMIC CONSIDERATIONS

The Department of Community Affairs has designated certain areas as enterprise zones. These zones are to encourage job growth and economic development in the area. Extending sewer lines to the enterprise zones is the best way for development to occur. The long range economic benefit to the area would be positive. The extension of sewers would also eliminate raw sewage discharges. Therefore, the long term social benefit would also be positive. Every effort will be made to secure grants and low interest loans to keep project costs down.

### 9.5.12 HISTORICAL OR ARCHAEOLOGICAL SITES

A letter was sent to the Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation, requesting notification of any known areas of archaeological and historic significance within the study area. No comments have been received. A copy of the letter is enclosed in the correspondence appendix. If the Bureau for Historic Preservation does have any comments in the future, they will be incorporated into the report. Until comments are received to the contrary, it is assumed that this project will not impact any areas of archaeological or historical importance.

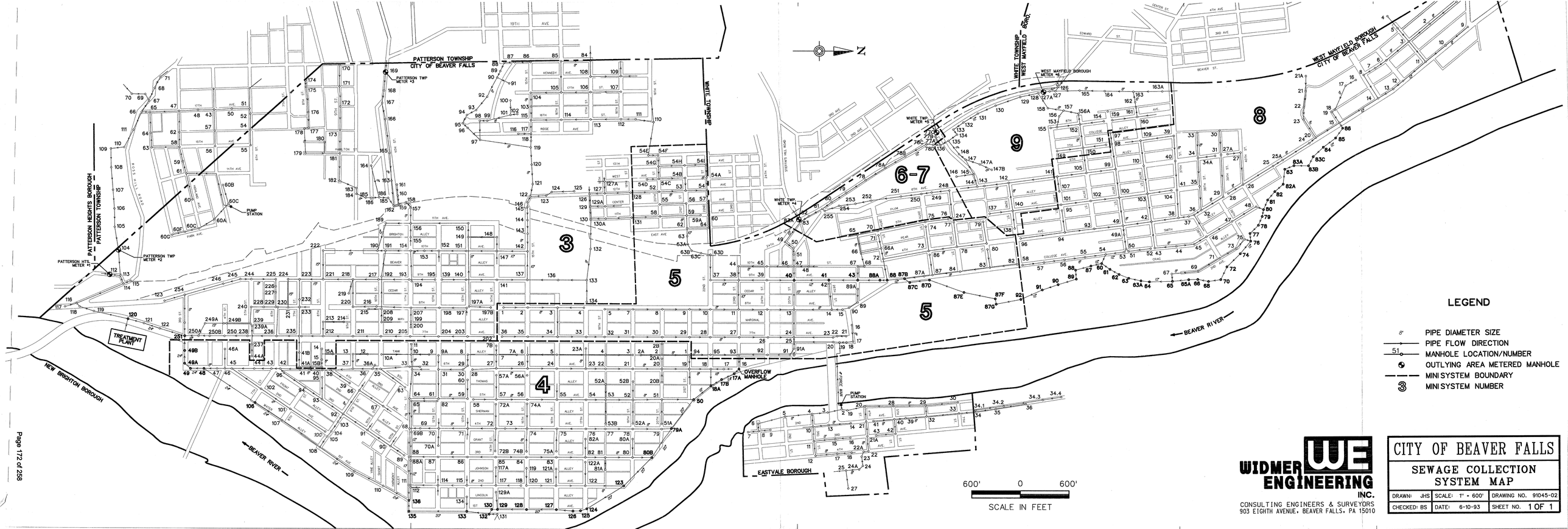
### 9.5.13 OLD FILL AREAS/LANDFILLS

There are no known old fill areas or landfills in the study area. The construction proposed will not impact them in any way.

### 9.5.14 OTHER ENVIRONMENTALLY SENSITIVE AREAS

An environmentally sensitive area has been identified in Big Beaver Borough's Comprehensive Plan. It is Homewood Falls on Clark's Run. This project will have a positive long term effect on Homewood Falls because raw sewage entering Clark's Run from Homewood would be virtually eliminated. Sewer lines and force mains will be located to minimize disturbance to the falls. An approved Erosion and Sediment Pollution control plan will help mitigate the short term impacts on Homewood Falls and Clark's Run.

# APPENDIX A - BEAVER FALLS SEWER SYSTEM




WIDMER ENGINEERING INC.
CONSULTING ENGINEERS & SURVEYORS
903 EIGHTH AVENUE, BEAVER FALLS, PA 15010

# CITY OF BEAVER FALLS

## SEWAGE COLLECTION SYSTEM MAP

| | | | |
|---|---|---|---|
| DRAWN: JHS | SCALE: 1" = 600' | DRAWING NO. 91045-02 | |
| CHECKED: BS | DATE: 6-10-93 | SHEET NO. 1 OF 1 | |

# APPENDIX B - BEAVER FALLS WATER POLLUTION CONTROL PLANT STUDY

## APPENDIX B - BEAVER FALLS WATER POLLUTION CONTROL PLANT STUDY



WATER POLLUTION CONTROL PLANT STUDY
CORRECTIVE ACTION PLAN
FOR THE
CITY OF BEAVER FALLS

## Report Summary

The City of Beaver Falls has been mandated to prepare a Corrective Action Plan by the Pennsylvania D.E.R. The ultimate goals of this plan are to attempt to eliminate Infiltration/Inflow from the contributing sewer systems and modify the City of Beaver Falls Water Pollution Control Plant as required to enable it to treat all incoming flows in compliance with its' N.P.D.E.S. Permit. Although sewer system rehabilitation work can be effective, it is unlikely that all of the extraneous I/I water can be removed from the sewer system, no matter how much work is performed. As stated in Pennsylvania D.E.R.'s letter to the City (August 26, 1991), it may be more cost-effective to deal with some of the I/I problems by expanding the sewage plant rather than trying to exclude all extraneous flows from the system. In addition, some plant capacity should exist for future growth needs. The regulatory agency requested that a determination be made of the existing plant's peak capacity and identification be made of all necessary plant modifications for it to operate at that peak capacity during high flow.

The methodology used for analyzing the plant's peak capacity was to first determine the hydraulic and organic loading capacities of each unit process. Once this was accomplished, the average and peak capacities associated with the unit process possessing the largest rated capacities were used for analyzing the adequacy of the remainder of the plant's facilities. The existing primary sedimentation tanks and chlorine contact tanks were determined to be the units of largest hydraulic capacity. The three (3) primary tanks, after slight modification with additional weir overflow troughs, have the following rated hydraulic capacities:

Primary Sedimentation Tanks Existing Rated Capacity

$Q_{Ave}$ (Average Daily Flow Capacity) = 4.80 MGD

$Q_{Peak}$ (Peak Flow Capacity) = 7.20 MGD

Chlorine Contact Tank
Existing Rated Capacity

$Q_{Peak}$ (Peak Flow Capacity) = 7.92 MGD

The capacities of all other existing treatment plant facilities are significantly less than those previously mentioned. The hydraulic and organic analysis contained in the appendix of this cursory report depict actual and projected capacities of each unit process within the plant. It has been summarized that all other plant facilities have approximately one-half (1/2) the rated capacity of the primary and chlorine contact tank facilities. Therefore, the plant's existing permitted capacity of 2.5 MGD (Q Ave.) can be readily increased to 4.8 MGD (Q Ave.) and the allowable peak flow (Q Peak) can be increased to 7.20 MGD by expansion of the remaining unit processes. Expansion of these facilities would provide an abundance of treatment plant capacity to treat a significant amount of Infiltration/Inflow and also provide excess capacity for future growth within the City and outlying communities. In addition, untreated wastewater which currently is bypassed at the wastewater treatment plant during rainfall events could be virtually eliminated. It is acknowledged that the City will be performing some needed sewer system rehabilitation work during 1992 with a PennVest low interest loan (awarded in late October 1991). Some of this work will address areas of known sources of I/I. The sewer system evaluation survey and flow monitoring program currently being performed by Widmer Engineering Inc. will probably identify additional areas which contribute extraneous water to the sanitary sewer system. Although successful removal of I/I is very desirable, it is unlikely that all or even a substantial portion of it can be cost-effectively removed from any sewer system of the magnitude of the Beaver Falls Wastewater Treatment Plant regional service area.

## Conclusions

The conclusions offered herein are presented based on the engineering analysis contained within the appendix of this cursory report. Analytical procedures used to evaluate capacity of each major component of the existing Beaver Falls Wastewater Treatment Plant were performed in accordance with regulations and guidelines set forth in the Pennsylvania Sewerage Manual, Pennsylvania D.E.R. - Bureau of Water Quality Management, Publication No. 1, 6th Edition.

In addition, inquiries were made directly to Pennsylvania D.E.R. for certain items that were site specific to the Beaver Falls Wastewater Treatment Plant. As previously mentioned, the plant modifications and expansion described below will result in the capacities of all plant components being increased to match that of the existing primary sedimentation tanks and chlorine contact tanks. All major plant structures and equipment proposed is itemized. Discussions with the plant superintendent, Mr. Darwin Main, revealed some additional miscellaneous items needed at the plant which have been incorporated into these projections. Minor items may not be specifically mentioned, but are included in the projected construction cost estimates offered under a subsequent section of this report.

Proposed Plant Facilities and Modifications
Required to Increase Beaver Falls WWTP Capacity to
Level of Existing Primary Sedimentation
and Chlorine Contact Tanks

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| Raw Sewage Screening | - | 1 | Add mechanical bar screen. Plant currently has comminutor and manual bypass bar screen. |
| Raw Sewage Pumps | 4 | 2 | Replace the 2 smallest capacity pumps with new units rated @ 3400 GPM each. Add variable frequency drive controls (VFD's) to all four (4) units. |
| Grit Chamber | 1 | - | No modifications |
| Primary Sedimentation Tanks | 3 | - | Add 60 L.F. of weir overflow trough to each primary sedimentation tank and add grease disposal system. |

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| Primary Sludge Pumps | 2 | 2 | Replace both units with higher capacity (400 GPM) units equipped with VFD control. |
| Primary Effluent Pumps | 4 | 4 | Replace all four (4) units with higher capacity (3400 GPM) units equipped with VFD control. |
| Oxidation Tower | 1 | 1 | Add duplicate oxidation tower w/interior dimensions of 61'0" dia. X 21'6" media depth. Consideration should be given to using plastic media rather than redwood to allow higher loadings to the towers. |
| Final Sedimentation Tanks | 2 | 2 | Add two units equal in capacity to the two existing units. Dimensions of each tank will be 80'0"L X 20'0"W with 9'8" average S.W.D. |
| Secondary Sludge Pumps | 2 | 2 | Replace both units with higher capacity (600 GPM) units equipped with V.F.D. control |
| Chlorine Contact Tank | 2 | - | No modification necessary if chlorination for disinfection is continued. If alternate method of disinfection, such as Ultra Violet (UV) disinfection, is installed, these tanks could be modified and used for sludge storage prior to thickening. |

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| Gravity Belt Thickener | - | 1 | The existing plant does not have sludge thickening facilities prior to discharge to the digesters. With the proposed plant expansion, thickening will be required so that the loading to the existing digesters is not excessive. A two (2) meter gravity belt thickener is a very cost-effective method of sludge thickening. This unit will require a small building enclosure, sludge feed and discharge pumps, polymer-feed system, and related equipment.<br><br>If sludge thickening is not incorporated into the plant modifications, additional digesters will be required even after the existing digesters are converted from standard rate to high rate units. |
| Sludge Holding Tanks | - | 2 | Two aerated sludge holding tanks will be required. One will be used for storing and mixing primary and secondary sludge prior to gravity thickening. This tank will have approximate dimensions of 80'L X 30'W X 14' depth and will provide sufficient storage so that use of the proposed gravity belt thickener can be limited to once every three days max. The aerated sludge holding tank will be equipped with |

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| Sludge Holding Tank - continued | | | an adjustable decant device for supernatant drawoff and either mechanical or diffused aeration system. It should be noted that the existing chlorine contact tanks can be used as a sludge holding tank (after some modifications) if the present chlorination system is replaced with UV disinfection.<br><br>A second smaller sludge holding tank will be required to store the thickened sludge discharged from the gravity belt thickener. Approximate dimensions will be 28'0" X 14'0" X 10'0" depth. This vessel must also be aerated with either mechanical or diffused aeration equipment. |
| Anaerobic Digesters | 2 | - | Modifications to the digesters will include roof deck replacement with Duo-Deck steel plate conversion. At least one digester will be equipped with a roof-mounted gas pearth mixing system which will modify the digester from a standard rate unit (moderately mixed) to a high rate (completely mixed) digester. |
| Sludge Drying Beds | 8 | - | The existing sludge drying beds will be grossly in-adequate if the plant is expanded to 4.8 MGD capacity as outlined within this report. Considering PA. |

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| Sludge Drying Beds - | | | D.E.R.'s allowable loading rate for "uncovered" drying beds, an additional 24,534 S.F. of drying bed area wil be required for the projected increased plant capacity. During the design phase of any future expansion project, discussions with PA DER can be held in an attempt to justify higher loading rates onto the existing beds (based on the plant's sludge drying beds past performance) in conjunction with the request for installation of two additional beds. It is doubtful, however, that PA. D.E.R. will agree with this scenario. In all probability, the City will be required to install a mechanical belt filter press for sludge dewatering and utilize some of the existing sand drying beds solely as an emergency backup to the belt filter press. A belt filter press could be installed within the same building used for sheltering the gravity belt thickener. |
| Belt Filter Press | - | 1 | As previously mentioned in the preceding item, it is apparent by the engineering analysis performed (refer to appendix) that in all likelihood, a 2.0 meter belt filter press will be required for sludge dewatering at the Beaver Falls WWTP. Computations indicate that a Belt Filter Press could handle all future sludge dewatering |

| Item | # of Existing Units | # of Proposed Units | Item Description/ Modification |
|---|---|---|---|
| | | | needs on a one day per week operation schedule. This will also allow many of the existing drying beds to be eliminated and provide needed site area. |

31,000 cu ft

## PROJECTED CONSTRUCTION COSTS

The following projected costs are anticipated with the implementation of the plant modifications and additions presented herein:

| Item No. | Description/Modification | Projected Construction Cost |
|---|---|---|
| 1 | Mechanical Screen @ | $ 100,000.00 |
| 2 | Primary Sedimentation Tank(s) Modifications (i.e., additional overflow weir troughs and grease disposal system) @ | $ 60,000.00 |
| 3 | Oxidation Tower Structure (including underdrain system) | $ 500,000.00 |
| 4 | Oxidation Tower Plastic Media for both existing and proposed units (replace existing redwood media in existing oxidation tower) @ | $ 495,000.00 |
| 5 | Final Sedimentation Tank(s) Structure @ | $ 300,000.00 |
| 6 | Final Sedimentation Tank(s) Equipment @ | $ 140,000.00 |
| 7 | Aerated Sludge Holding Tank @ | $ 190,000.00 |
| 8 | Aerated Sludge Holding Tank Equipment @ | $ 60,000.00 |
| 9 | Thickened Sludge Storage Tank @ | $ 60,000.00 |
| 10 | Thickened Sludge Storage Tank Equipment @ | $ 25,000.00 |
| 11 | Gravity Belt Thickener Equipment @ | $ 100,000.00 |
| 12 | Belt Filter Press Equipment @ | $ 250,000.00 |
| 13 | Building to House G.B.T., B.F.P., Polymer and Sludge Handling Equipment @ | $ 380,000.00 |
| 14 | Digester Roof(s) Duo-Deck Conversions and Pearth Gas Mixing System @ | $ 320,000.00 |

| Item No. | Description/Modification | Projected Construction Cost |
|---|---|---|
| 15 | Ultraviolet (U.V.) Disfinfection equipment and required flume to replace existing chlorination equipment @ | $ 250,000.00 |
| 16 | All Pumps including accessory equipment such as Variable Frequency Drives, Motors, Valves, Fittings, etc., @ | $ 240,000.00 |
| 17 | Other miscellaneous plant equipment, structures and modifications including new garage, gasoline tank and pump, demolition of old storage building, aluminum hand railing, grating, etc. @ | $ 140,000.00 |
| 18 | Plant Yard Piping @ | $ 405,000.00 |
| 19 | Electrical work including emergency generator, switchgear, control panels, timer controls for all primary and secondary tank collectors, fixtures, flow meters w/chart recorders, level controllers, automatic samplers and miscellaneous other instrumentation @ | $ 540,000.00 |
| 20 | Site amenities including concrete sidewalks, asphalt pavement construction and replacement, and site seeding and mulching @ | $ 45,000.00 |
| 21 | Construction contingency @ | $ 200,000.00 |
| | **Total Projected Construction Cost:** | **$4,950,000.00** |
| | **Engineering (Design, securement of permits and full-time construction supervision) @** | **$ 495,000.00** |
| | **Legal @** | **$ 30,000.00** |
| | **Administration @** | **$ 25,000.00** |
| | **TOTAL ESTIMATED PROJECT COSTS:** | **$5,500,000.00** |

330,000 des
165,000 inspec

The construction cost tabulation shown on the previous pages include an alternate type of disinfection system in lieu of chlorination for the Beaver Falls Wastewater Treatment Plant. There is a strong possibility that the use of chlorine gas will be prohibited by the city within the next few years. Ultra-violet (U.V.) disinfection is the trend that a lot of wastewater treatment plans are now taking. It is capable of 100% disinfection of bacteria and organisms, and does not require contact tanks for detention time. There is possibility that there could be some savings in the overall projected plant modifications cost (tabulated above) by modifying the existing chlorine contact tank (which would no longer be needed with U.V. disinfection) to serve as an aerated sludge holding tank. This would partially offset the cost of constructing a new sludge holding tank (Item No. 7) in the projected construction costs tabulation on the previous page. This item would be studied in detail during the design phase of this project.

Plan Implementation

The implementation of this project as described within this cursory report, would require approximately two and one-half years. The design phase, including securement of permits, would require eight - twelve months; contract bidding and construction would require approximately sixteen months. The scheduling of this project would be coordinated with the outcome of the sewer system evaluation study that is currently being conducted by Widmer Engineering Inc.

Plant Bypass

The Wastewater Treatment Plant contains an emergency bypass located in the primary effluent pump station. When operative this bypass discharges settled sewage directly to the chlorine contact tank and bypasses the oxidation tower (secondary treatment unit). This bypass only becomes operative during periods of intense rainfall. At the request of the PA. D.E.R., the plant personel will be installing a flow meter and chart recorder to monitor bypassed flows

during the week of November 25, 1991. The regulatory agency has also requested that a determination be made as to what flow results in the emergency bypass to become operative. Since year 1991 was an extremely dry (low precipitation) year there were no bypasses observed at the plant. Therefore, the "critical" flow which produces a bypass could not be determined.

Once the new meter is installed on the plant bypass an accurate determination of the critical flow can be determined by correlating the plant bypass occurrence with the plant's existing effluent meter. This will yield the exact flow which produces plant bypasses.

# ENGINEERING ANALYSIS

# CITY OF BEAVER FALLS
# WASTEWATER TREATMENT FACILITY

## BASIS OF DESIGN

| DESIGN CRITERIA | CONCENTRATION OR LOAD |
|---|---|
| 1990 Population of Service Area: | |
| City of Beaver Falls | 10,687 |
| Eastvale | 328 |
| Patterson Township | 835 |
| Patterson Heights | 576 |
| West Mayfield | 352 |
| White Township | 611 |
| Total: | 13,389 |
| **Hydraulic Load** | |
| Year 1990 - 365 Day Average Flow * | 2.36 MGD |
| Highest Three (3) Consecutive Month Average: | |
| April - June 1989 | 2.89 MGD* |
| Per Capita Contribution (based on yearly average) | 176 G.P.C.D. |
| **Organic Concentration** | |
| Year 1990 - 365 Day Average Organic Concentration | 123 ppm BOD5 (w/peak monthly average = 153 ppm) |
| Year 1990 -365 Day Average Suspended Solids Concentration | 119 ppm Suspended Solids (w/peak monthly average = 148 ppm) |
| For design purposes the influent BOD5 and suspended solids concentrations used for analysis are | 150 ppm BOD5<br>160 ppm S.S. |

* This flow represents the highest 3 consecutive month average.

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Preliminary Treatment** | |
| Existing Preliminary Treatment | Comminutor with bypass bar screen |
| Proposed Modifications | Replace with a mechanical screen having peak rated capacity of 7 MGD. |
| Raw Sewage Pumping Facilities: | |
| Four (4) existing raw sewage pumps rated ● | 1 ● 1,100 GPM<br>1 ● 2,300 GPM<br>3 ● 3,900 GPM<br>4 ● 5,600 GPM (standby unit) |
| Proposed Modifications: | |
| Replace existing Pump #1 & #2 with higher capacity pumps rated ● | 3,400 GPM each * |
| Provide electronic speed adjustment | Install variable frequency drives on all raw sewage pumps. |
| * It will be shown later that the plant's proposed capacity (ave. daily flow) should be increased to Qave. = 4.8 MGD & Qpeak = 7.2 MGD. | |
| Existing Plant Flow Meter consists of monitoring flow over the plant's effluent weirs. | Modifications should include a new Doppler Flow Meter installed on the raw sewage pump's common discharge line.<br><br>This will yield better accuracy and also record total plant daily intake. |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Primary Treatment:** | |
| **Primary Sedimentation Tanks:** | |
| Existing Tanks | 3 |
| Proposed Tanks | 0 |
| Dimensions (each): | |
| Width | 20'0" |
| Length | 80'0" |
| Sidewater Depth | 9'0" Average |
| Freeboard | 1'6" |
| Total Capacity for Three (3) Tanks | 323,352 Gallons - excluding hopper(s) volume. |
| Total Existing Weir Length for Three (3) Tanks 3 X 100' Each | 300 L.F. |
| Total Proposed Weir Length for Three (3) Tanks 3 X 160' Each | 480 L.F. |
| Total Surface Area Provided 3 X 20' X 80' | 4,800 S.F. |
| **Detention Times:** | |
| Based on Proposed Q Ave. @ 4.80 MGD<br>323,352 Gallons/4.8 X $10^6$ Gallon/24 Hours @ | 1.62 Hours |
| Based on Q Peak @ 7.20 MGD<br>323,352 Gallons/7.20 X $10^6$ Gallons/24 Hours @ | 1.1 Hours |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Surface Settling Rates (SSR):** | |
| Requirement Based on Q Ave. | SSR = 1,000 GPD/S.F. |
| Requirement Based on Q Peak | SSR = 1,500 GPD/S.F. |
| Allowable Q Ave. Based on Allowable SSR = 1,000 GPD/ S.F. | |
| Q Ave. = 1,000 GPD/S.F. X 4,800 S.F. @ | 4.8 MGD |
| Allowable Q Peak Based on Allowable SSR = 1,500 GPD/ S.F. | |
| Q Peak = 1,500 GPD/S.F. X 4,800 S.F. @ | 7.2 MGD |
| **Weir Overflow Rates (W.O.R.):** | |
| Requirement Based on Q Ave. | 10,000 GPD/L.F. |
| Requirement Based on Q Peak | 15,000 GPD/L.F. |
| Existing Q Ave. Based on Allowable WOR = 10,000 GPD/ Ft. | |
| Q Ave. = 300 L.F. X 10,000 GPD/L.F. @ | 3.0 MGD |
| Proposed Q Ave. Based on Allowable W.O.R. = 10,000 GPD/Ft. | |
| Q Ave. = 480 L.F. X 10,000 GPD/L.F. @ | 4.8 MGD* |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Existing Q Peak Based on Allowable WOR = 15,000 GPD/L.F. | |
| Q Peak = 300 L.F. X 15,000 GPD/L.F. ● | 4.5 MGD (existing Q Peak) |
| Proposed Q Peak Based on Allowable WOR = 15,000 GPD/ L.F. | |
| Q Peak = 480 L.F. X 15,000 GPD/L.F. | 7.2 MGD* (proposed Q Peak) |
| * Additional F.R.P. Weir Plates and Troughs will be installed to increase total length from 300' to 480 feet. | |
| Primary Sludge Pumps: | 2 Proposed (Replace existing) |
| Type | Progressive Cavity (variable capacity) |
| Capacity | 0 to 400 GPM |
| Sludge Pumps Discharge to | Proposed Aerated Sludge Holding Tank where it will be mixed with secondary sludge. |
| Estimated Primary Sludge Solids Concentration | 3% |
| Estimated Volume of Primary Sludge Production ● 60% Removal Efficiency: | |
| Weight of Dry Solids: | |
| (60%)(160 ppm SS)(8.34) (4.80 MGD) ● | 3,843 #/Day |
| Specific Gravity of the Primary Sewage ● | 1.03 |
| Estimated Sludge Volume/ Day: | |
| 3,604 #/Day Dry Solids/8.34 X 1.03 X 0.03 ● | 14,000 Gal/Day |
| Estimated BOD5 Reduction ● | 30% |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Secondary Treatment Type Process:** | |
| **Oxidation Tower** | |
| Existing Secondary Treatment Process Type | Bio (Oxidation) Tower |
| Number of Units | One (1) |
| Oxidation Tower Dimensions: | |
| Height ● | 21'6" Effective Media Height |
| Diameter ● | 61'0" Interior |
| Volume of Media ● | 62,801 C.F. |
| Media Type (Existing) | Redwood |
| Method of Flow Distribution Distribution | Rotary Arm |
| Type of Ventilation | Convection - Air plenum beneath media. |
| Media Type Proposed | Plastic, since the allowable hydraulic and organic loading rates are considerably higher than those for redwood. |
| Ratio of Surface Areas | Redwood media is approximately the surface area per C.F. of media as plastic media. |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Compute Allowable Hydraulic Loading to One (1) Oxidation Tower using Plastic Media: | |
| Modified Velz Equation for Munters Plastic Media | $S_2 = e^{\left[\frac{S_1}{(K_{20} * As * D * THETA^{(T-20)})}{Q_I^{N}}\right]}$ |

Where:

| | |
|---|---|
| $S_1$ = Dissolved (soluble) BOD Influent Concentration @ | 70 ppm |
| $S_2$ = Dissolved BOD Effluent Concentration @ | 16.0 ppm |
| $K_{20}$ = Reaction Rate Coefficient at 20 degrees C @ | 0.0024 |
| $A_s$ = Media Specific Surface (SF/CF) @ | 30 |
| THETA = Temperature Correction Coefficient @ | 1.035 |
| T = Wastewater Temperature (Coldest Month) Degree C @ | 10 |
| $Q_I$ = Feed Flux (GPM/SF) = Q/0.785*61^2 @ | Q/2,921 S.F. |
| N = Dimensionless Flow Exponent @ | 0.50 |
| D = Media Depth @ | 21.5 Feet |
| Diameter @ | 61.0 Feet |
| Media Volume @ | 62,833 C.F. |
| Media Type @ | 30060 |

| UNIT PROCESS | DESIGN DATA |
| --- | --- |
| Solving for QI (Feed Flux - Surface Loading Rate), it is calculated that, based on the parameters listed above, the existing single tower using Munters media will treat ● | 1667 GPM or 2.4 MGD |
| Duplicate Towers will treat ● | 4.8 MGD |
| During peak flow rates there will be a decrease in the influent soluble BOD5 concentration (because of dilution) and the duplicate towers will still have adequate capacity. | |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Final Sedimentation Tanks:** | |
| Existing Tanks | 2 |
| Proposed Tanks | 2 |
| Dimensions (each): | |
| Width ● | 20'0" |
| Overall Length ● | 80'0" |
| Effective Length | 74'8" (effective length downstream of inlet baffle) |
| Sidewater Depth ● | 9'8" Average |
| Freeboard ● | 2 Feet |
| Existing Hydraulic Capacity (total) | 230,540 Gallons |
| Proposed Hydraulic Capacity (total) | 461,080 Gallons |
| Existing Surface Area (effective) | 2,987 S.F. |
| Proposed Surface Area (effective) | 5,974 S.F. |
| Existing Total Overflow Weir Length | 328 L.F. |
| Proposed Total Overflow Weir Length | 656 L.F. |
| **Detention Times:** | |
| Based on Proposed Q Ave. ● 4.80 MGD | |
| 461,080 Gallons/4.8 X $10^6$ Gallons/24 Hours ● | 2.31 Hours (w/4 final tanks) |
| Based on Q Peak ● 7.20 MGD | |
| 461,080 Gallons/7.20 X $10^6$ Gallons/24 Hours ● | 1.54 Hours |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Surface Settling Rates (SSR):** | |
| Requirement Based on Q Ave. | SSR = 800 GPD/S.F. |
| Requirement Based on Q Peak | SSR = 1,200 GPD/S.F. |
| Existing Q Ave. Based on Allowable SSR = 800 GPD/S.F. | |
| Existing Q Ave. = 800 GPD/S.F. X 2,987 S.F. ● | 2.39 MGD |
| Proposed Q Ave. Based on Allowable SSR = 800 GPD/S.F. | |
| Proposed Q Ave. = 800 GPD/S.F. X 5,974 S.F. ● | 4.80 MGD |
| Existing Q Peak Based on Allowable SSR = 1,200 GPD/S.F. | |
| Existing Q Peak = 1,200 GPD/ S.F. X 2,987 S.F. ● | 3.584 MGD |
| Proposed Q Peak = 1,200 GPD/ S.F. X 5,974 S.F. ● | 7.2 MGD |
| **Weir Overflow Rates (WOR):** | |
| Requirement Based on Q Peak | 15,000 GPD/L.F. |
| Existing Q Peak Based on Allowable WOR = 15,000 GPD/L.F. | |
| Q Peak = 328 L.F. X 15,000 GPD/L.F. ● | 4.92 MGD |
| Proposed Q Peak Based on Allowable WOR = 15,000 GPD/L.F. | |
| Q Peak = 656 L.F. X 15,000 GPD/L.F. ● | 9.84 MGD |
| **Secondary Sludge Pumps:** | 2 Proposed (replace existing) |
| Type | Progressive Cavity (variable capacity) |
| Capacity | 0 to 600 GPM |
| Existing Sludge Pumps Discharge to | Digesters |
| Proposed Sludge Pumps will Discharge to | Sludge Holding Tank |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Chlorine Contact Tank:** | |
| Waste Enters These Units | By Gravity |
| Forward Flow Q Ave. ● | 3.24 MGD |
| Q Peak ● | 7.00 MGD |
| No. of Existing Units ● | 2 |
| **Dimensions of Each Tank:** | |
| Length ● | 40'0" Interior |
| Width ● | 20'0" Interior |
| Sidewater Depth ● Q Ave. = | 7'6" |
| Total Capacity Provided (After deduction for baffles) | 82,487 Gallons |
| Detention Time Required at Peak Hourly Flow or Maximum Rate of Pumpage ● | 15 Minutes |
| Allowable Q Peak = 82,487 Gallons/15 Minutes X 1,440 Min/Day/1 X $10^{6}$ ● | 7.92 MGD |
| **Contact Tank Baffles:** | |
| No. of Baffles (Ea. Tank) | 3 |
| No. of Chambers (Ea. Tank) | 4 |
| Baffle Type ● | Side to Side |
| Length of Travel (Ea. Tank) | 95'4" |
| Velocity through Contact Tank ● Q Peak (95'4"/15 Min/60 Sec/Min) ● | 0.11 FPS |
| **Post Aeration:** | Effluent Cascade Wall |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Sludge Production:** | |
| Effluent Limit Required | 30 ppm SS and 25 ppm BOD5 |
| Influent Concentration (Conservative) | 160 ppm SS and 150 ppm BOD5 |
| Pounds Dry Solids to be removed each day: 4.8 MGD X 8.34 X 130 ppm ● | 5,204 Pounds/Solids |
| **Primary Sedimentation Tanks:** | |
| Primary Sludge Solids Concentrations ● | 3% Average |
| Estimated % Removal of Suspended Solids by Primary Tanks ● | 60% |
| Estimated % Removal of BOD5 by Primary Tanks ● | 3,843 Pounds/Solids/Day |
| Specific Gravity of Primary Sludge ● | 1.03 |
| Estimated Primary Sludge Volume/Day: 3,843 # Solids/ Day/(8.34 X 1.03 C 0.03) ● | 14,912 Gallons/Day |
| **Final Clarifiers:** | |
| Pounds Dry Solids to be removed by Final Clarifiers: 5,204 # - 3,843 # (removed by primary tanks) ● | Approx. 1,361 # Solids |
| Specific Gravity of Secondary Sludge | 1.0 |
| Secondary Sludge Solids Concentration ● | 0.7% |
| Estimated Secondary Sludge Volume/Day: | |
| 1,361# Solids/Day/8.34(1.00) (0.007) ● | 23,313 Gallons/Day |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Waste Sludge: | |
| BOD5 Metabolized within Oxidation Towers @ 0.70 X 150 ppm applied - 25 ppm in effluent then 80 ppm BOD5 X 4.80 MGD X 8.34 #/MGD(ppm) | 3,203 # BOD5/Day Metabolized |
| Waste Sludge Production: | |
| 3,203 #BOD5 Metabolized X 0.25# W.S. Yield/1.0# BOD5 Metabolized = | 800 # W.S./Day |
| Volume of Waste Sludge Produced from Metabolization of BOD5 @ 0.7% Solids Concentration - 800 #W.A.S./ 1.0 X 8.34 X 0.007 | 13,703 Gallons W.S./ Day |
| Total Volume of Sludge = Primary Sludge @ 14,912 + Secondary Sludge @ (23,313 + 13,703) Produced on a Daily Basis: | 51,928 Gallons/Day |
| Total Dry Solids Produced Daily - 3,843 Lb. Primary + (1,361 lb. + 800 lb.) | 6,004 #/Dry Solids/Day |
| Proposed Aerated Sludge Holding Tank: | |
| Forward Flow @ | 51,928 Gal/Sludge/Day |
| Dimensions: | |
| Length @ | 80'0" |
| Width @ | 30'0" |
| Depth @ | Variable up to 14'0" Sidewater Depth |
| Capacity @ 14'0" SWD (Max.) @ | 251,500 Gallons |
| Storage Provided in Sludge Holding Tank @ 251,500 Gal/ 51,928 Gal/Day @ | 4.8 Days |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| This storage will be utilized for holding weekend sludge production. | |
| Solids Concentration of Aerated Sludge Holding Tank Contents: | |
| Primary Sludge - 14,912 GPD @ 3% Secondary Sludge - 37,016 GPD @ 0.7% | |
| Resultant Solids Concentration @ | 1.36% |
| Proposed Aeration System Type | Coarse Bubble Diffused Air System (non-clog diffusers) |
| Proposed Sludge Thickening Facilities | Gravity Belt Thickener |
| Dimensions: | |
| Length @ | 14' 8'7/16" |
| Width @ | 2.0 Meters or 9'4" |
| Effective Drainage Area @ | 74 S.F. |
| Allowable Hydraulic Loading for 2 Meter Gravity Belt Thickener | 300 GPM |
| Manufacturer's data and 5 months of actual operation @ City of Connellsville's new wastewater treatment plant facility indicates that the thickened (dewatered) sludge will have a final solids concentration content @ | 7.0% min. - 9.0% max. |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Volume of Thickened Sludge Produced from Gravity Belt Thickener: | |
| (6,004 #Dry Solids/Day/0.07 X 8.34 X 1.03 S.G.) @ | 10,000 Gal/Day |
| Filtrate is returned to | Head of Plant |
| Duration that Gravity Belt Thickener is required to operate: | |
| 51,928 GPD/300 GPM @ | 2.88 Hrs./Day or 8.6 Hours every 3 Days |
| Solids Loading to Gravity Belt Thickener @ 6,004 #/ Day/74 S.F. | 81.1 # Solids/S.F./Day |
| Proposed Thickened Sludge Storage Tank: | |
| Dimensions: | |
| Length @ | 28'0" |
| Width @ | 14'0" |
| Sidewater Depth @ | 10'0" |
| Capacity @ | 29,361 Gallons |
| Available Detention Time Provided: | |
| 29,361 Gal/10,000 Gal/Day @ | 2.94 Days |
| Provisions to Prevent Septic Conditions: | Diffused Aeration |
| Type Diffusers | Coarse Bubble Diffusers to Prevent Clogging. |
| Sludge from this tank is pumped to | Heat Exchanger and then to existing Anaerobic Digestor. |
| Heat Exchanger: | Replace existing unit with new unit. |
| Sludge Heating Capacity | 400,000 BTU/Hour |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Anaerobic Digesters: | |
| Number of Units | Two (2) Existing |
| Dimensions: | |
| Diameter ● | 40'0" |
| Sidewater Depth ● | 18' + Lower Sloped Section (4'9" high) |
| Digester Capacity Each | 25,620 C.F. or 191,644 Gallons |
| Existing Digester(s) Type | Both are heated - moderately mixed anaerobic digesters. |
| Volume of Thickened Sludge Produced Daily from Gravity Belt Thickener | 10,000 Gallons/Day |
| Solids Concentration of Thickened Sludge | 7% to 9% (use 7% for computations) |
| Percent Volatile Matter in Thickened Sludge ● | 75% |
| Volatile Solids Produced Daily: 75% X 6,004 Lb. D.S./Day ● | 4,503 Lb. Volatile Solids/ Day |
| PA. DER Digester Criteria for Moderately Mixed Digesters Maximum Permissible Loading Rate ● | 50# VSS/1,000 C.F. of Digester Volume |
| Minimum Sludge Retention Time | 30 Days |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Projected Volatile Solids Loading Rate to Existing Digesters: | |
| 4,503 Lb. Volatile Solids/Day/2 Digesters X 25.62 X $10^3$ C.F. @ | 88 Lb. VSS/1,000 C.F. |
| Projected Sludge Retention Time: | |
| 2 X 191,644 Gallons/10,000 GPD Sludge @ | 38.3 Days |

Conclusions:

Although the existing digesters will provide adequate sludge retention time after the proposed gravity belt thickener is installed, they exceed the maximum permissible volatile solids loading.

Recommended Modifications:

| | |
|---|---|
| Digester No. 1 - Convert existing moderately mixed Anerobic Digester No. 1 to completely mixed system via: | Install digester roof-mounted gas-pearth mixing system. |
| Digesters No. 1 and No. 2 | Replace existing digester roof coverings with new Duo-Deck (steel plates) conversion. |
| PA. D.E.R. Criteria for Completely Mixed Digester: | |
| Maximum Permissible Loading Rate @ | 100 Lb. VSS/1,000 C.F. Digester Volume |
| Minimum Sludge Retention Time @ | 15 Days |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| **Sludge Dewatering System:** | |
| Number of Existing Sand Drying Beds (uncovered) | 8 |
| Dimensions: | |
| Width @ | 30'0" |
| Length @ | 2 @ 110' Ave., 2 @ 116' Ave., 2 @ 120', 2 @ 140', and 2 @ 160' |
| Total Existing Bed(s) Surface Area @ | 31,980 S.F. |
| Sludge Drying Bed Area Required Based on PA. DER Criteria | 1.5 S.F. Bed Area/Capita |
| Plant Design Solids Loading 4.8 MGD X 160 ppm SS X 8.34 | 6405 Lb. SS/Day |
| Total Sludge Bed Area Required: | |
| 37,676 Cap. X 1.5 S.F. Bed Area/Cap. | 56,514 S.F. |
| Existing Sludge Bed Area | 31,980 S.F. |
| Additional Sludge Drying Bed Area Required to Comply with PA DER Regulations (56,514 S.F. - 31,980 S.F.) @ | 24,534 S.F. |

**Conclusions:**

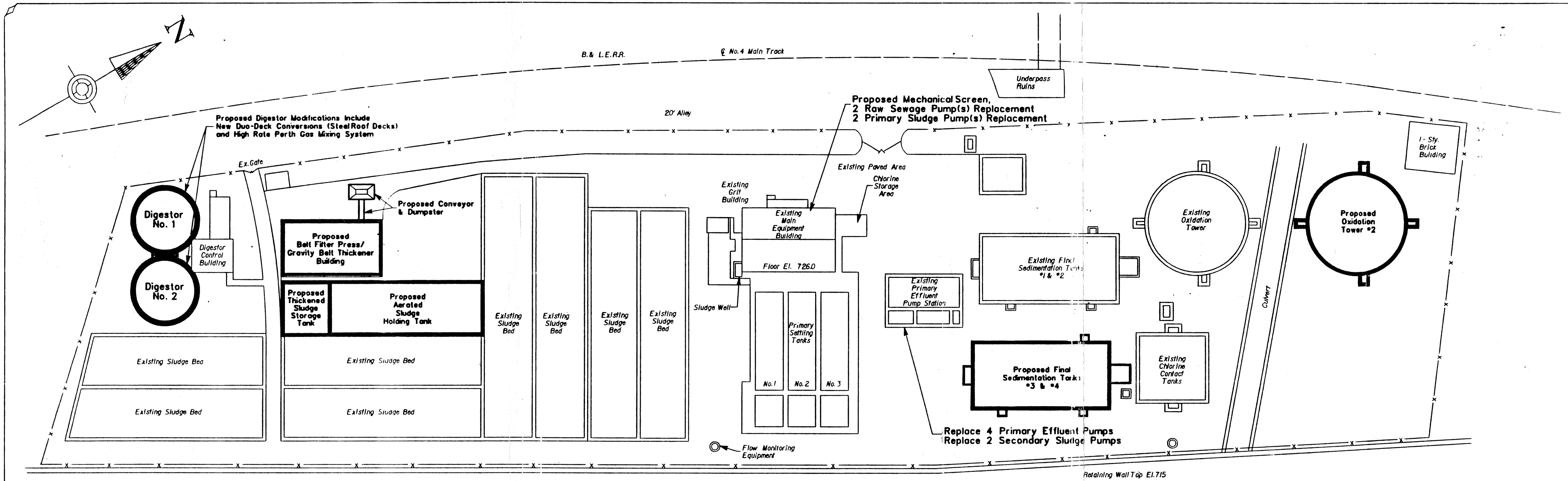
Plant does not have sufficient land area to construct an additional 24,534 S.F. of sludge drying beds to match proposed design flow Q Ave. of 4.8 MGD.

**Recommendations:**

Install a 2 meter belt filter press for sludge dewatering and utilize some of the existing beds as back-up dewatering units.

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Belt Filter Process | |
| Proposed Sludge Dewatering Equipment | 2 Meter Belt Filter Press |
| Emergency Backup for Belt Filter Press ● | Sludge Pump discharge piping will be provided with valve arrangement to permit sludge to be diverted to existing sand drying beds. |
| Belt Filter Press Filtrate will be Discharged to | Head of Sewage Plant |
| Belt Filter Press Sludge Cake Dry Solids Concentration ● | 20% Minimum (Actual % Solids in Filter Cake will likely reach 27 to 30%) |
| Project Quantity of Dry Solids sent to Anaerobic Digesters Daily | 6,004 Lbs. D.S./Day |
| Volatile Suspended Solids Concentration ● 75% | 4,503 Lbs. VSS/Day |
| Reduction of VSS within Digesters ● 40% | 1,801 Lbs./Day |
| Net Daily Dry Solids Production after Reduction of VSS by Digesters | 4,203 Lbs. D.S./Day |
| Solids Content of Sludge Feed from Digesters to Proposed Belt Filter Press | 5% to 7% (Use 6% as conservative average) |
| Belt Filter Press will be Operated ● | 1 Day/Week |

| UNIT PROCESS | DESIGN DATA |
|---|---|
| Volume of Wet Sludge to be processed by proposed Belt Filter Press during each work day cycle = 7 Days/Week/1 Operating Day X 4,203 Lb. D.S./ (1.03)(0.06)(8.34) ● | 57,082 Gallons Wet Sludge |
| Manufacturer's recommended Average Hydraulic Loading to Belt Filter Press ● | 120 GPM |
| Required Daily Operation Time of Belt Filter Press - 57,082 Gallons Wet Sludge/ 120 GPM ● | 7.9 Hours |
| Proposed Sludge Handling Facilities ● | Discharge Conveyors |
| Wet Weight of Sludge Cake produced from each operation cycle is (7 Days X 4,203 # D.S./ 1.03(0.27)(2,000) ● | 53 Tons of Filter Cake |
| Proposed Discharge Conveyors will Discharge to | Either on-site dumpster, dump truck, or to storage bed (existing drying bed can be paved with concrete). |
| Ultimate Sludge Disposal | Sludge is ultimately trucked to a landfill. |




WIDMER ENGINEERING INC.
CONSULTING ENGINEERS & SURVEYORS
930 EIGHTH AVENUE, BEAVER FALLS PA. 15010

| REVISIONS | |
|---|---|
| DATE | TYPE |
| | |

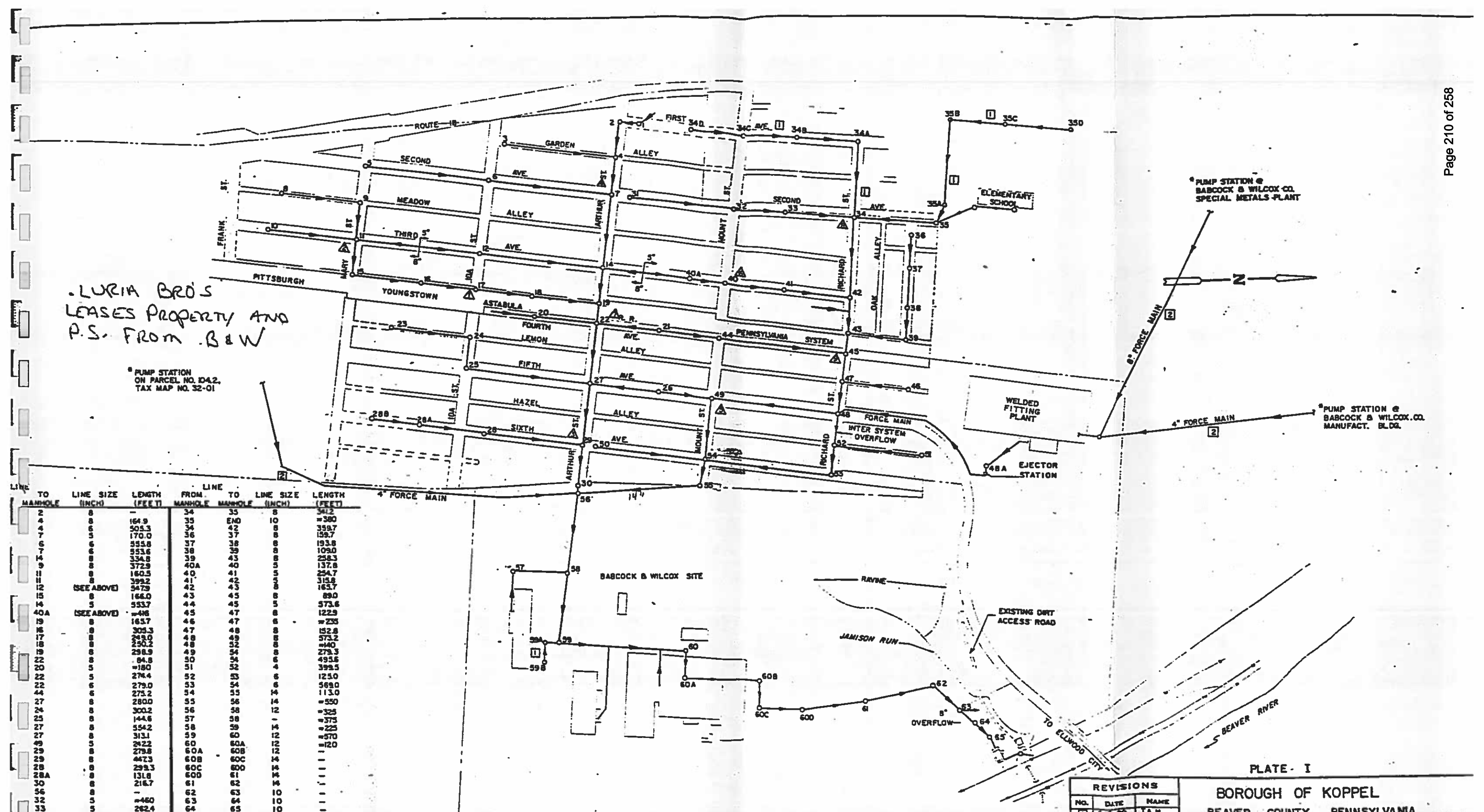
City of Beaver Falls
Beaver Falls, Pennsylvania

# Water Pollution Control Plant Upgrade Study

## Proposed Plant Layout

| | |
|---|---|
| FIELD BOOK NO. | |
| PROJECT NO. | 91065-00-2E |
| DRAWN S.M.Bagley | CHECKED J.G.Tomaro |
| DATE November 1991 | |
| SCALE 1" = 40' | |
| DRAWING NUMBER | SHEET NUMBER |
| 91067-P1 | 1 of 1 |

# APPENDIX C - BOROUGH OF KOPPEL SEWER SYSTEM




- LURIA BRO'S LEASES PROPERTY AND P.S. FROM B&W

| LINE FROM MANHOLE | TO MANHOLE | LINE SIZE (INCH) | LENGTH (FEET) |
|---|---|---|---|
| 2 | 4 | 8 | – |
| 4 | 8 | 8 | 164.9 |
| 4 | 6 | 6 | 505.3 |
| 7 | 5 | 5 | 170.0 |
| 6 | 6 | 6 | 555.8 |
| 7 | 6 | 6 | 553.6 |
| 14 | 8 | 8 | 334.8 |
| 9 | 8 | 8 | 372.9 |
| 11 | 8 | 8 | 160.5 |
| 11 | 8 | 8 | 399.2 |
| 12 | (SEE ABOVE) | | 547.9 |
| 15 | 8 | 8 | 166.0 |
| 14 | 5 | 5 | 553.7 |
| 40A | (SEE ABOVE) | | ≈416 |
| 19 | 8 | 8 | 165.7 |
| 16 | 8 | 8 | 305.3 |
| 17 | 8 | 8 | 249.0 |
| 18 | 8 | 8 | 250.2 |
| 19 | 8 | 8 | 298.9 |
| 22 | 8 | 8 | 84.8 |
| 20 | 5 | 4 | ≈180 |
| 22 | 5 | 5 | 274.4 |
| 22 | 6 | 6 | 279.0 |
| 44 | 6 | 6 | 275.2 |
| 27 | 8 | 14 | 280.0 |
| 24 | 8 | 12 | 300.2 |
| 25 | 8 | – | 144.6 |
| 27 | 8 | 14 | 554.2 |
| 27 | 8 | 12 | 313.1 |
| 49 | 5 | 12 | 242.2 |
| 29 | 8 | 12 | 279.8 |
| 29 | 8 | 14 | 447.3 |
| 28 | 8 | 14 | 298.3 |
| 28A | 8 | 14 | 131.8 |
| 30 | 8 | 14 | 216.7 |
| 56 | 8 | 10 | – |
| 32 | 5 | 10 | ≈460 |
| 33 | 5 | 10 | 262.4 |
| 34 | 5 | 8 | 285.0 |
| 34A | 8 | 8 | 362.0 |
| 34B | 8 | 8 | 260.0 |
| 34C | 8 | 8 | 266.0 |
| 34D | 8 | 8 | 242.0 |
| END | 8 | 8 | STUB OUT |
| 35A | 8 | 8 | 87.0 |
| 35B | 8 | 8 | 393.3 |
| 35C | 8 | 8 | 244.7 |
| 35D | 8 | 8 | 290.0 |
| 35 | END | 10 | ≈380 |
| 42 | 8 | 8 | 359.7 |
| 37 | 8 | 8 | 159.7 |
| 38 | 8 | 8 | 193.8 |
| 39 | 8 | 8 | 109.0 |
| 43 | 8 | 8 | 258.3 |
| 40 | 41 | 5 | 137.8 |
| 41 | 42 | 5 | 254.7 |
| 42 | 43 | 8 | 315.8 |
| 43 | 45 | 8 | 165.7 |
| 44 | 45 | 5 | 89.0 |
| 45 | 47 | 8 | 573.6 |
| 46 | 47 | 8 | 122.9 |
| 47 | 48 | 8 | ≈235 |
| 48 | 49 | 8 | 152.8 |
| 49 | 54 | 8 | 573.2 |
| 50 | 54 | 6 | ≈140 |
| 51 | 52 | 4 | 279.3 |
| 52 | 53 | 6 | 495.6 |
| 53 | 54 | 6 | 399.5 |
| 54 | 55 | 14 | 125.0 |
| 55 | 56 | 14 | 569.0 |
| 56 | 58 | 12 | 113.0 |
| 57 | 58 | – | ≈550 |
| 58 | 59 | 14 | ≈325 |
| 59 | 60 | 12 | ≈375 |
| 60 | 60A | 12 | ≈225 |
| 60A | 60B | 12 | ≈570 |
| 60B | 60C | 14 | ≈120 |
| 60C | 600 | 14 | – |
| 600 | 61 | 14 | – |
| 61 | 62 | 14 | – |
| 62 | 63 | 10 | – |
| 63 | 64 | 10 | – |
| 64 | 65 | 10 | – |
| 59 | 59A | 8 | ≈45 |
| 59A | 59B | 8 | ≈75 |

| REVISIONS | | |
|---|---|---|
| NO. | DATE | NAME |
| 1 | 6-5-89 | T.A.H. |
| 2 | 9-90 | T.A.H |

PLATE - I

BOROUGH OF KOPPEL
BEAVER COUNTY, PENNSYLVANIA
SEWER SYSTEM EVALUATION SURVEY
COLLECTION SYSTEM INDEX

| | |
|---|---|
| SHEET 1 OF 1 | S.O. 8414-26-ARA |
| SCALE 1" = 200' | DATE DECEMBER, 1976 |
| MICHAEL BAKER, JR., INC. Consulting Engineers BEAVER, PENNSYLVANIA | DESIGNED T.P.Y. DRAWN/TRACED N.A. CHECKED- T.P.Y. FILE |

# APPENDIX D

## Consumers Guide To On-Lot Sewage Disposal System

## Operation And Maintenance

# PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL RESOURCES

## BUREAU OF WATER QUALITY MANAGEMENT

# CONSUMERS GUIDE TO ON-LOT
# SEWAGE DISPOSAL SYSTEM
# OPERATION AND MAINTENANCE

Robert P. Casey, *Governor*
Commonwealth of Pennsylvania

Arthur A. Davis, *Secretary*
Department of Environmental Resources

# TABLE OF CONTENTS


Page

On-Lot Sewage Disposal Systems . . . . . 1

System Installation . . . . . 1
Site Protection . . . . . 1

Primary Treatment . . . . . 2
Septic Tank . . . . . 2
Tank Maintenance . . . . . 4

Distribution Systems . . . . . 5
Gravity Distribution . . . . . 5
Pressure Distribution . . . . . 6
Maintenance . . . . . 9

Soil Absorption Systems . . . . . 9
Standard Trenches . . . . . 9
Seepage Beds . . . . . 11
Subsurface Sand Filters . . . . . 11
Maintenance of Gravity Distribution Systems . . . . . 12
Elevated Sand Mound . . . . . 12
Maintenance of Pressure Distribution System . . . . . 14

Water Conservation . . . . . 16

Trouble Shooting On-Lot Sewage Disposal System Problems . . . . . 17


# LIST OF FIGURES


Figure 1. Septic Tank . . . . . 2
Figure 2. Septic Solids Retainer . . . . . 3
Figure 3. Distribution Box . . . . . 5
Figure 4. Pressure Dosing Tank & Pump . . . . . 7
Figure 5. Siphon . . . . . 8
Figure 6. Conventional Trench . . . . . 10
Figure 7. Seepage Bed . . . . . 11
Figure 8. Subsurface Sand Filter . . . . . 12
Figure 9. Elevated Sand Mound . . . . . 13
Figure 10. Lateral Cleanout . . . . . 14
Figure 11. Lateral Cleanout Extender . . . . . 15


# LIST OF TABLES


Table 1. Septic Tank Pumping Frequencies . . . . . 4
Table 2. Water Use Vs. Fixture . . . . . 16
Table 3. Water Savings Vs. Fixture . . . . . 16

# On-Lot Sewage Disposal Systems

On-lot sewage disposal systems are designed and constructed based on the soil profile and percolation test results. These on-lot systems have three components that treat, distribute and dispose of domestic sewage. Sewage, both human waste and water used for bathing and washing, flows to the ***septic tank*** where primary treatment of the sewage takes place. The treated septic tank effluent then flows to a ***distribution box*** or a ***solid header*** in gravity flow systems, or to a ***dosing tank*** in a pressurized system. In both of these systems, the septic tank effluent is directed to an ***absorption area*** constructed of pipe placed within a layer of gravel. Septic tank effluent flows from the distribution box, or is pumped from the dosing tank, to the absorption area, and flows through the gravel, percolating through the soil for additional treatment. It is important to note that this effluent, although partially treated, still contains substances which can affect the groundwater, such as viruses, pathogens and nitrates. An efficiently running system will treat these substances and protect groundwater resources. A system that is improperly sited, designed, installed, or improperly maintained may degrade the groundwater supply in the area and affect drinking water quality. This being the case, utmost care should be exercised when siting, designing and installing the system. A permit issued by the municipality Sewage Enforcement Officer (SEO) is required before installing a system. A ***Consumers Guide to On-Lot System Permits*** has been developed by the Department which explains the permitting process. The guide is available from the local office of the Department serving your municipality.

## System Installation

The construction of the on-lot system may begin after the lot owner has received a permit for the installation of the sewage disposal system from the SEO. The homeowner should protect the system area from vehicle traffic and stripping of top soil in the area of the system by roping off or marking the area of the proposed system. The homeowner should caution the contractor not to begin or continue excavation of the on-lot system area if the soil is wet. Soil moisture is right for heavy equipment operation when a handful of soil can be molded only with considerable pressure. Work in wet conditions will cause compaction of the soil surface and close soil pores necessary for proper operation of the system.

At the time of installation it is possible to make future maintenance easier. The septic tank should be installed with an extension to grade over the inspection ports and septic tank manhole. This will allow easy access to the tank for inspection and pumping with a minimum of digging. On pressurized systems lateral cleanouts as shown in Figure 11 should be installed on each lateral.

### Site Protection

1. A system of the best design installed in the best soils may still malfunction if continually subjected to erosion and saturation caused by storm water accumulation. Storm water should be kept away from the absorption area. Keep surface, downspout, footer-drain and sump pump water out of the system. 2. Keep heavy equipment off the completed absorption area. 3. In grading the lot after the system is installed, do not divert surface water or downspouts in the direction of the system. 4. When backfilling a new system, sufficient soil cover should be placed to crown the disposal area surface. 5. Be sure any future settling over the absorption area surface is followed by additional filling to reestablish the crowned effect. 6. Be sure to hire a reputable contractor to install the system.

If you own property with an existing sewage system, check the disposal area to determine if any swales or depressions exist which would hinder proper surface water diversion. Although minor grading is effective for most system locations, some sites may require construction of upslope drainage trenches or pipes to divert all storm waters flowing from neighboring properties.

The permit will provide the location of each system component relative to your house, road and other landmarks. Keep a copy of the permit in a safe place. Maintenance on any of the system components described below will be easier if you can refer to the permit for system component locations. For future reference, keep a list of the individuals responsible for installation of the system, including the absorption area, dosing tank, pump, etc.

## Primary Treatment

### Septic Tank

Common to both gravity and pressure systems is the ***septic tank.***

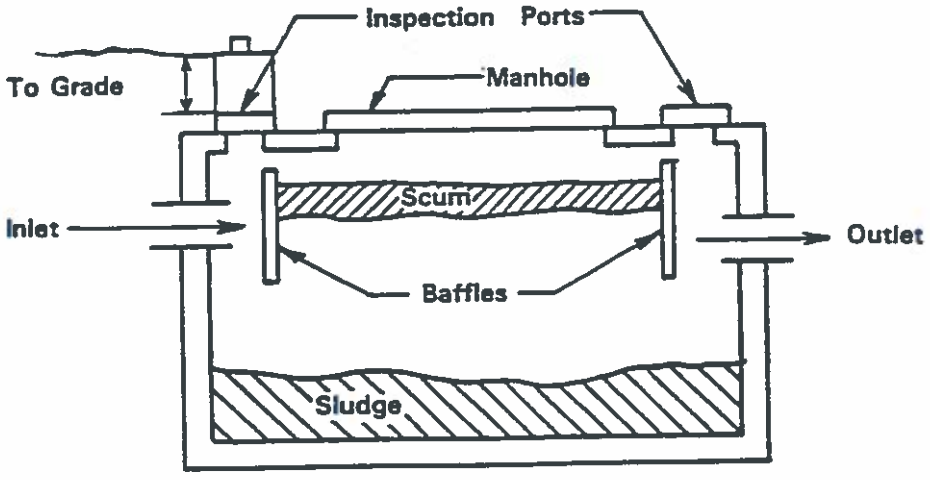
A septic tank is a watertight chamber usually concrete or fiberglass, which separates floating and settleable solids and provides a place for specialized bacteria to decompose sewage. Septic tanks may have one or two compartments. Two compartment tanks or two single tanks in series are not required but do a better job of settling solids.

Another type of treatment tank is aerobic wastewater treatment facilities. These are manufactured by numerous companies. These units require extensive maintenance and the homeowner should consult the manufacturer concerning their use and maintenance.

Among the most important components of a septic tank are the baffles. The inlet baffle forces wastewater down into the tank preventing short-circuiting across the top. The outlet baffle keeps the scum layer from moving into the soil absorption system. This is shown in Figure 1.

**Figure 1**

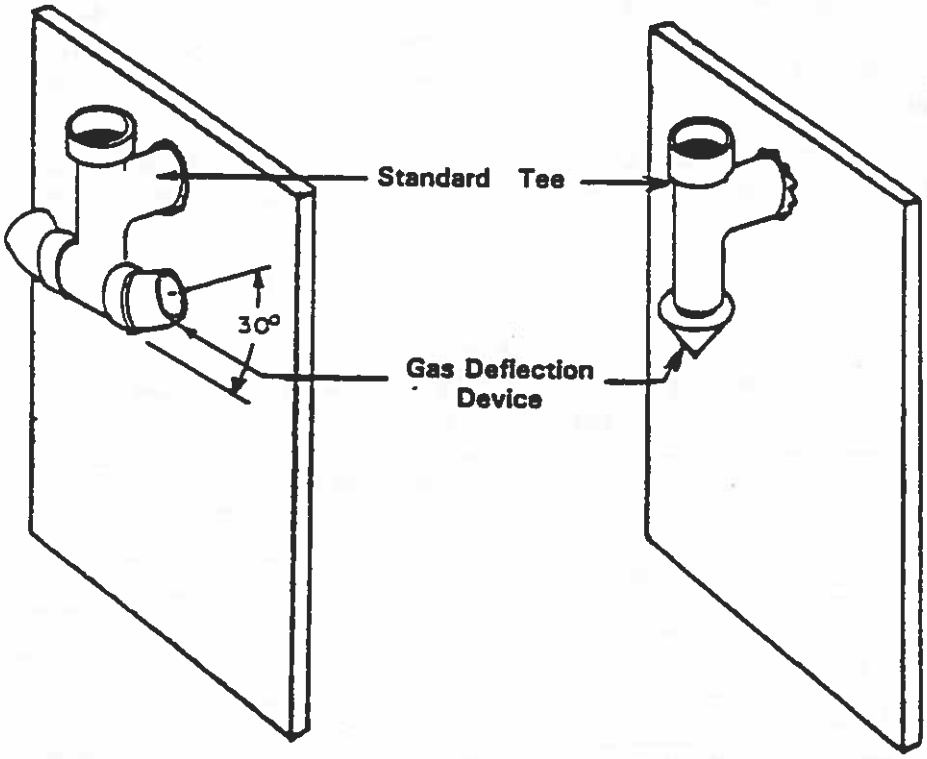
**CROSS SECTION OF SEPTIC TANK**



Chapter 73 (Sewage Facilities Standards) of the Department's rules and regulations requires that the tank have inlet and outlet baffles, usually a vented tee. As a part of regular maintenance, these baffles should be checked to determine that there is unobstructed flow and they are not broken. To facilitate this activity, inspections ports should be provided for inspection of the baffles. Increased solids retention and therefore longer system life can be accomplished through the use of septic solids retainers (Figure 2). These units not only prevent solids carryover, as baffles would, but also prevent solids from being "burped" out of the tank as a result of gas releases.

**Figure 2**

**SEPTIC SOLID RETAINERS**




The size of the tank determines how often maintenance operations should occur. The capacity of the septic tank is based on the size of the house. In Pennsylvania, a 900-gallon tank is the minimum size for a home with three or fewer bedrooms. For each additional bedroom over three, the capacity of the tank must be increased 100 gallons. Septic tanks for other buildings start at 900 gallons and are increased in capacity according to daily sewage flows.

## Tank Maintenance

A septic tank accumulates solids and requires periodic cleaning. Septic tank pump and haul contractors can clean your tank. It is a good idea to supervise the cleaning to ensure that it is done properly. To extract all the material from the tank, the scum layer must be broken up and the sludge layer stirred up into the liquid portion of the tank. This is usually done by alternately pumping liquid from the tank and reinjecting it into the bottom of the tank. The septic tank should be pumped out through the large central manhole. **DO NOT USE THE BAFFLE INSPECTION PORTS!**

Before closing the tank, check the condition of the baffles. If they are missing or deteriorated, have them replaced with sanitary tees or septic solid retainers. **IT SHOULD NEVER BE NECESSARY TO ENTER A SEPTIC TANK. THE SEPTIC TANK PRODUCES TOXIC GASES WHICH CAN KILL IN A MATTER OF MINUTES.** Any work to replace the baffles or repair the tank should be made from the outside. When working on a tank make sure the area is well ventilated and someone is standing by. Never go into a septic tank without a self-contained breathing apparatus (SCBA), even to retrieve someone who has fell in and was overcome by toxic gases or the lack of oxygen. If a SCBA is not available, the best thing to do is call for emergency services and put a fan at the top of the tank to blow in fresh air.

To facilitate future cleaning and inspection, install risers from the central manhole and inspection ports to the ground surface before burying the tank. Also mark the location of the tank so it can be easily found.

Recommended pumping frequencies for different size households and tank size are described below in Table 1.

**Table 1**
**Estimated Septic Tank Pumping Frequencies in Years**
**(For Year-Round Residence)**

| Tank Size (gal) | Household Size (Number of People) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 500 | 5.8 | 2.6 | 1.5 | 1.0 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | — |
| 750 | 9.1 | 4.2 | 2.6 | 1.8 | 1.3 | 1.0 | 0.7 | 0.6 | 0.4 | 0.3 |
| 900 | 11.0 | 5.2 | 3.3 | 2.3 | 1.7 | 1.3 | 1.0 | 0.8 | 0.7 | 0.5 |
| 1,000 | 12.4 | 5.9 | 3.7 | 2.6 | 2.0 | 1.5 | 1.2 | 1.0 | 0.8 | 0.7 |
| 1,250 | 15.6 | 7.5 | 4.8 | 3.4 | 2.6 | 2.0 | 1.7 | 1.4 | 1.2 | 1.0 |
| 1,500 | 18.9 | 9.1 | 5.9 | 4.2 | 3.3 | 2.6 | 2.1 | 1.8 | 1.5 | 1.3 |
| 1,750 | 22.1 | 10.7 | 6.9 | 5.0 | 3.9 | 3.1 | 2.6 | 2.2 | 1.9 | 1.6 |
| 2,000 | 25.4 | 12.4 | 8.0 | 5.9 | 4.5 | 3.7 | 3.1 | 2.6 | 2.2 | 2.0 |
| 2,250 | 28.6 | 14.0 | 9.1 | 6.7 | 5.2 | 4.2 | 3.5 | 3.0 | 2.6 | 2.3 |
| 2,500 | 31.9 | 15.6 | 10.2 | 7.5 | 5.9 | 4.8 | 4.0 | 4.0 | 3.0 | 2.6 |

For example, if 6 people reside in a 3-bedroom house, a 900 gallon tank should be pumped every 1.3 years. If the same system serves a family of 2, the tank would be ready for pumping every 5.2 years. Systems installed before the current rules and regulations may have septic tanks smaller than 900 gallons. Contact the tank cleaner to determine the size. Some older tanks may need to be pumped as often as once a month. Homes utilizing garbage disposal units will also need more frequent pumping.

## Distribution Systems

The distribution system delivers septic tank effluent to the absorption area.

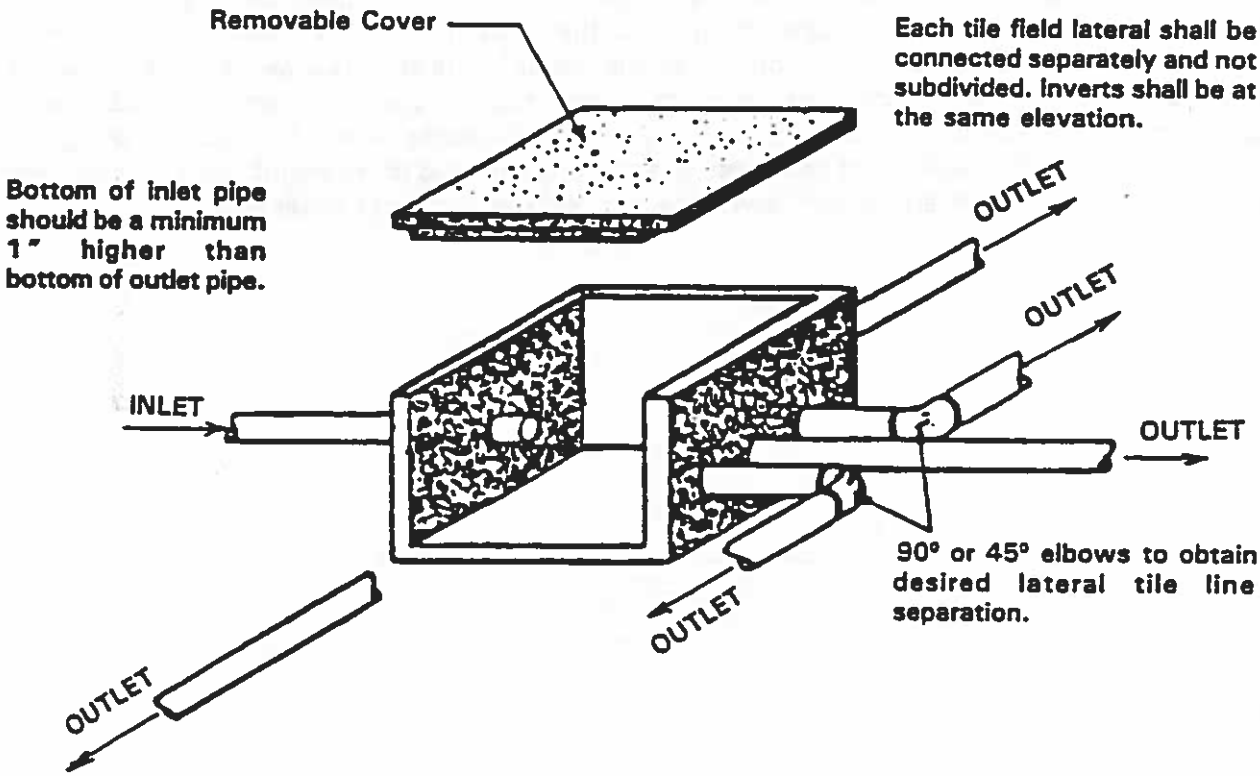
### Gravity Distribution

Where limiting zones and percolation test results allow, subsurface systems using ***gravity distribution*** may be permitted. Gravity distribution, as the name implies, relies on the force of gravity to distribute the septic tank effluent to the absorption area.

After the treatment process takes place in the septic tank, the effluent flows into a distribution box, commonly referred to as a ***D-Box*** where the flow is split equally to each lateral pipe. Figure 3 shows a D-box. When installing this type of system it is imperative that the box is level and is tested to assure equal flow to all parts of the subsurface system. D-boxes should be cleaned and checked for level when the septic tank is cleaned.

**Figure 3**

**DISTRIBUTION BOX**




Gravity distribution can also be accomplished through the use of a solid header as shown in Figure 7 on page 11.

**Pressure Distribution**

Where limiting zones or percolation rates do not allow for gravity distribution systems, ***pressurized distribution*** is required.

In a gravity system effluent trickles into the drain field. During this process, a biological layer builds up at the first hole, reducing flow to the soil in that area. This occurs with each successive hole until all the holes are clogged in a particular trench. Creeping failures can also occur as the absorption area is overloaded in one area due to unequal loading.

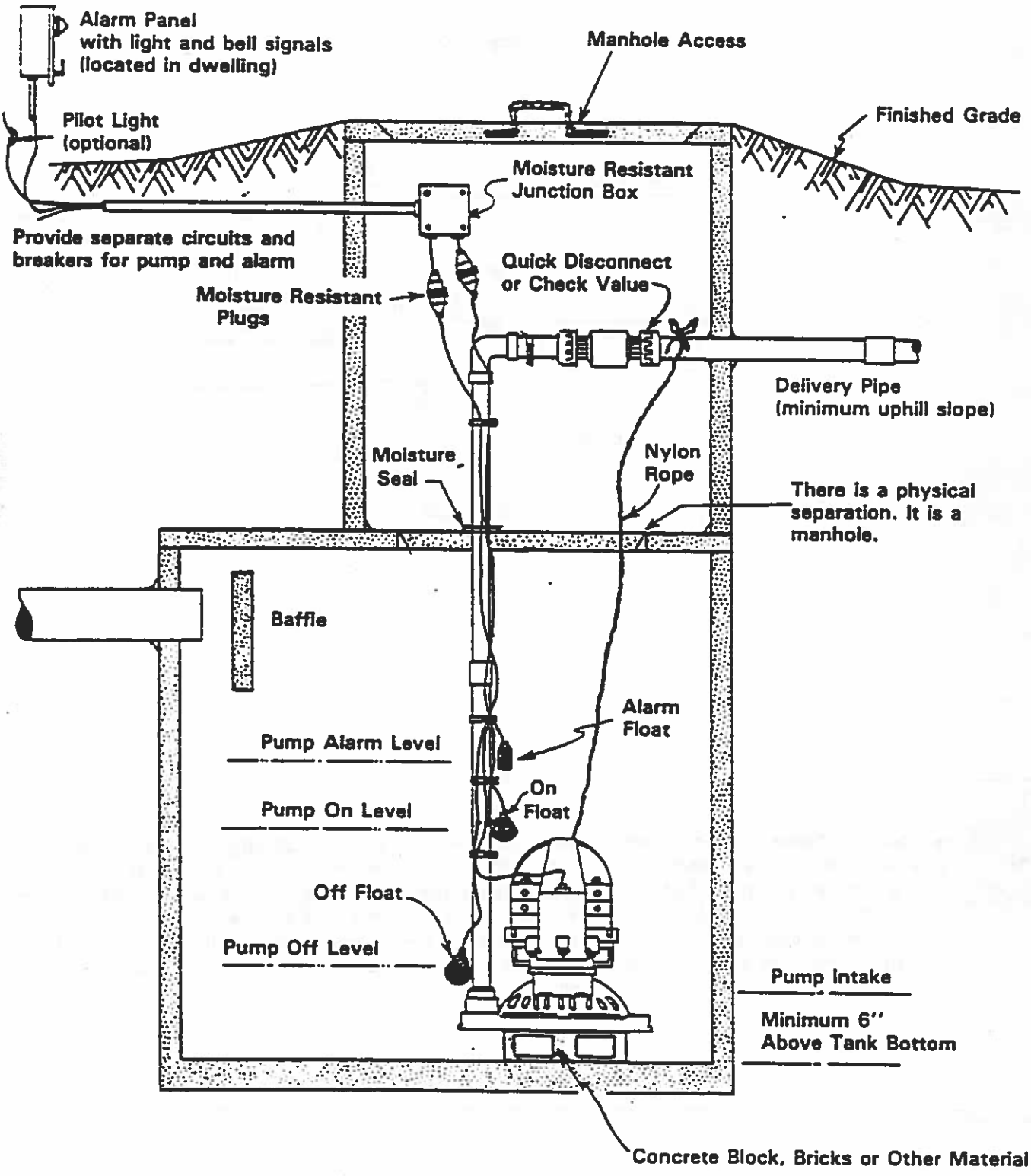
In a **pressurized system** a calculated "dose" is pumped to the absorption area, providing equal distribution to all parts of the absorption area. Clogging of the holes is also reduced due to the suspending of fine material and pressurization of the flow. On-lot systems utilizing pressure distribution also benefit from aerobic (with oxygen) and anaerobic (without oxygen) conditions that result from the dosing and resting periods.

To accomplish this "dosing", a pump or siphon is used to deliver septic tank effluent to the absorption area. This pump is housed in a "**dosing tank.**" (Figure 4). The system must be allowed to drain back to the dosing tank if a pump is used to avoid clogging of the holes in the distribution network. When using a siphon system, the holes in the absorption area piping are larger than those in the pump system to allow for proper draining of the system. Where a pump is used, "float switches" activate or deactivate the pump when the water in the tank reaches a certain level. A switch is also provided which activates an alarm in the house to alert the owner of problems in the dosing tank. The electrical connections for the alarm and switches must be placed at the highest point in the manhole. This will avoid problems due to corrosion and make maintenance easier and safer. Make sure that alarm and on-off switches are tied into separate breakers.

Figure 4

## DOSING TANK

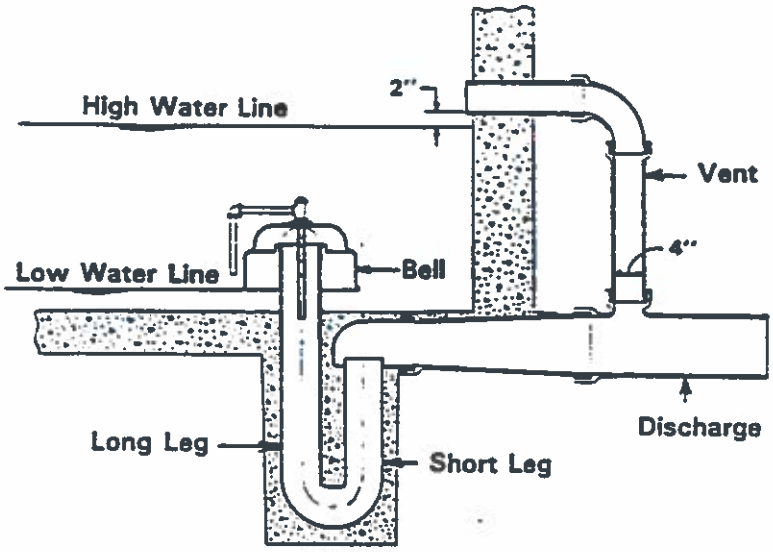
When possible, locate quick disconnect and electrical connections within arm's reach of the surface



A siphon system is used to deliver septic tank effluent to the absorption area in downhill applications (Figure 5). The siphon is purchased in standard sizes. The system and the siphon tank are sized and placed to meet required pressure and delivery rates.

Figure 5

STANDARD DESIGN SINGLE SEWAGE SIPHONS




As sewage flows from the septic tank, the water level in the dosing tank rises and the air under the bell is compressed and forces septic effluent out the long leg into the short leg resulting in the loss of a small amount of effluent out the discharge pipe. When the liquid level reaches the bottom of the trap, any further addition of sewage into the dosing tank creates an imbalance which results in a sudden escape of air out the vent, activating the siphon, and pushing the effluent into the absorption area. The siphon action continues until the liquid level reaches the bottom of the bell, at which time the siphon is broken and effluent stops flowing.

### Maintenance

The dosing tank for both siphons and pumps should be cleaned of solids at the same frequency as the septic tank. The pumping system alarm should also be tested semi-annually by simply pulling up the alarm switch with a garden hoe. DO NOT ENTER THE DOSING TANK. This should activate the alarm as if high water had activated the alarm. The other switches, wiring and pump should be visually checked to determine their working order including fraying wires, broken pipes, corrosion and wire ties for slippage.

The siphon system should be inspected annually to determine that a full dose is being discharged and that the siphon is not trickling effluent to the absorption area. This requires observing the water level when the siphon starts and stops. If the siphon is trickling, the siphon must be recharged by filling the trap with water and filling the dose tank until the siphon runs. Filling and running the siphon should be conducted until the siphon is operating properly.

## Soil Absorption System

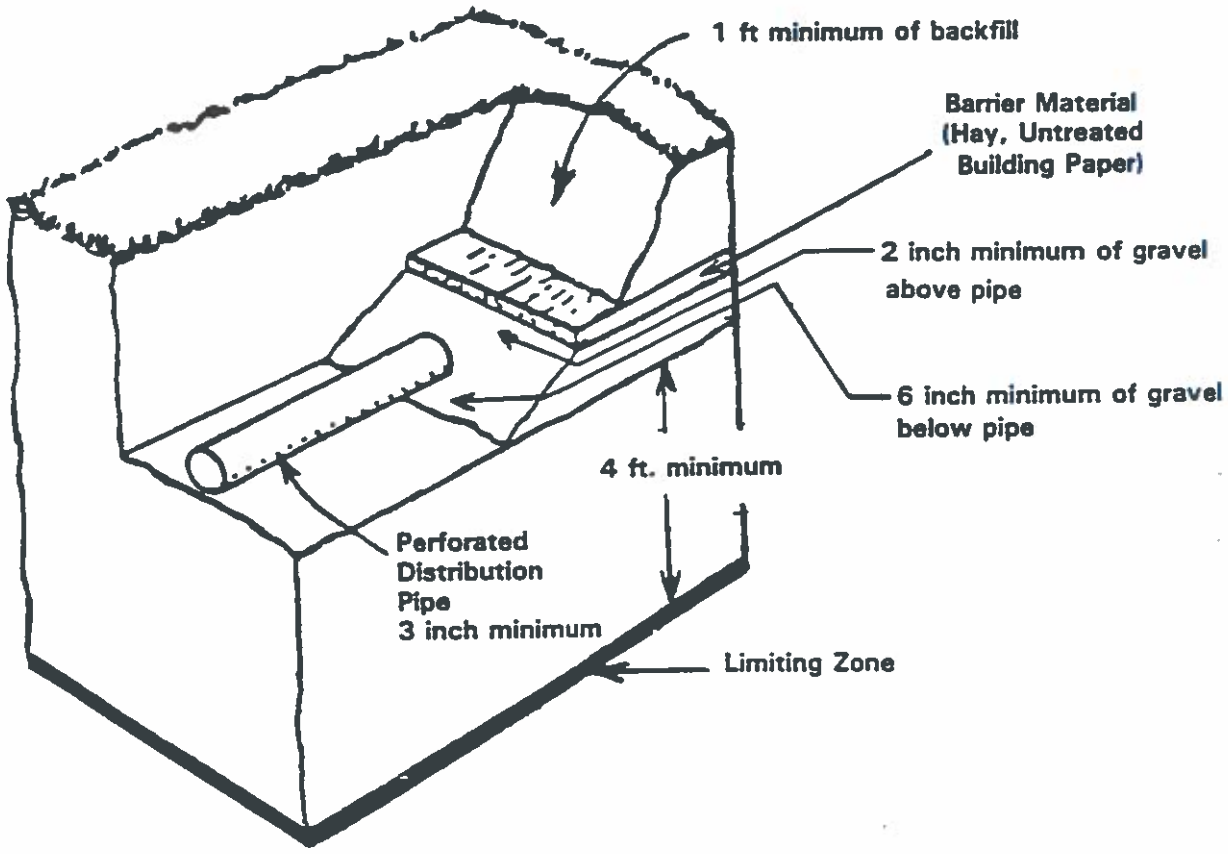
The final component of the on-lot system is the soil absorption system. Septic tank effluent flows to the absorption system from the distribution box or dosing tank to the perforated PVC piping, referred to as laterals, that are placed in the trenches, beds or elevated sand mounds. The soil provides renovation by stripping organic and pathogenic materials from the water. The treated water passes to the groundwater and becomes part of the water cycle. The type of system that is suitable for any particular lot is based on the soil probe examination and the percolation tests. A description of each of these systems and their operation and maintenance requirements are included in this section.

### Standard Trenches

The first type of system that is most familiar to homeowners is standard trenches. As the name implies this is a system of trenches which is fed septic tank effluent either through gravity flow or pressure distribution. The trench system is installed by excavating trenches between 12 and 72 inches wide and between 12 to 36 inches deep (Figure 6). The trenches are filled with 6 inches of gravel upon which a minimum 3 inch perforated pipe is layed, in gravity distribution, or a 1½ inch perforated pipe if pressure distribution is used. A minimum of 2 inches of gravel is placed over the laterals and a layer of untreated building paper or hay is placed over the gravel. A minimum of 1 foot of backfill is used to cover the trench.

Figure 6

STANDARD TRENCH

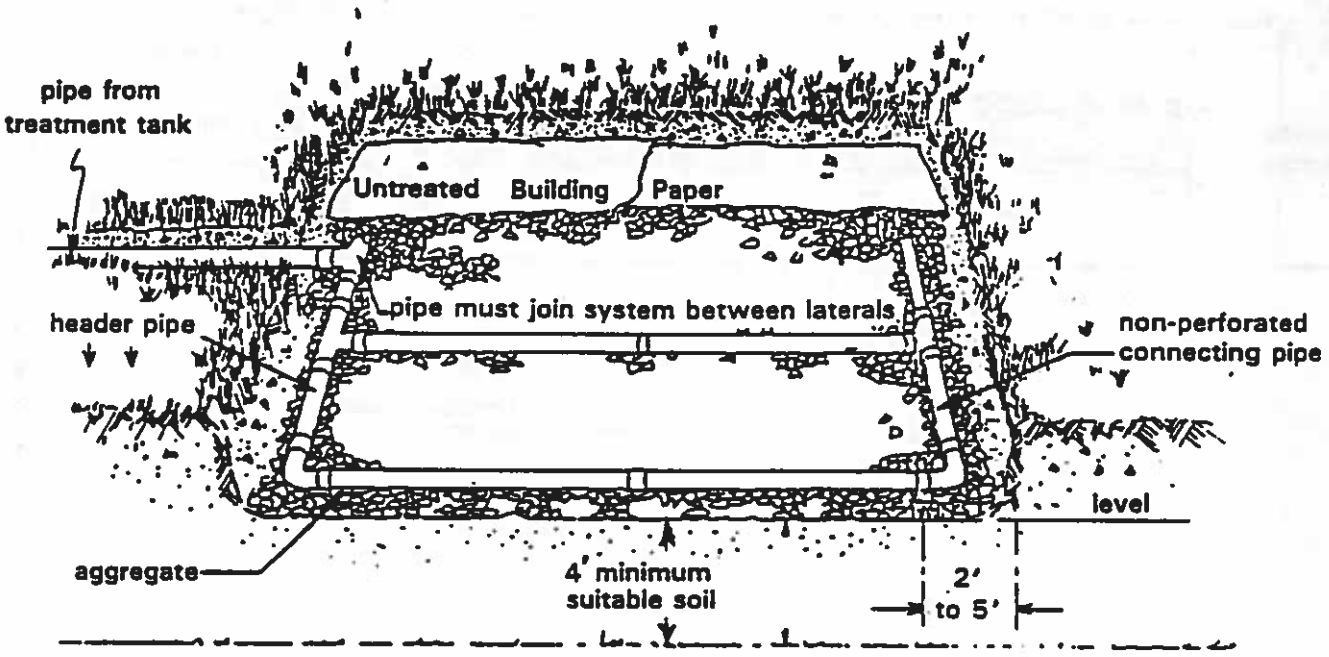


## Seepage Beds

In seepage beds (Figure 7) the piping is placed in a bed of gravel as opposed to being in trenches of gravel. Septic tank effluent is fed to the bed either through a D-box, a single header in a closed system or through pressure distribution. These systems may be used when space constraints limit the use of standard trenches. Figure 7 shows a closed header system that can be used instead of a D-box.

Figure 7

SEEPAGE BED SYSTEMS

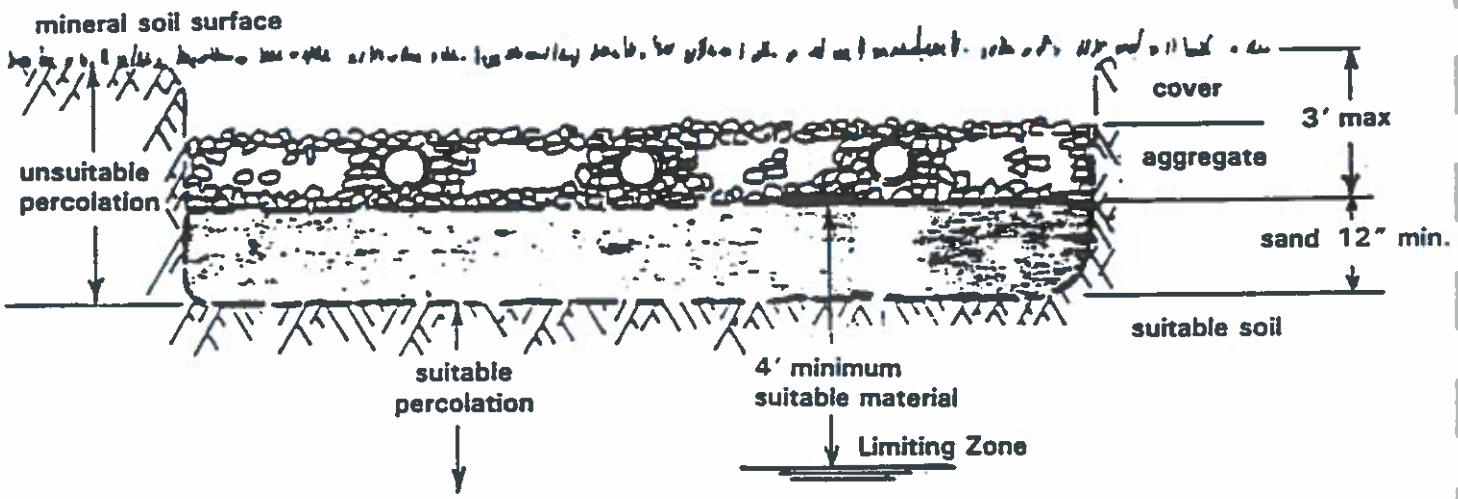



## Subsurface Sand Filters

This system is employed on sites where the average percolation rate of the soil between 0 and 36 inches is greater than 90 min./inch and the percolation rate at a depth between 36 and 72 inches from the soil surface is between 3-90 min./inch. This system also requires that the limiting zone must occur at a depth greater than 6 feet from the soil surface. The soil with a percolation rate greater than 90 min./inch is excavated and replaced with sand meeting the standards. The system on top of the sand is constructed following the standards for seepage beds. Figure 8 shows a cross-section of this system.

Figure 8

SUBSURFACE SAND FILTER




### Maintenace of Gravity Distribution Systems

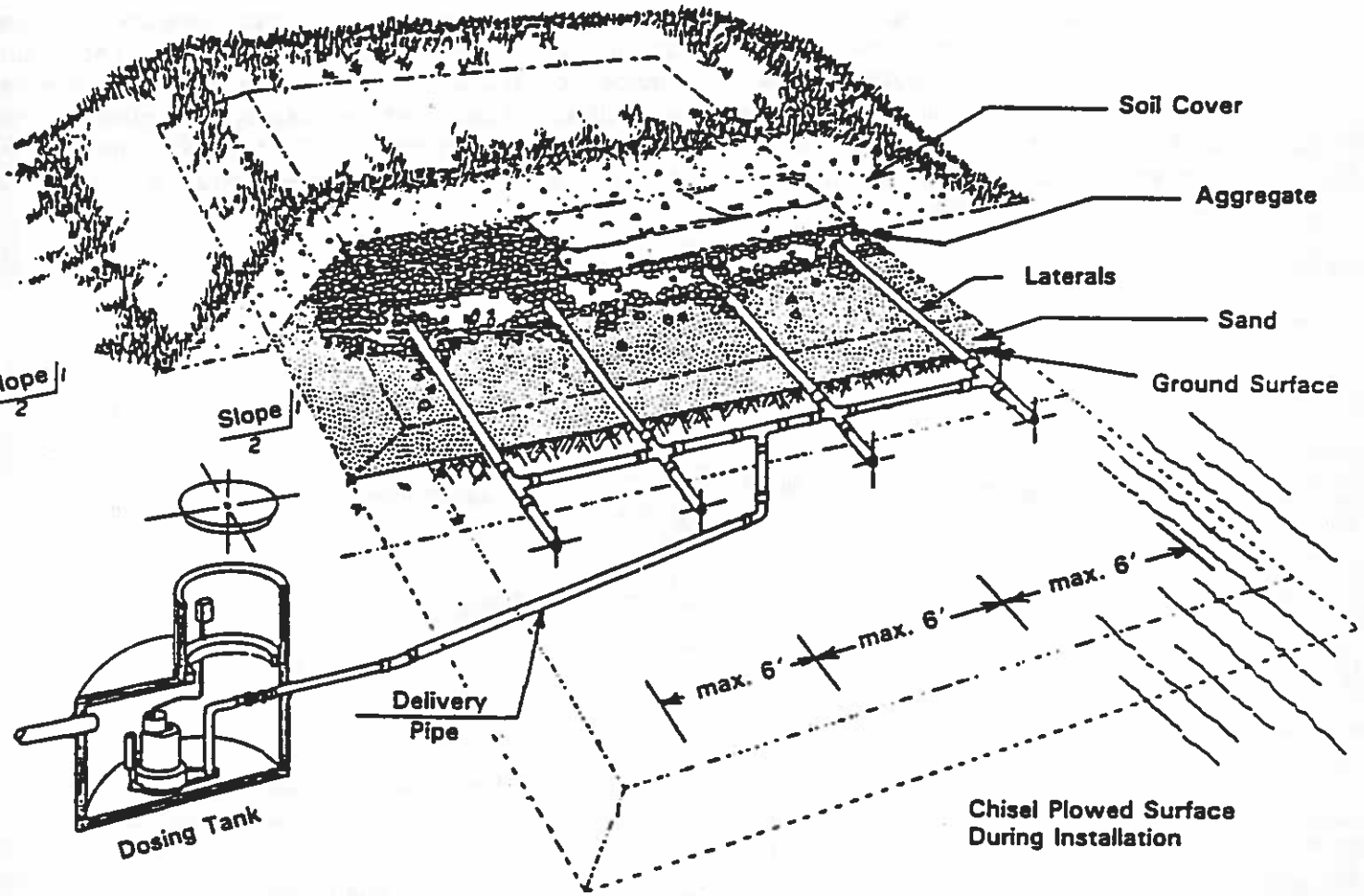
Maintenance on these systems, if gravity distribution is used, is minimal and consists of regular pumping of the septic tank and D-box. A pressurized system should be maintained as described on page 15.

### Elevated Sand Mound

This type of system was developed to allow for the use of an on-lot system in situations where the limiting zones occurs at a depth that would preclude the use of the subsurface systems described above. Elevated sand mounds can be used on sites where the percolation rate is between 3 and 120 min./inch and the limiting zone occurs at a depth between 20 and 60 inches from the soil surface. The elevated sand mound system is shown in Figure 9.

Figure 9

ELEVATED SAND MOUND



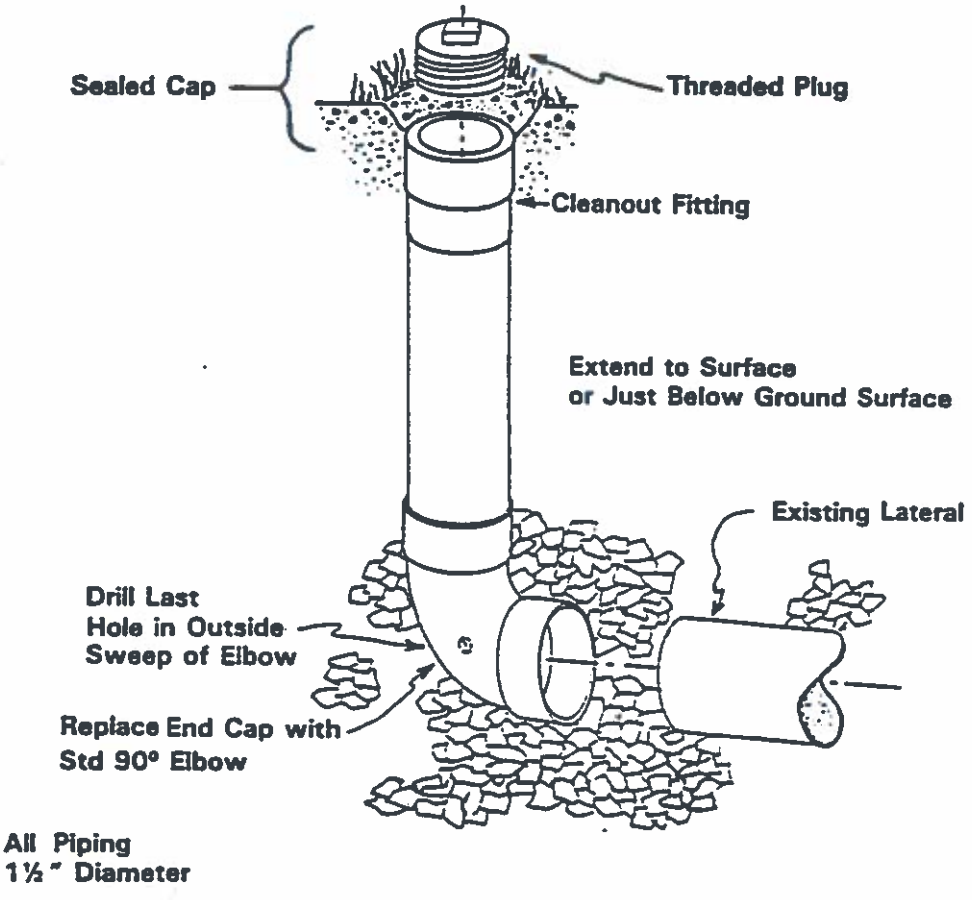
The theory of operation of an elevated sand mound is as follows. In a subsurface system, at least 60 inches of suitable soil is required for on-lot systems as measured from the surface of the ground. This allows 12 inches for installation of the pipe and gravel and a 48 inch soil separation from the bottom of the absorption area to the limiting zone. In an elevated sand mound 20 inches of suitable soil may be acceptable. The additional 28 inches needed to meet the 48 inch separation is made up of sandy fill placed upon the soil surface. Elevated sand mounds rely exclusively on pressurized distribution to evenly distribute septic tank effluent across the absorption area.

### Maintenance of Pressure Distribution System

In addition to the pumping of the septic tank and dosing tank, the distribution network may need to be backflushed to the dosing tank, and the pump cycle run to clear to the laterals of scum and grease buildup. **This should be done when inspection of the lines indicates a need to be cleaned or a noticable lengthening of the pump cycle occurs.** The length of the dose cycle should be timed when the system is new and then yearly to determine the cycle time. To facilitate this cleaning operation, pressurized distribution systems should be fitted with lateral cleanouts at the time of installation (Figure 10).

**Figure 10**

**INSTALLATION OF LATERAL CLEANOUT**



These cleanouts will have a 1½ inch cleanout plug. The cleanout plugs should be removed and the interior of the lateral checked for accumulations of solids, greases, or other debris, every six months.

Flushing the pressurized system is accomplished in the following manner:

a. Lateral cleanout plugs are removed one at a time starting at the lateral furthest from the dosing tank. A garden hose is inserted into the cleanout. Water from a garden hose is used to flush the lateral through the manifold back to the dosing tank. 3—5 gallons for each lateral should be sufficient.

b. After flushing the lateral, the water is pumped from the dose tank through the lateral, out the lateral cleanout extender (Figure 11) to a 5 gallon bucket. This is done by manually activating the pump by lifting the on-switch. **Do not enter the dosing tank.** A garden hoe can be used to lift the on-switch, which activates the pump. Water from this operation is dumped into the septic tank.

c. Lateral cleanout plugs are replaced on the lateral after the flushing and backflushing operation is completed. The next lateral is flushed using the process described until all laterals are completed.

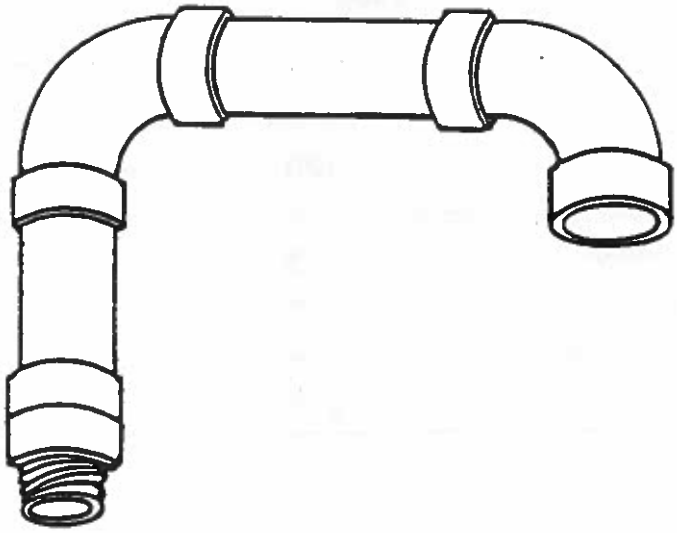
d. Hands and equipment should be thoroughly washed after the cleaning operation is completed.

A septic tank pumping firm can also be retained to flush the system as described above. This is best done during regular septic tank pumping.

Once the system has been flushed, lateral cleanout plugs should be replaced and the system may be used again.

**Figure 11**

**LATERAL CLEANOUT EXTENDER**



**All piping 1½" diameter**

## Water Conservation

To assure that the on-lot system does not become hydraulically overloaded, which can cause a malfunction, the system user should practice basic water conservation. The wastewater flow from the residence should be kept as low as possible. Each and every gallon of water which goes down household drains must pass through the septic tank and be treated by the on-lot system. Discharging excessive wastewater to the system is a common cause of on-lot system failure. You can reduce the hydraulic load on your on-lot system by following the practices described below.

1. Fix all leaky faucets and plumbing fixtures.
2. Use the dishwasher only when it is full. This will save energy as well as water.
3. Use the garbage disposal with discretion. Wastes from these units are not digested easily by bacteria in the septic tank. Such wastes may cause quick buildup of solid matter requiring frequent pumping. Compost the garbage wastes and fertilize your garden.
4. Showers usually take less water than a bath and save energy.
5. Reduce the volume of water discharged by each commode flushing. Buy a low water use commode or place a heavy object such as a brick in a plastic bag in the tank.
6. Springs, sump pumps, spouting, french drains or any other water conveyance not involving waste materials should not be discharged into the system.
7. Try to limit the number of wash loads run each day. Running two or three loads of wash in a single day, particularly during wet periods of the year, may cause severe overloading of the system.

By practicing water conservation, the life of a system can be extended. Below in Table 2 and 3 is an outline of expected water use and savings from different available fixtures.

**Table 2**
**Water Use vs. Fixture**

| Fixture | Gallons Per Day | % of Total Daily Use |
|---|---|---|
| Toilet | 100 | 39 |
| Bathing and Hygiene | 88 | 34 |
| Laundry | 35 | 14 |
| Kitchen | 27 | 11 |
| Housekeeping | 5 | 2 |
| TOTAL | 255 | 100 |

**Table 3**
**Water Savings vs. Fixture**

| Fixture | Water Use |
|---|---|
| Conventional Toilet | 4-6 gal./flush |
| Water Saving Toilet | 3.5 gal./flush |
| Conventional Showerhead | 3-15 gal./min. |
| Water Saving Showerhead | 2-3 gal./min. |
| Top Loading Washer | 35-50 gal./load |
| Front Loading Washer | 22-25 gal./load |
| Regular Faucet Aerator | 2.5-6 gal./min. |
| Flow Regulating Aerator | .5-2.5 gal./min. |

## Hazards to On-lot Systems

On-lot systems are "alive" and a biological mat is constantly decomposing and treating raw sewage. This mat is extremely sensitive to pollutants that it is not able to treat. The homeowner should avoid placing the following down the drain:

1. Oils and grease
2. Harsh drain cleaners
3. Pesticides
4. Paints and thinners
5. Disposable products including sanitary napkins and diapers
6. Paper towels
7. Plastic products (Childrens toys, products wrappers)
8. Septic tanks additives/cleaners. These are not needed and may harm the systems plumbing and/or biological mat.
9. Bones, eggshells, coffee grounds

Eliminating these items from the waste stream will help to increase the life of the on-lot system.

## Trouble Shooting

The following table describes problems associated with on-lot systems and their possible remedy.

# Trouble Shooting On-Lot Sewage Disposal System Problems

| Indication of Problem | Possible Cause | Possible Remedies |
|---|---|---|
| ***Applicable to all systems.*** | | |
| (1) Raw sewage is backing up into home. | • Line from toilets to septic tank is clogged. | • Contact drain cleaner for investigation and removal of blockage. |
| | • Septic tank is full and needs pumping. | • Refer to pumping schedule on page 4. Determine location of tank and retain septic tank pumping firm for cleaning operation. |
| | • Absorption area may be failing. | • Contact local agency Sewage Enforcement Office (SEO) for guidance. |
| (2) Toilets running sluggish. | • Septic tank is full. | • Contact tank pumper for septic tank cleaning. |
| | • Absorption area may be failing. | • Contact local agency SEO for guidance. |
| (3) Sewer odors in house. | • Vent stack may be clogged. | • Contact plumbing professional for removal of blockage. |
| | • System may be backing into house | • Check septic tank. Pump if needed. |
| (4) Odor in drinking water. | • Water containing sulfur | • Bacteriological sampling of wells to determine problem |
| | | • Contact local agency SEO for further guidance. |
| | • Possible system malfunction to ground water and pollution of drinking water supply if individual supply. | • Do not consume water until cause is determined and remedy of problem is completed. |
| (5) Sponginess or wetness in the following areas:<br>(a) Septic Tank<br>(b) Distribution Box<br>(c) Absorption Area | • Plumbing from or to any of the listed components is broken, crushed, twisted. | • Determine which system component is in the area. Contact system installer to repair problem. |
| | • Absorption area malfunction. | • Contact local agency SEO for further guidance. |
| (6) Raw sewage is surfacing within absorption area. | • Absorption area malfunction. Check for increased water use, construction activity around area, improper diversion of surface runoff. | • Contact local agency SEO for repair options. |
| (7) Raw sewage is surfacing at a point other than within absorption area and other treatment components are known to be operable. | • Poor siting of system has caused sewage to be conveyed to another point without treatment. | • Contact local agency SEO for guidance. |

## Trouble Shooting On-Lot Sewage Disposal System Problems (Continued)

| Indication of Problem | Possible Cause | Possible Remedies |
|---|---|---|
| ***Applicable to pressurized systems. Includes all elevated sand mounds and all other systems designed based on perc. rate between 61-90 min/inch.*** | • Septic tank effluent is not being lifted by pump. | • Contact pump installer. |
| (1) Dosing pump runs continuously. | • System may be clogged and pump is pumping same water continually. | • Contact SEO for further guidance. |
| | • Absorption field failure. | • Flush system as described on page 15. |
| | • Infiltration of surface water or water from downspouts. | • Reduce infiltration with diversion channels or place downspout away from system. |
| (2) Dosing pump does not run. | • Power to pump may be off. | • Restore power to pump. |
| | • Pump is not switching on as a result of faulty on-off switches or mislocated switches. | • Contact pump installer to check on-off switches. |
| | • Electrical connections corroded. | • Retain qualified professional to replace connections. |
| (3) Dosing of absorption area is taking long period of time. | • Distribution network may be clogged. | • Flush network as described on page 15 and run dosing cycle. |
| | • Pump may not be working properly. | • Contact pump installer for guidance. |
| (4) In systems employing siphons, siphon is trickling, not providing pressurized dose. | • Siphon is operating improperly. | • Recharge siphon bell with air. Run dose cycle. Repeat dose cycle. If system does not pressure dose, contact siphon installer. |
| | • Siphon system improperly installed. | • Contact siphon installer and SEO for further guidance. |
| (5) Dosing tank alarm light is on. | • Dosing tank is full. | • Make sure pump is able to run. Consult section above to determine pump trouble shooting. |
| | • Dosing tank plumbing is clogged resulting in full tank. | • Check plumbing from absorption area to tank. |
| | • Faulty high water alarm/electrical connections. | • If dosing cycle is operating, and light is still on, contact pump installer for guidance. |
| (6) Sewage surfacing in dosing tank area | • Pump not running fast enough. | • Have pump installer check pump. |
| | • Clogging in distribution network. | • Flush distribution network. |
| | • Extraneous flows downspouts, surface water. | • Divert extraneous flows. |

Homeowners should be aware that when remedying problems, a permit is required for any repair or modification of the system. A permit is not required for routine maintenance, such as tank pumping or lateral flushing.

# APPENDIX E

## Correspondence

DANIEL C. BAKER, JR.
SEWAGE ENFORCEMENT OFFICER
Certificate No. 00092
6150 TUSCARAWAS ROAD, BEAVER, PA. 15009
OFFICE: 495-7020 RESIDENCE: 495-4[illegible]

DER-EP

MAY 8 10 15 AM '84

May 3, 1984

David W. Borneman
Project Manager
Commonwealth of Pennsylvania
Department of Environmental Resources
Bureau of Water Quality Management
600 Highland Building
121 South Highland Avenue
Pittsburgh, PA 15206-3988

Re: Project Priority Rating: Township of Chippewa
Township of Brighton
Borough of Big Beaver

Dear Mr. Borneman:

As Sewage Enforcement Officer for the above municipalities and in accordance with your request by letter dated March 21, 1984, I have outlined on the attached map eleven (11) problem areas in which roughly one (1) out of three (3) households and commercial uses presently have problems with their on-lot sanitary disposal system.

The following is a brief description of each problem area, approximate number of existing dwellings or commercial uses, soil conditions, results in correcting existing systems by using current technology, nature of severity, findings and results from on-site investigations of applications for permits to construct systems on existing vacant properties in these areas. The location of the problem areas are shown on the attached U.S.G.S. Map.

AREA NO. 1

Location: Chippewa Township on Clayton Road and George Street. This area has approximately 24 residential dwellings and soils in this area are mapped and found to be Cavode and Wharton Silt Loams. The dwellings on the south side of Clayton Road are discharging sewage effluent into a PennDOT storm drain and also onto the berm of the road causing an icing condition in the winter. The dwellings on the north side of the road all have point discharges of sewerage effluent running into an unnamed tributary of Walnut Bottom Run. Two (2) systems in this area were required to be repaired during 1984 to comply with the requirements of the loaning institutions. I found that soil mottling was less than 20 inches below the ground surface. These systems were repaired using an experimental pressurized elevated sand mound system with underdrainage inner septor trenches. Replacement costs were approximately $5,000.00 for each of these systems.

AREA NO. 2

Location: Chippewa Township on Lipenwood and Wanda Drives. This area includes approximately 22 residental dwellings and soils in this area are mapped and found to be Canfield, Cavode, Rexford and Wharton Silt Loam. A majority of these dwellings are connected to common drain lines discharging sewage onto the ground surface at the north end of these streets with drainage to Wallace Run. Since 1974 I have made on-site tests on approximately five (5) vacant lots in this area and found that the soil conditions for the installation of on-lot systems does not comply with Department of Environmental Resources' Chapter 73 requirements. Two (2) systems were corrected with standard gravel trenches and provided with an overflow trench filled with sand which allows drainage to run during wet season and prevents back-up in basement of dwellings.

AREA NO. 3

Location: Chippewa Township on Shenango Road and 37th Street Extension. This area includes approximately 70 dwellings and soils in this area are mapped and found to be Gilpin, Canfield and Ravenna Silt Loam. Six (6) dwellings on Shenango Road are all connected to a common drain line discharging into a ravine back of these dwellings which then drains to Wallace Run. On the south side of 37th Street Extension there are locations where sewerage is discharging to the berm of the road or directly into PennDOT inlets. Since 1974 I have inspected and issued permits for five (5) new dwellings within this area. They all were elevated sand mounds and as of March 1, 1984 show no evidence of malfunctioning.

AREA NO. 4

Location: Big Beaver Borough on Wallace Run Road, Shenango Road and in Stell Rich Heights Subdivision, Tragesser Subdivision and the Big Beaver Elementary School. There are approximately 215 dwellings in this problem area and soils in this area are mapped and found to be Gilpin, Canfield, Ravenna and Wharton Silt Loam. The Tragesser Plan consists of single family residential dwellings on small lots, approximately one half of the dwellings in this subdivision are connected to a drainage pipe discharging sewage effluent directly to Wallace Run and the remaining portion are discharging sewage effluent to bituminous pavements on a year round basis. The dwellings in Stell Rich Heights have individual discharge lines running to the berm, ditches and inlets of public streets. The elementary school facilities are discharging sewage effluent to a PennDOT inlet along Friendship Drive. All of the above are located in the Wallace Run drainage basins. I have made only one (1) on-site inspection for a new system in this area and found soils to be unsuitable for any type of system.

AREA NO. 5

Location: Homewood Borough and Commercial District on PA Traffic Route No. 18. The Homewood portion of this area is mainly residential dwellings with numerous point discharges of sewerage to berms and storm drain facilities discharging into Clarks Run. The remaining portion of this area consists of commercial establishments on Traffic Route No. 18 adjacent to the Turnpike Interchange. All of these commercial properties have point discharges of sewage effluent to the highway storm drainage system on Traffic Route No. 18. These establishments on the east side of PA Traffic Route No. 18 are discharging sewage effluent to the storm drainage system of ConRail. These businesses consist of motels, bowling alleys, service station truck stops, restaurants and roller skating rink all of which have high volumes of water usage and discharge.

AREA NO. 6

Location: South Beaver Township on Blackhawk Road, portions of Elmbrook Village Road, Georgetown Road, Pinecrest Drive and Arrowhead Drive. There are approximately 140 dwellings and a mobile home park in this problem area. Soils in this area are mapped and found to be Gilpin, Canfield and Ravenna Silt Loam. On Pinecrest Drive most of the dwellings are connected to a common drain which discharges to a small unnamed tributary of Little Beaver Creek. Records indicate that only two (2) permits for new construction have been issued in this area and three (3) have been denied. Repairs have been made to two (2) systems and appear to have corrected the malfunctioning problems.

AREA NO. 7

Location: Chippewa Drive on Rhodes Drive and Summers Drive. This area consists of approximately 30 residential dwellings and soils in this area are mapped and found to be Wharton, Guernsey and Brinkerton Silt Loam. The major portion of these dwellings are discharging sewage to the berm of the public road. Since 1974 I have made on-site inspections on three (3) existing lots and found that the soils did not meet the requirements of the Department of Environmental Resources' Chapter 73. Two (2) systems have been repaired but I only consider the repairs to be a temporary correction of problem. Lots on high side of street have all systems in front yard and space available for corrections is limited.

AREA NO. 8

Location: Chippewa Township on Park Road, Fineview Drive and Orchard Lane. This area consists of approximately 30 residential dwellings and soils in this area are mapped and found to be Tilsit, Cavode and Brinkert Silt Loam. A majority of these are connected to a drain pipe discharging sewage effluent into an unnamed tributary of the North Branch of Bradys Run. Those dwellings on the northside of Fineview are situated on a high bank with small front yards and no area available for corrections. One (1) system on Fineview was corrected by installing a heavy duty pump in existing seepage pit and constructing a shallow placement system in rear yard.

AREA NO. 9

Location: Chippewa Township on Braden School Road, Braun Road, Mannel Street and James Street. This problem area consists of approximately 100 dwellings and soils are mapped and found to be Wharton, Cavode, Tilsit and Guernsey Silt Loam. Those properties located on Braun Road and east of the Beaver Valley Expressway are currently discharging to the berm of the public highway. On-site inspections made since 1974 in this area has found that most of the soils are unsuitable for any type of system whatsoever. I have issued permits for eight (8) systems in this area and three (3) have been elevated sand mound systems. Permits have been issued to correct existing systems and these have all been elevated sand mound systems.

AREA NO. 10

Location: Chippewa Township on Shenango Road, Lester Drive Charles Street and Geneva Street. This area consists of approximately 25 dwellings and soils are mapped and found to be Cavode and Wharton Silt Loam. The major portion of these dwellings are discharging sewage to the berm of the above public streets. Several vacant lots have been tested since 1974 and found to be unsuitable for the installation of an on-lot septic system as per requirements of Chapter 73.

AREA NO. 11

Location: Chippewa Township on Linden Street. This area consists of approximately 11 dwellings and soils are mapped and found to be Wharton Silt Loam. Three (3) or four (4) of these dwellings are connected to a drain pipe discharging sewage effluent to the ground surface at the lower end of the above street.

The above eleven (11) locations represent those problem areas where the greatest number of complaints of malfunctioning systems have been received by the Municipalities. On-site investigations have been made by the undersigned and in most cases the soil and ground water conditions are such that no system or correction will provide any relief or eliminate the discharging of sewage effluent to the ground surface. These locations were also inspected by Norma English, Department of Environmental Resources Sewage Facilities Sanitation and myself on March 27, 1984, maps were marked with 90 found point discharges or sewerage to public streets or runs.

If you have any questions regarding this report, please contact me at your convenience

Sincerely,

Daniel C. Baker, Jr.
Sewage Enforcement Officer

DCBJr/jem
cc: Bruce Hamer - Chipnewa Township Manager
Carol Miller - South Beaver Township Secretary
Paul B. Rayl - Big Beaver Borough Secretary

WIDMER ENGINEERING INC.

March 29, 1993

Mr. Kurt W. Carr, Chief
Division of Archeology and Protection
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
P. O. Box 1026
Harrisburg, PA 17108-1026

Re: Beaver Falls Area Act 537 Plan

Dear Mr. Carr:

Please find enclosed Form A and a copy of the USGS topographic map for the study area.

This plan is proposing to sewer the Borough of Homewood and to extend a collection system along Route 18 in Big Beaver Borough. Sewer lines will be installed within the right-of-ways of local and state roads.

This plan is also investigating the feasibility of extending sewer lines along Stockman Run and Wallace Run. The locations of all sewer lines are highlighted on the enclosed map.

There are no definite plans for development at this time. If you have any questions, please contact me at the address or phone number given below.

Sincerely,

WIDMER ENGINEERING INC.

James M. Vanek

James M. Vanek

JMV/las

enc.

ENGINEERS AND SURVEYORS

806 Lincoln Place Beaver Falls, Pennsylvania 15010 Phone 412/847-1696

Commonwealth of Pennsylvania
Department of Environmental Resources
Bureau of Water Quality Management

# FORM A
# NOTIFICATION OF POTENTIAL EFFECT OF PROPOSED ACTION ON ARCHAEOLOGICAL AND HISTORICAL RESOURCES

This is to notify the Pennsylvania Historical and Museum Commission in writing of the potential effect of a proposed action on an archaeological or historical resource in accordance with the Pennsylvania Historic Preservation Act, 37 PA. CSA, Sections 501-512.

This action involves: DER 537 Program

Development Name Beaver Falls Regional Sewage Facilities Plan

Development Location, including County and Municipality: City of Beaver Falls, Borough of Homewood, Big Beaver Borough, Beaver County

Enclosed is a copy of the U.S.G.S. 7.5 minute topographic map which clearly outlines the specific project boundaries. The name of the map is Beaver Falls.

This sewage facility plan encompasses 6,776 acres (total project area).

There are an unknown number of buildings over 40 years old within the project area. Pictures and a description of the plans for these buildings are included.

A brief description of this development project is included that indicates the nature of the development, number and size of lots to be subdivided, previous land use.

It is understood that your agency will advise the applicant within 60 days of the receipt of this notice if the project will not affect a known archaeological or historical resource or, if a significant known archaeological or historic resource, as determined by the PHMC using Secretary of Interior criteria for determining resource significance, requires protection or if a "high probability archaeological area" could be affected by the proposed sewage facilities.

Questions concerning this proposal and the results of the search should be directed to:

Applicant's Name: City of Beaver Falls

Address: 806 Lincoln Place

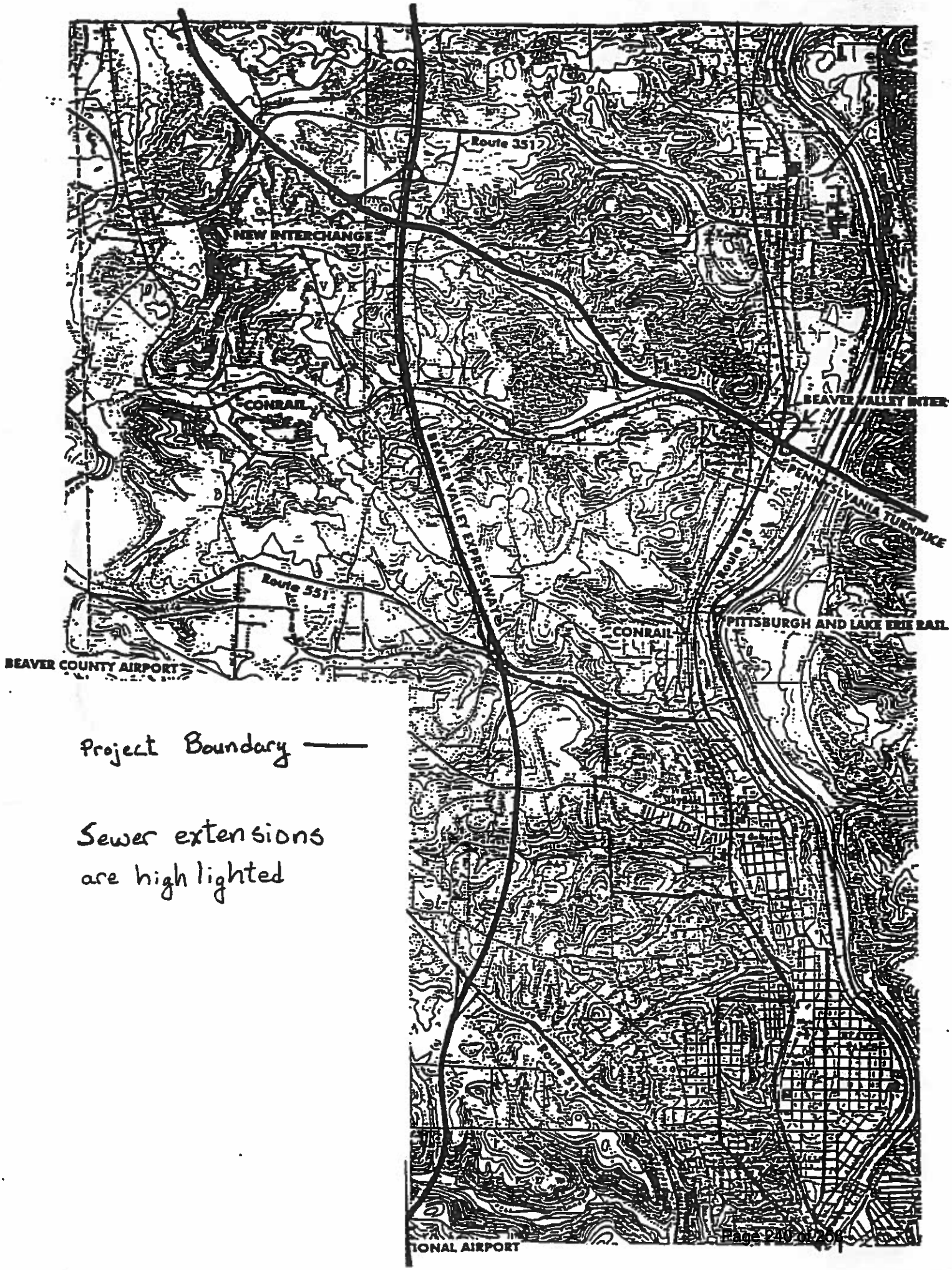
Beaver Falls, PA 15010

Telephone: (412) 847-1696

This form must be forwarded to the:

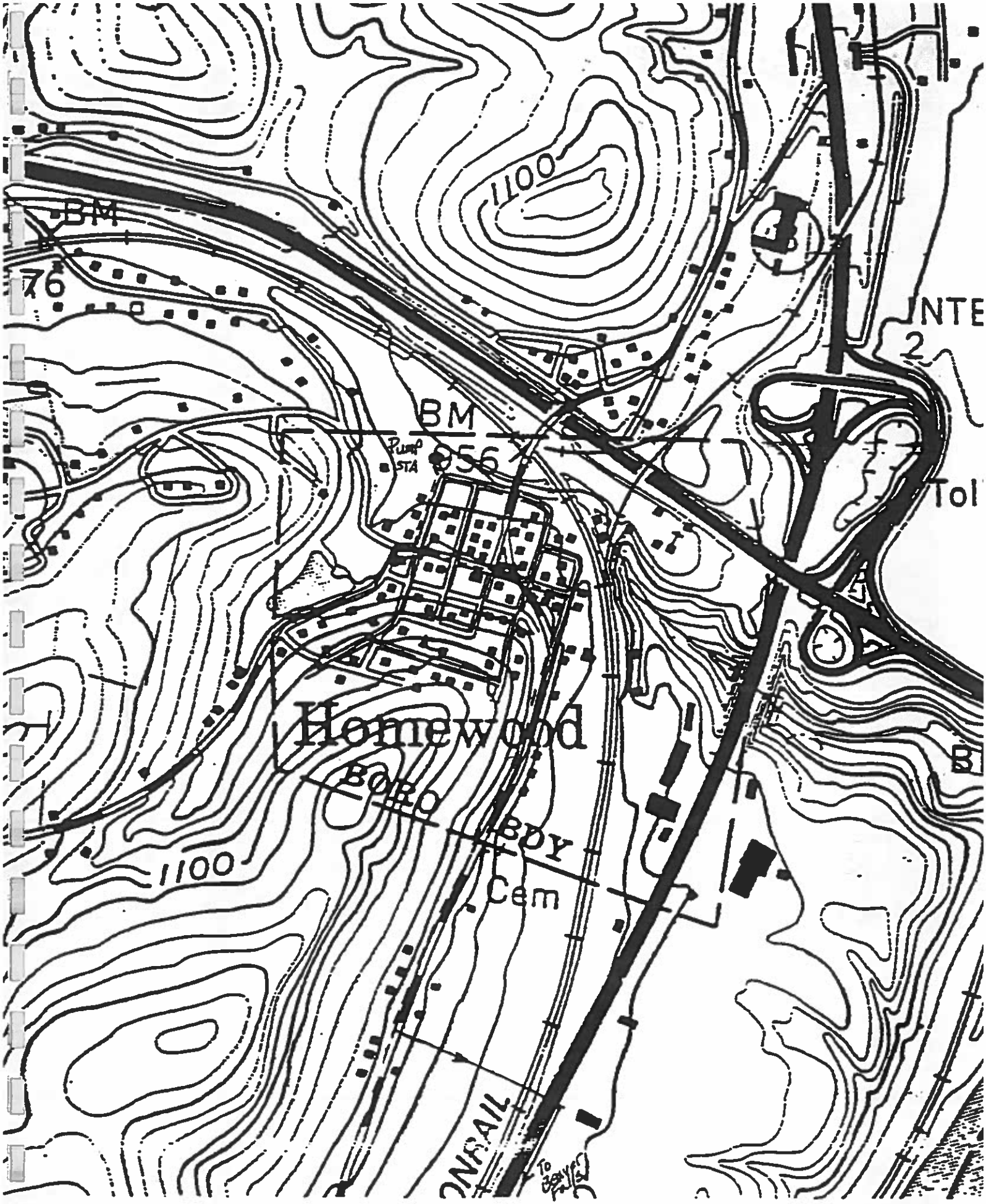
Pennsylvania Historical and Museum Commission
Bureau of Historic Preservation
P.O. Box 1026
Harrisburg, PA 17108
Telephone: 717-783-8946

Revised 3/90




Project Boundary ——

Sewer extensions are highlighted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ONRAIL
To
Gravity Sewer
Force Main

Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Post Office Box 1026
Harrisburg, Pennsylvania 17108-1026

May 10, 1993

James M. Vanek
Widmer Engineers, Inc.
806 Lincoln Place
Beaver Falls, PA 15010

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

Re: File No. ER 93-2124-007-A
DER 537 Program
Beaver Falls Regional Sewage
City of Beaver Falls
Homewood & Big Beaver Borough
Beaver County

Dear Mr. Vanek:

The Bureau for Historic Preservation has reviewed this State funded, assisted or licensed project under the authority of the Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 507 et. seq. (1988). This review includes comments on the project's potential effect on both historic and archaeological resources.

There is a high probability that archaeological resources are located in the project area and may be affected by project activities. It is the recommendation of the Historical and Museum Commission that the applicant conduct a Phase I survey to locate these sites and to develop a plan for their protection. If a survey is not conducted and the applicant encounters archaeological resources during construction, the applicant must stop the project, conduct the survey and develop a plan acceptable to the Museum Commission to mitigate any effects on these resources. These may delay the completion of the project. If this project will require any federal permit or receive federal funding, the federal agency, under the National Historic Preservation Act will probably require the survey to be conducted. We suggest that you seriously consider conducting the survey early in the process so as to avoid delays in the future. Guidelines and information for survey are enclosed.

There may be properties eligible for the National Register of Historic Places located in the project area. However, due to the nature of the activity, it is our opinion that there will be no effect on these properties. Should the applicant become aware, from any source, that unidentified historic properties are located at the project site, or that the project activities will have an effect on these properties, the Bureau for Historic Preservation should be contacted immediately.

If you need further information in this matter please consult Noel Strattan at (717) 783-9900.

Sincerely,

Kurt W. Carr, Chief
Division of Archaeology
and Protection

Enclosure

KWC/lfa

WIDMER ENGINEERING INC.

May 25, 1993

Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
P. O. Box 1026
Harrisburg, PA 17108-1026

Attn: Mr. Kurt W. Carr

Re: File No. ER 93-2124-007-A
Beaver Falls Regional Act 537 Plan

Dear Mr. Carr:

This letter is in response to your letter dated May 10, 1993. Your letter mentions that there is a high probability that archaeological resources exist in the project area and recommends that a phase I survey be conducted and that a resource protection plan be developed.

Since almost all of the construction will consist of sewer line installation in the rights-of-way of roads, a phase I survey will not be conducted at this time. If archaeological resources are encountered during construction, construction will be stopped and phase I surveys will be conducted.

If you have any questions or comments, please contact me. Thank you for your timely response to the initial submittal.

Sincerely,

WIDMER ENGINEERING INC.

James M. Vanek

James M. Vanek

JMV/las

WIDMER ENGINEERING INC.

March 30, 1993

Pennsylvania Department of Environmental
Resources
Bureau of Forestry
P. O. Box 1467
Harrisburg, PA 17120

Attn: Botanist

RE: Beaver Falls Area Act 537 Plan
Beaver County

Dear Sir:

This is to request that you conduct a search of the Pennsylvania Natural Diversity Inventory to identify any species of concern which may be impacted by an alternative being proposed as part of this plan. This plan proposes the extension of sewer lines from the City of Beaver Falls along Route 18 to the Borough of Koppel. This plan is also investigating the feasibility of extending sewer lines along Stockman Run and along Wallace Run to the Route 18 line. The plan also proposes sewering Homewood Borough. The Beaver Falls Sewage Treatment Plant will be expanded with the extension of sewer lines.

The location of the proposed project components are shown on the attached 7.5 minute U.S.G.S. topographic map.

It is understood that you will notify the City of Beaver Falls of any identified protected species within the project area. It is also understood that your agency will assist this municipality in identifying the appropriate contact agency to provide assistance in the evaluation and mitigation of potential impacts on the protected species under their jurisdiction.

ENGINEERS AND SURVEYORS

806 Lincoln Place Beaver Falls, Pennsylvania 15010 Phone 412/847-1696

If you have any questions, please contact me at (412) 847-1696. If you need to contact the City of Beaver Falls, you can reach Perry Wayne, City Coordinator, at (412) 847-2803.

Sincerely,

WIDMER ENGINEERING INC.

James M. Vanek

JMV/las

enc.

# APPENDIX F

# Public Comments and Municipal Response

**NOTICE**

**THE CITY OF BEAVER FALLS**

Chapter 71 of the Commonwealth of Pennsylvania Department of Environmental Resources Rules and Regulations requires that the City of Beaver Falls, Beaver County, as sponsor of a proposed public sewage system project, notify and allow the general public to comment on the project.

The proposed project consists of the construction of a gravity and pressure sewer system, expansion of the existing sewage treatment plant to 4.7 MGD, and replacement of an overloaded interceptor line and a leaking interceptor line. The project will serve areas in Beaver Falls, Patterson Township, White Township, Eastvale Borough, West Mayfield Borough, Patterson Heights Borough, Big Beaver Borough, and Homewood Borough.

A 30-day comment period has been established to allow the general public to comment on the proposed project. The public may provide comments to the City and view the proposed project's Facility Plan at the Beaver Falls Municipal Building. The City will address the comments before taking any action on the project.

Public comments should be submitted in writing to the City of Beaver Falls, 715 15th Street, Beaver Falls, PA 15010.

City of Beaver Falls
Perry C. Wayne,
City Clerk/Coordinator
5/28/93

## PUBLIC COMMENTS AND MUNICIPAL RESPONSE

The Beaver Falls Area Regional Sewage Facilities Plan was advertised in the Beaver County Times on May 28, 1993. A copy of the newspaper clipping is attached. The public comment period concluded on June 28, 1993. No comments were received.

On June 22, 1993, a public meeting was held to explain the recommendations of the plan. An explanation of the minimum project scope within the City of Beaver Falls was given, along with the recommended alternative. The residents of the City had no objections to the project within the City, but concern was raised that the cost to the City residents would be increased if the line were extended to Koppel. Based on a commitment from Koppel or the Route 60/Route 351 enterprise zone with the increased number of users, the revised allocation of costs, and the increased possibility of obtaining full PennVEST financing, the cost to the residents of the City should not be significantly increased.

On June 29, 1993, an additional public meeting was held to explain the plan to the Borough of Homewood and Big Beaver. A question was raised about the possibility of the Boroughs paying for the sewer line extension to increase the project implementation. Based on the cost of this alternative ($1,710,745), the annual debt service would be approximately $102,500, resulting in a user cost in excess of $50/EDU/month. This cost is too high for the residents to afford. Therefore, the alternative was not considered further.

# APPENDIX G

# Municipal Adoption Resolutions

RESOLUTION FOR PLAN REVISION #1010

RESOLUTION OF THE COUNCIL OF The CITY OF BEAVER FALLS BEAVER COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Resources (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Widmer Engineering Inc. has prepared a Regional Sewage Facilities Plan which provides for sewage facilities in a portion of the City of Beaver Falls, and

WHEREAS, The City of Beaver Falls finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Beaver Falls hereby adopt and submit to the Department of Environmental Resources for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

I, PERRY C. WAYNE JR., Secretary, Beaver Falls City Council, hereby certify that the foregoing is a true copy of the City's Resolution No. #1010, adopted AUGUST 16, 1993.

AUTHORIZED SIGNATURE

James C Reynolds
MAYOR

CITY SEAL

Rene C. Wayne Jr.
CITY COORDINATOR

RESOLUTION FOR PLAN REVISION

RESOLUTION OF THE COUNCIL OF HOMEWOOD BOROUGH, BEAVER COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Resources (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Widmer Engineering Inc. has prepared a Regional Sewage Facilities Plan which provides for sewage facilities in a portion of Homewood Borough, and

WHEREAS, Homewood Borough finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Council of the Borough of Homewood hereby adopt and submit to the Department of Environmental Resources for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

I, Elayne Buzzelli, Secretary, Homewood Borough Council, hereby certify that the foregoing is a true copy of the Borough's Resolution No. 7-93-2, adopted July 14, 1993.

AUTHORIZED SIGNATURE BOROUGH SEAL

Alfred DeLongo

## RESOLUTION FOR PLAN REVISION

RESOLUTION OF THE COUNCIL OF BIG BEAVER BOROUGH, BEAVER COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Resources (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Widmer Engineering Inc. has prepared a Regional Sewage Facilities Plan which provides for sewage facilities in a portion of Big Beaver Borough, and

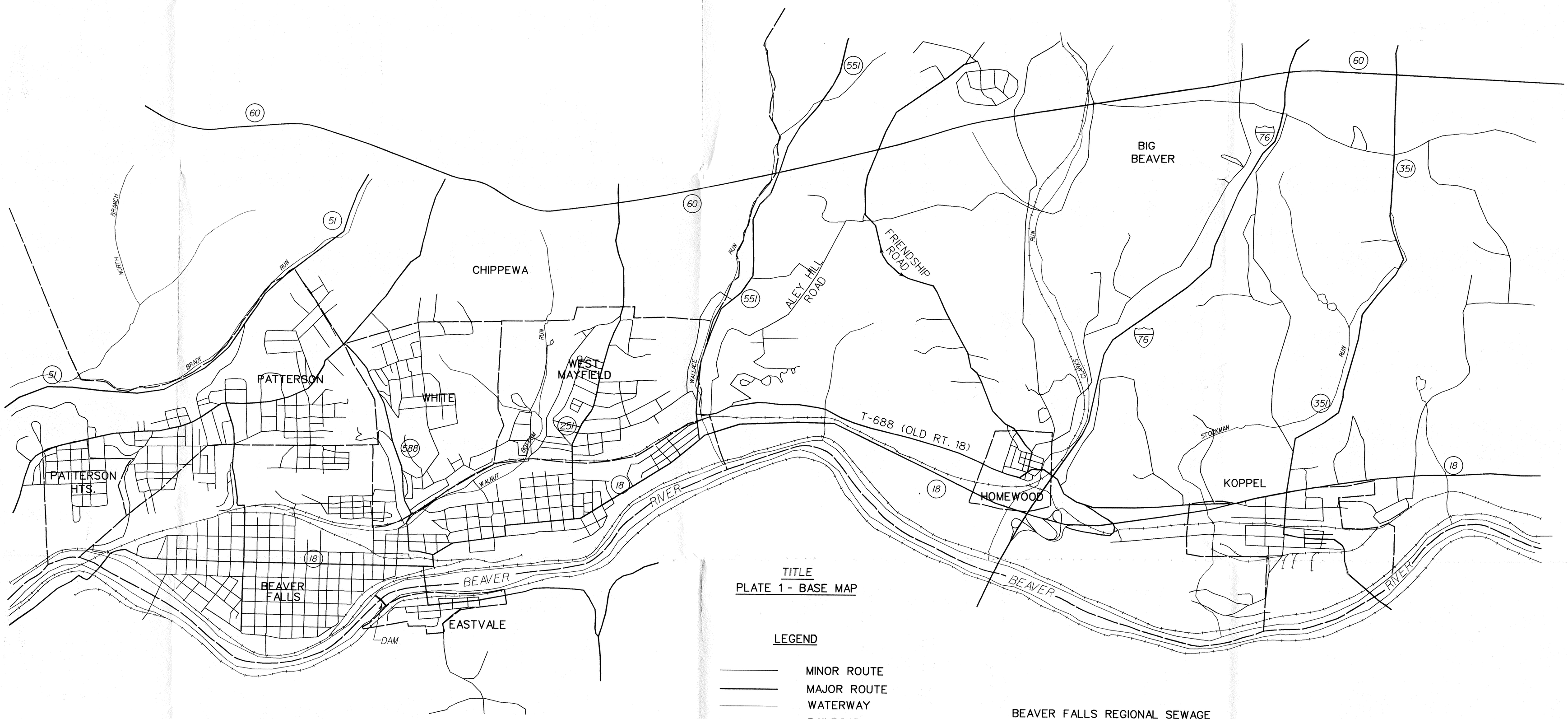
WHEREAS, Big Beaver Borough finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Council of the Borough of Big Beaver hereby adopt and submit to the Department of Environmental Resources for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

I, Janet E. Kolson, Secretary, Big Beaver Borough Council, hereby certify that the foregoing is a true copy of the Borough's Resolution No. 005-1993, adopted July 12, 1993.

AUTHORIZED SIGNATURE BOROUGH SEAL

Joseph R. Barbera
President of Council



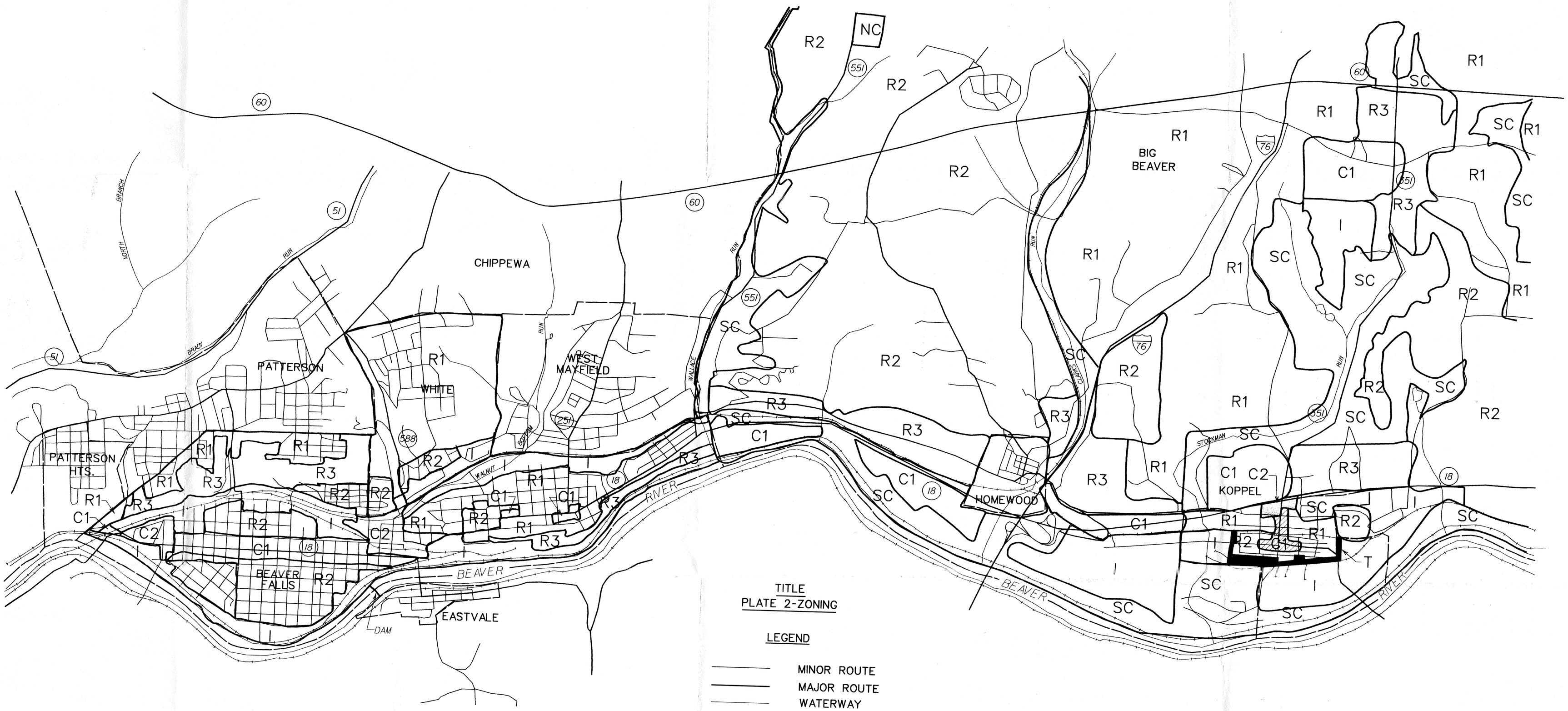

TITLE
PLATE 1 - BASE MAP

LEGEND

- MINOR ROUTE
- MAJOR ROUTE
- WATERWAY
- RAILROAD

BEAVER FALLS REGIONAL SEWAGE FACILITIES PLAN PLATE INDEX

1 - BASE MAP
2 - ZONING
3 - SOILS
4 - WETLANDS/FLOOD PLAINS
5 - GEOLOGY




TITLE
PLATE 2-ZONING

LEGEND

- MINOR ROUTE
- MAJOR ROUTE
- WATERWAY
- RAILROAD

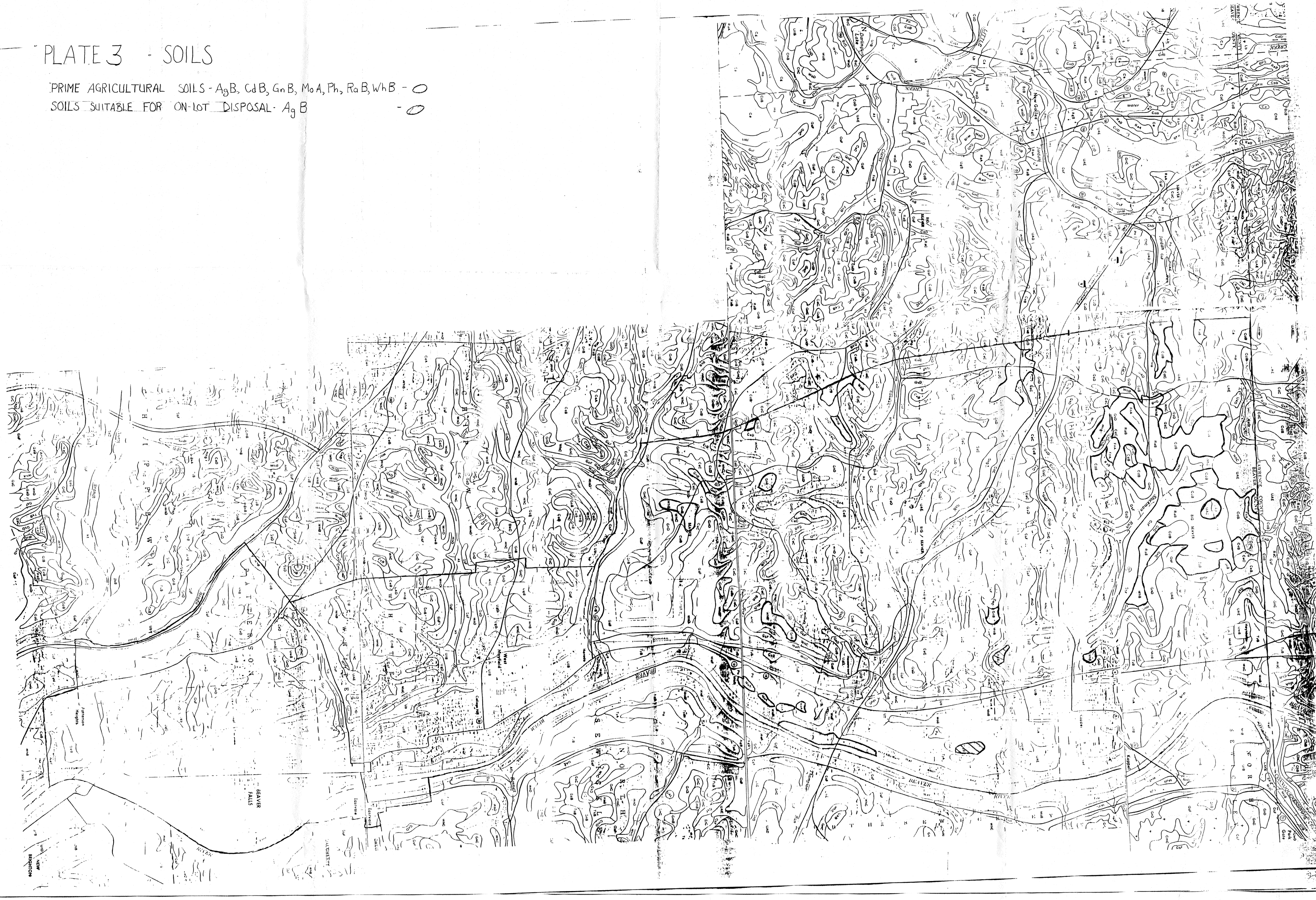
ZONING DISTRICTS

- R1 - RESIDENTIAL-SINGLE FAMILY-RURAL
- R2 - RESIDENTIAL-MULTIFAMILY
- R3 - RESIDENTIAL-LIMITED USE
- C1 - COMMERCIAL
- C2 - HEAVY COMMERCIAL
- I - INDUSTRIAL
- SC - SPECIAL CONSERVATION
- T - TRANSITIONAL

# PLATE 3 - SOILS

PRIME AGRICULTURAL SOILS - AgB, CdB, GnB, MoA, Ph, RaB, WhB - 0

SOILS SUITABLE FOR ON-LOT DISPOSAL - AgB - 0



N

CHIPPEWA

PATTERSON

WHITE

WEST MAYFIELD

PATTERSON HTS.

BEAVER FALLS

EASTVALE

DAM

BIG BEAVER

HOMEWOOD

KOPPEL

BEAVER RIVER

BRADY RUN

SOUTH BRANCH BRADY RUN

RACCOON RUN

BRUSH CREEK

MCKINNEY RUN

60 51 551 588 251 18 76 351

TITLE

PLATE 4 - WETLANDS/FLOOD PLAINS

LEGEND

- MINOR ROUTE
- MAJOR ROUTE
- WATERWAY
- RAILROAD
- FLOOD PLAINS
- WETLANDS

N

CHIPPEWA

PATTERSON

WHITE

WEST MAYFIELD

BIG BEAVER

PATTERSON HTS.

BEAVER FALLS

EASTVALE

HOMEWOOD

KOPPEL

NORTH BRANCH BRADY RUN

RUN

WALNUT

SPRING

CLARKS

STRAKMAN

BEAVER RIVER

DAM

60 51 551 76 351 488 251 18

TITLE
PLATE 5 GEOLOGY

LEGEND

MINOR ROUTE
MAJOR ROUTE
WATERWAY
RAILROAD
A ALLEGHENY GROUP
C CONEMAUGH GROUP
P POTTSVILLE GROUP

# EXHIBIT Q

scottmadden
MANAGEMENT CONSULTANTS

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ScottMadden, Inc.
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Suite 250
Westborough, MA 01581
508-202-7918
scottmadden.com

September 7, 2022

Mr. Thomas F. Rafferty
Director, Business Development
Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

Dear Mr. Rafferty,

ScottMadden, Inc. ("ScottMadden") performed a valuation of the City of Beaver Falls ("Beaver Falls") wastewater system at the request of Aqua Pennsylvania, Inc. ("Aqua") for the purposes of establishing a fair value in accordance with Public Utility Code (66 PA.C.S) – Valuation of Acquired Water and Wastewater Systems for ratemaking purposes. The resulting conclusion of value should not be used for any other purpose or by any other party for any other purpose. This valuation was conducted in accordance with the Statement on Standards for Valuation Services and the Uniform Standards of Professional Appraisal Practice. The estimates of value that result from a valuation engagement are expressed as conclusions of value.

ScottMadden was restricted or limited in the scope of our work or data available for analysis as follows:

- Financial statements for the year 2021 were not available; nor were projected capital expenditures as developed by Beaver Falls;
- Original costs were not available for all assets, as such, ScottMadden relied on estimated replacement costs as outlined in the Engineering Assessment of Wastewater System Assets, authored by Gannett Fleming, Inc. (the "Engineering Assessment") as the basis for estimating original costs;
- Although ScottMadden was able to develop similar consumption estimates as provided by Beaver Falls and Aqua, due to the reporting nature of the data, ScottMadden was not able to fully verify the figures provided by Beaver Falls and Aqua.

Based on our analysis, as described in this valuation report, the conclusion of value of Beaver Falls as of September 7, 2022 is $40,199,347. This conclusion of value is subject to the Statement of Assumptions and Limiting Conditions found in Appendix A and to the Valuation Analyst's Representation found in Appendix B. ScottMadden has no obligation to update this report or our conclusion of value for information that comes to our attention after the date of this report.

ScottMadden has no financial interest or contemplated financial interest in the property that is the subject of this report.

Respectfully submitted,



Dylan W. D'Ascendis, CVA, CRRA
Partner
ScottMadden, Inc.



Matthew R. Howard, CRRA
Manager
ScottMadden, Inc.

# Valuation Report

## City of Beaver Falls Wastewater System

As of September 7, 2022



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MANAGEMENT CONSULTANTS

Table of Contents


**I. Introduction and Purpose ..... 1**

**II. Background and Operations ..... 2**

**III. Summary of Valuation Approaches ..... 2**

A. Cost Approach ..... 2

B. Market Approach ..... 2

C. Income Approach ..... 3

**IV. Application of the Cost Approach ..... 3**

A. Description of Facilities ..... 3

i. Wastewater Treatment Plant ..... 3

ii. Collection and Conveyance System ..... 3

B. Calculation of Reproduction Cost New Less Depreciation ..... 4

i. Indication of Value Using the Cost Approach ..... 1

**V. Application of the Market Approach ..... 2**

A. Market Value of Invested Capital to Net Plant Multiple Method ..... 2

B. Comparable Sales Method ..... 2

C. Indication of Value Using the Market Approach ..... 3

**VI. Application of the Income Approach ..... 3**

A. Operating Revenue Assumptions ..... 3

B. Operating Expense Assumptions ..... 4

C. Future Capital Requirements Assumptions ..... 4

D. Discount Rate ..... 5

E. Indicated Value Using the Income Approach ..... 6

**VII. Conclusion of Value – Subject Interest ..... 6**

**VIII. Closure ..... 7**

Appendix A: Statement of Assumptions and Limiting Conditions

Appendix B: Valuation Analysts' Representations

Appendix C: Resumes of Dylan W. D'Ascendis, CVA, CRRA and Matthew R. Howard

Appendix D: Joint Sewer Users Bills

Appendix E: Engineering Assessment of Wastewater System Assets

Appendix F: Market Transactions

Appendix G: Beaver Falls Rate Ordinances

Appendix H: Determination of Discount Rate





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## I. INTRODUCTION AND PURPOSE

Dylan W. D'Ascendis, CVA, CRRA, Partner at ScottMadden, Inc. and Matthew R. Howard, CRRA, Manager at ScottMadden (full professional qualifications included in Appendix C to this report), have been retained by Aqua to value Beaver Falls' wastewater operations ("Subject Interest") in accordance with Public Utility Code ("66 PA.C.S.") – Valuation of Acquired Water and Wastewater Systems for Ratemaking Purposes as of September 7, 2022. The conclusions of value derived as a result of this engagement are valid only for the stated purpose as of the date of valuation. The valuation report does not reflect values of the Subject Interest under any other circumstances other than those described in this report; therefore, no other purpose is intended or should be inferred.

For consideration in this transaction is a 100% interest in Beaver Falls' wastewater operations, which means that the purchaser of the Subject Interest would be able to control the entity's operations going forward. The Subject Interest is not a marketable interest since it is not publicly traded, and it would be difficult to immediately turn the Subject Interest into cash.

ScottMadden has used fair market value as the standard of value for this engagement. The Internal Revenue Service's Revenue Ruling 59-60 recommends the use of fair market value for valuation of corporate stocks on which market quotations are either unavailable or of such scarcity that they do not reflect the fair market value. Fair market value is defined in Section 25.2512-1 of the U.S. Treasury Regulations (Gift Tax Regulations) as:

> The price at which property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts.

The premise of value is an assumption regarding the most likely set of transactional circumstances that may be applicable to the subject valuation. In lay terms, this explains what is going to happen to the Subject Interest after the transaction. There are any number of variations of premise of value, but two general premises of value are Liquidation (the Subject Interest does not continue operating after the transaction) and Going Concern (the Subject Interest continues operating after the transaction). The premise of value applied in this valuation study is Going Concern as there is no indication that the Subject Interest would cease operations after the transaction.


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## II. BACKGROUND AND OPERATIONS

The Subject Interest is the wastewater operations of Beaver Falls.

Beaver Falls' wastewater operations provide wastewater treatment, conveyance, and collection services to residents within the City of Beaver Falls, and wastewater treatment and conveyance services to residents outside the City of Beaver Falls, including customers from Big Beaver Borough, Eastvale Borough, North Sewickley Township, the Borough of Patterson Heights, Patterson Township, West Mayfield Borough, and White Township, as well as customers serviced by Dalton's Service Co. which provides sewer hauling services, (collectively, the "Joint Sewer Users").[1]

The existing wastewater system consists of a pump station and a wastewater treatment plant ("WWTP"), which provides treatment to approximately 3,351 service connections across nearly 36 miles of piping within the City of Beaver Falls, as well as to residents of the Joint Sewer Users as noted above. The WWTP was constructed during the years 1936 to 1938, and underwent upgrades in 1990, 1991, 1993, 1996, 1998, 2008 and 2011.

## III. SUMMARY OF VALUATION APPROACHES

The valuation of the Subject Interest as a Going Concern considers several methods. Each method, at times, may appear more theoretically justified in its use than others. The soundness of a particular method is based on the specific circumstances of each case. ScottMadden is responsible for determining the reasonableness of each approach/method of valuation for Beaver Falls at this time. The commonly used methods of valuation can be grouped into one of three general approaches: The Cost Approach, the Market Approach, and the Income Approach.

### A. Cost Approach

The Cost Approach is a valuation method that typically values the underlying assets of a company to derive their market value. Because this method only focuses on the company's underlying assets, it fails to reflect the past and projected profitability of the company, as well as the associated risks inherent in the company's operations. Typically, the analyst would start with the current replacement (or reproduction) cost new of the assets being valued, and then deduct for the loss in value caused by physical deterioration, functional obsolescence, and economic obsolescence of those assets, to arrive at an indicated market value.

### B. Market Approach

The Market Approach considers comparable transactions of similar utilities in the same general timeframe and general operational area as the company and other market-based data to establish a fair market value. Usually,

[1] See, Appendix D. Resident estimates are approximately 9,074 and 13,768 for the City of Beaver Falls and the Joint Sewer Users, respectively, based on 2020 population estimates from the United States Census Bureau.


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finding comparable transactions is difficult, if not impossible, since no two companies are identical, nor are they usually timely. In addition, details surrounding utility transactions, particularly private transactions, are incomplete at best. In spite of these challenges, an analyst may be able to pinpoint a relevant multiple of purchase price or transaction value and then apply that multiple to the Subject Interest to derive a value for that Interest. One can also look to the market data of publicly-traded companies comparable in risk to the Subject Interest for an indication of value.

### C. Income Approach

The Income Approach provides an indication of value by discounting the expected or future cash flows of a company to a present value. The projected cash flows must account for additional investment and reflect the specific growth potential of the system being valued. The discount rate used to calculate the present value of the company must be derived from market data of similar risk companies. The discount rate must also take into account how the potential acquirer will finance the transaction (e.g. debt, equity, or a combination of debt and equity).

## IV. APPLICATION OF THE COST APPROACH

### A. Description of Facilities

The description of Beaver Falls' assets are described fully in the Engineering Assessment (attached as Appendix E to this report), and summarized below.

As mentioned above, Beaver Falls' wastewater operation is comprised of a pump station, a WWTP, and approximately 36 miles of piping covering 3,351 service connections. As noted above, while Beaver Falls does not own collection assets for the Joint Sewer Users, it does treat their wastewater.

#### i. Wastewater Treatment Plant

The Beaver Falls WWTP accepts wastewater from the City of Beaver Falls and the Joint Sewer Users as noted above. The Beaver Falls WWTP is comprised of the primary structures/processes as detailed in the previously mentioned Engineering Assessment: three primary settling tanks, two biological contact oxidation towers, five secondary settling tanks, two chlorine disinfection tanks, two anaerobic sludge digesters, one belt filter press, one grit separator, one grease separator, various piping, pumps, blowers and controls, and an onsite diesel fueled emergency power generator.

#### ii. Collection and Conveyance System

The Beaver Falls wastewater collection and conveyance system is composed of 60,318 linear feet of service laterals across 3,351 connections, 536 brick and 138 concrete manholes, approximately 1,400 linear feet of 8-inch ductile


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iron pipe ("DIP") that connects the pump station to the sewer system, and 36.1 miles of sewers, ranging in size from 8 inches to 24 inches in diameter, broken down as follows:

- 27.65 miles of 8-inch vitrified clay pipes ("VCP")
- 0.57 miles of 8-inch polyvinyl chloride pipes ("PVC")
- 0.97 miles of 8-inch cast iron pipes ("CIP")
- 0.76 miles of 10-inch VCP
- 0.27 miles of 12-inch VCP
- 1.09 miles of 12-inch PVC
- 0.80 miles of 15-inch VCP
- 0.32 miles of 15-inch PVC
- 0.17 miles of 18-inch Standard Dimensional Ratio ("SDR") 35 PVC
- 2.00 miles of 24-inch SDR 35 PVC

### B. Calculation of Reproduction Cost New Less Depreciation

The first step in arriving at the fair market value of the assets of the Subject Interest using the Cost Approach derives the "Reproduction Cost New" for the assets that comprise Beaver Falls' wastewater operations. In order to arrive at the Reproduction Cost New for Beaver Falls' assets, ScottMadden began with the original cost of the assets provided by the Engineering Assessment. In certain instances, original costs were not available. In those instances, Gannett Fleming provided estimated probable replacement costs. ScottMadden then used the Handy-Whitman Index (the "Index") to determine the current reproduction value, or for assets which only a replacement cost was available, to determine an estimated original cost. The Index is prepared specifically for electric, gas, and water utilities, and is the only publication of its kind available to the public. The Index has been published continuously since 1924. The Index is comprised of historical index values for various accounts prescribed by the NARUC Uniform System of Accounts, as well as for construction, material, and labor, by geographic region of the United States. For assets not included in the Index (specifically laboratory equipment, office furniture, computer equipment, audio/video equipment, communication equipment, truck trailers, and storage equipment), ScottMadden used the Producer Pricing Index. ScottMadden also used the Consumer Pricing Index for various small tools owned by Beaver Falls.

The trended original cost method consists of the development of adjustment factors from the time when the asset was put into service to the current date. For example, an average main (NARUC account 331)[2] placed into service in 1985 with an original cost of $100,000 would be trended forward by the ratio of the index value at the current date divided by the index value at the time of installation. The index value of NARUC account 331 in July 2021 is 911.00, and the index value in 1985 when the assets were installed was 254.00, which means the ratio applied to

[2] Denoted as 361 in the Engineering Assessment.


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the original cost of the distribution main would be 3.59.[3] This would translate into a current cost for that main of $358,661.[4]

The next step in deriving the fair market value of the Subject Interest using the Cost Approach is to quantify the amount of physical deterioration, functional obsolescence, and economic obsolescence of the assets. Physical deterioration is caused by use, wear and tear, and the aging process. Functional obsolescence is caused by changes in design or construction to create efficiencies not present in the current asset. Economic obsolescence is a loss in value due to external factors not in the control of the entity such as economic conditions. The most common measure of physical deterioration is the reserve held for depreciation, which is based on the asset's remaining life versus its average useful life. Functional obsolescence is measured by comparing the subject asset to a replacement asset with current technology. The Engineering Assessment found no significant functional obsolescence for Beaver Fall's assets. Economic obsolescence is usually measured by market conditions, which have been supportive towards the water and wastewater industries in the recent past, as well as prospectively, so ScottMadden does not believe there is significant economic obsolescence present in Beaver Falls' assets. Since the only applicable measure of loss of value is physical deterioration, the useful lives for each asset were determined, and reserves for depreciation were calculated for each Beaver Falls asset if original costs were available. As mentioned previously, certain assets did not have original cost records, so ScottMadden relied upon the application of the index to the estimated replacement costs provided by the Engineering Assessment.

#### i. Indication of Value Using the Cost Approach

Using the Handy-Whitman, the Consumer Pricing, and Producers Pricing Indices to trend the original cost less depreciation of Beaver Fall's assets forward, ScottMadden arrived at the Reproduction Cost New minus depreciation value of $11,446,928.

As stated above, the value derived from the Cost Approach is based solely on the underlying assets of the Subject Interest, which means it does not take into account the expected cash flows of these assets. For Beaver Falls, this difference is significant. Since Beaver Falls does not own assets of the Joint Sewer Users but derives approximately half of its historical and expected revenues from them, the Cost Approach significantly understates Beaver Falls' fair market value.

Additionally, even though the Handy-Whitman Index takes into account the changes in the cost of various factors over time in different regions throughout the country, it cannot take into account intricacies such as terrain (e.g. mountains in Appalachia versus farmland in Pennsylvania) or changes in development and zoning since original

[3] 911.00 / 254.00 = 3.59.
[4] (911.00 / 254.00) x $100,000 = $358,661.


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installation. All else remaining equal, different terrains or changes in laws will translate into different timeframes to complete the project, which will directly affect costs.

## V. APPLICATION OF THE MARKET APPROACH

### A. Market Value of Invested Capital to Net Plant Multiple Method

The Market Approach is a valuation technique whereby the value of a company is estimated based on pricing relationships associated with market transactions involving similar companies, and/or market values of a similarly traded comparable risk group. One technique to derive a value using market data would be to apply a market value of invested capital to net plant ratio of a comparable risk group to the original cost less depreciation ("OCLD") value of the Beaver Fall's assets. As shown on page 2 of Schedule 2, market value of invested capital to net plant of the water utility proxy group used to derive the weighted average cost of capital ("WACC") in the Income Approach range from 1.3723x to 2.4940x net plant.

In calculating the Beaver Falls' OCLD, ScottMadden relied on the same data as discussed above in Section IV. As of October 21, 2021, the OCLD for Beaver Falls' assets was $5,003,844.[5] Applying the range of market value of invested capital to net plant ratios of 1.3723x to 2.4940x to the estimated OCLD results in an indicated range of values between $6,866,665 and $12,479,523 with an average value of $9,496,121 as shown on page 3 of Schedule 2. Again, since Beavers Falls' value assets do not reflect its value, this measure would significantly understate the indicated value of Beaver Falls.

### B. Comparable Sales Method

ScottMadden also researched transactions involving companies who acquired 100% of a water or sewer interest since 2016. That research returned 107 results from around the country which are contained on pages 4-5 of Schedule 2.[6] A common ratio which can be used to determine the Beaver Fall's market value is transaction value per equivalent domestic unit ("EDU"). The purchase price per EDU ratios for the relevant transactions are also shown on pages 4-5 of Schedule 2. As shown on page 5 of Schedule 2, the nationwide average purchase price to EDU is 4.22x, while the Pennsylvania average purchase price to EDU is 6.63x.[7] Beaver Falls' EDUs were calculated by first finding the average annual residential consumption and then dividing the total annual consumption of the system by the average annual residential consumption. Given the approximate 9,392 EDUs served by Beaver Falls,[8] indicated values using this approach range from $39,667,839 to $62,260,398. In calculating the EDUs for Beaver Falls, ScottMadden relied on consumption data generated by Beaver Falls and

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5 As shown on Column [4] of page 2 of Schedule 1.
6 Transaction details are provided in Appendix F.
7 Multiple in thousands.
8 109,238,000 / 2,880 = 37,930; 356,245,793/ 37,930 = 9,392. Average residential consumption based on customers within the City of Beaver Falls.


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provided by Aqua. Due to the reporting nature of that data, ScottMadden was not able to fully confirm the consumption totals, although ScottMadden did produce figures that were similar to those provided by Aqua. As such, ScottMadden relied on the data provided by Aqua in calculating EDUs for Beaver Falls.

### C. Indication of Value Using the Market Approach

As noted above, because Beaver Falls' underlying assets do not reflect the cash flows generated from the Joint Sewer Users, ScottMadden applied a weight of 10% to the market value of invested capital to net plant approach, and a weight of 90% to the comparable sales approach. Applying those weights results in an indicated value of $46,817,319 for Beaver Falls as shown on page 1 of Schedule 2.

## VI. APPLICATION OF THE INCOME APPROACH

ScottMadden performed an independent study of the value of the income generated from service to its customers. The Income Approach employed by ScottMadden is based on the "highest and best use" assumption that the assets of Beaver Falls would be "maximally productive" or profitable if owned by similar entities.

ScottMadden has prepared a financial model to develop the indicated value of the Subject Interest. The underlying data was taken from Beaver Falls' financial books and records. Due to the limited purposes of these financial statements, they may be incomplete or contain departures from generally-accepted accounting principles. ScottMadden has not audited, reviewed, or compiled these statements and express no assurance of them. Additionally, as noted above, Beaver Falls does not have financial records past 2020.

### A. Operating Revenue Assumptions

The vast majority of Beaver Falls' revenues are tied to fees for the collection, treatment and conveyance of wastewater for customers within Beaver Falls, and fees for treatment and conveyance of wastewater for customers of the Joint Sewer Users.[9] Further, revenues are dependent on two factors; population growth and rate increases. Upon review of U.S. census data for the period 2010 through 2020, ScottMadden has concluded that the Beaver Falls' and Joint Sewer Users' combined population growth will be approximately flat going forward as can be gleaned by US census data. As such, we do not reflect any increase or decrease in future revenues due to customer growth.

In regard to rate increases, as discussed in detail below, because the capital improvements identified by Aqua for the period 2023-2032, ScottMadden assumes the capital improvements identified by Aqua would need to be performed regardless of who owned the system. ScottMadden applied yearly rate increases of 10% every year from 2023 through 2027. The assumption of the 10% annual rate increases are based on the need to recover the capital improvement outlays outlined by Aqua, and listed in Schedule 3, page 5. Regarding the period beginning

[9] The Joint Sewer Users are billed on a wholesale basis.


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2028, on December 8, 2020, Beaver Falls passed an ordinance authorizing yearly increases of 3% for both sewer users within Beaver Falls and for the Joint Sewer Users, which ScottMadden applied starting in 2028 and for each year onwards.[10]

### B. Operating Expense Assumptions

General operating expenses for Beaver Falls are primarily comprised of administrative, wage and benefit, maintenance, operational, contractual, utility, and various miscellaneous expenses. All expenses are assumed to increase at the projected level of the Consumer Price Index[11] ("CPI").

Regarding the Repairs and Maintenance expense, ScottMadden was informed that this expense would be comparable to the 2019 amount due to requirements as noted in Beaver Falls' corrective action plan ($246,620). That expense was increased by the projected CPI for the years 2021 through 2025, which is when the corrective action plan is scheduled to be completed. Starting in 2026, ScottMadden assumed the expense would be comparable to the 2020 level, grown at the projected CPI through 2026 ($216,457), and then grown at the projected CPI into perpetuity.

Regarding the Sewer Line Reimbursement expense, based on information from Beaver Falls', ScottMadden understood the expense to non-operational in nature and as such, did not reflect the ongoing operations of the Subject Interest. Given that, ScottMadden removed the expense from the operating results moving forward.

### C. Future Capital Requirements Assumptions

As noted above, because Beaver Falls did not have an internal capital improvement plan, ScottMadden relied on needed capital improvements as outlined by Aqua. In assessing Aqua's capital plan, ScottMadden sought to only include projects that addressed issues of safety, compliance, and equipment failure. ScottMadden engaged Aqua in discussions to ensure only capital improvement items that fit those needs were included. Table 1 below presents those items, along with the estimated total spend for each item for the period 2023 through 2032:

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10 ScottMadden applied a 3% rate increase for the years 2021 and 2022 as consistent with the Beaver Falls Ordinance; see, Appendix G.

11 ScottMadden employed a CPI projection of 2.25% per year, based on the long-term CPI projection published by *Blue Chip Financial Forecasts*. *See, Blue Chip Financial Forecasts*, Vol. 40, No. 12, December 1, 2021 at 14; Appendix H, at 23.


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**Table 1: Beaver Falls Capital Improvement Summary, 2023 - 2032**

| System Component | Description | Total Spend |
|---|---|---|
| Safety Measures | Miscellaneous | $75,000 |
| Collection | MH Inspections/GIS Based Map Creation | $80,000 |
| Collection | Temporary Metering Program | $100,000 |
| Collection | CCTV Main Inspections | $375,000 |
| Collection | MH Rehabilitation | $400,000 |
| Collection | Prioritized Main Rehabilitation and Replacement | $2,040,000 |
| Collection | New Customer Connections | $125,000 |
| Collection | Existing Lateral Repairs | $500,000 |
| Treatment | Replace Trickling Filter Tower #1 | $250,000 |
| Treatment | HVAC Upgrades in Headworks | $175,000 |
| Treatment | Headwork Room Upgrades | $250,000 |
| Treatment | Screen Replacement | $350,000 |
| Treatment | Electrical Upgrades/Arc Flash Remediation | $1,750,000 |
| Treatment | Convert from Cl Gas to Hypo | $300,000 |
| Treatment | Replace Primary Clarifier Sludge Collector Gear Drives | $250,000 |
| Treatment | SCADA System | $300,000 |
| Treatment | Miscellaneous Repairs | $350,000 |
| Transportation | Replace Dump Truck | $75,000 |
| Safety Measures | PHASE II Site Assess | $100,000 |
| Subtotal Before Contingency | | $7,845,000 |
| Contingency | 10% of Above Items | $784,500 |
| Total | | $8,629,500 |

For the period 2022, ScottMadden relied on the median yearly level of capital improvements based on Aqua's projections ($569,250). For the period 2033, ScottMadden grew the median level of capital improvements by the projected CPI, which resulted in a 2033 capital improvement estimate of $727,109, which ScottMadden continued to grow by the projected CPI into perpetuity.

### D. Discount Rate

After calculating the expected cash flows, an appropriate discount rate must be calculated in order to arrive at a value of the Subject Interest based on the Income Approach. The discount rate is the investor-required expected rate of return on the assets. An investor in any company needs to be compensated for the risk of that investment, and a higher level of risk equates to a higher required rate of return. The overall rate of return in this instance is defined by the WACC. ScottMadden has calculated a discount rate which relates to the traditional method of financing for publicly-traded water and wastewater companies, which uses an equal mix between debt and equity capital.


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For the common equity cost rate, ScottMadden applied the Discounted Cash Flow, Risk Premium and Capital Asset Pricing Models to a proxy group of publicly-traded water companies and a group of non-regulated companies comparable in total risk to the water utility group. Application of these cost of common equity models to these groups results in an indicated cost of common equity of 10.19% which is presented in Appendix H.

The representative capital structure is a hypothetical capital structure based on the range of capital structures for fiscal year 2020 of the publicly-traded proxy group companies used to derive the cost of common equity.[12] For the debt cost rate used in the WACC calculation, ScottMadden used the average Moody's A2 public utility bond rate as of November 30, 2021 for an investor-owned entity.[13] Table 2 below illustrates the assumed WACC of an investor-owned water utility.

**Table 2: Assumed WACC**

| Type of Capital | Cost Rate | Ratio | Weighted Cost |
|---|---|---|---|
| Long-Term Debt | 3.04% | 50.00% | 1.52% |
| Common Equity | 10.19% | 50.00% | 5.10% |
| **Total** | | **100.00%** | **6.62%** |

### E. Indicated Value Using the Income Approach

Inputting the estimated revenue, expense, and capital expenditure data into the model resulted in an indicated value of $39,970,803.

## VII. CONCLUSION OF VALUE – SUBJECT INTEREST

No method of valuation will produce the exact value of a business. A valuation study cannot incorporate market conditions at the time of sale or predict a potential investor's desire, or lack thereof, to acquire the business. ScottMadden has determined the range of values of the Subject Interest based on the relative weighting of the three valuation methods. The weightings indicate the value placed on each appraisal method from the valuation expert.

In ScottMadden's opinion, the Income and Market Approaches should each receive 45% weight and the Cost Approach 10% weight. The reason for this is the Cost Approach does not accurately represent Beaver Falls' value as it cannot reflect the revenues from the Joint Sewer Users. In this instance, the value of Beaver Falls is not only reflected in its physical assets, but its flow volumes with the Joint Sewer Users. The indicated result based on the Cost Approach would remain the same regardless of whether Beaver Falls' assets continue to serve the Joint Sewer Users or not. In lieu of valuing Beaver Falls' contracts with the Joint Sewer Users as intangible assets,

[12] The range of equity ratios of the proxy group companies were from 40.05% to 59.28% at 2020 fiscal year end.
[13] Source of Information: Bloomberg Professional Services.


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ScottMadden has simply assigned less weight to the results of the Cost Approach. The ranges of values and relative weightings of the valuation approaches for each scenario are set forth in Table 3 below:

**Table 3: Conclusion of Value for the Subject Interest**

| Valuation Approach | Indicated Value | Weight | Weighted Value |
|---|---|---|---|
| Cost | $11,446,928 | 10% | $1,144,693 |
| Market | $46,817,319 | 45% | $21,067,793 |
| Income | $39,970,803 | 45% | $17,986,861 |
| **Indicated Value** | | **100%** | **$40,199,347** |

In addition to the purchase price, the parties should consider the value of additional items including, but not limited to, the following: any debt balance, any balance of materials and supplies, prepaid expenses, and outstanding customer accounts receivable at the date of closing.

## VIII. CLOSURE

ScottMadden strived to consider all relevant information and data presented by Aqua and Beaver Falls. ScottMadden appreciates Aqua's and Beaver Falls' willingness to provide critical data necessary to complete the engagement. Again, ScottMadden has no financial interest or contemplated financial interest in the property that is the subject of this report.

Respectfully submitted,



Dylan W. D'Ascendis, CVA, CRRA
Partner
ScottMadden, Inc.



Matthew R. Howard
Manager
ScottMadden, Inc.


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## APPENDIX A: STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS

The conclusion of value arrived at herein is valid only for the stated purpose as of the date of the valuation. All data relied upon by ScottMadden, Inc. was provided before September 7, 2022. All subsequently received data was not considered.

Financial statements and other related information provided by the Aqua, Beaver Falls, or either of their representatives, in the course of the engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods. Except as specifically noted herein, ScottMadden, Inc. has not audited, reviewed, or compiled the financial information provided and, accordingly, expresses no audit opinion or any form of assurance on this information.

Public information has been obtained from sources ScottMadden, Inc. believes to be reliable. However, ScottMadden makes no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information

ScottMadden, Inc. does not provide assurance on the achievability of the results forecasted because unexpected events and circumstances frequently occur; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.

The conclusion of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.

This report and the conclusion of value arrived at herein are for the exclusive use of Aqua for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore, the report and conclusion of value are not intended by ScottMadden, Inc., and should not be construed by the reader, to be investment advice in any manner whatsoever. The conclusion of value represents the considered opinion of ScottMadden, Inc. based on information furnished to it by the Aqua, Beaver Falls, and other sources.

Neither all nor any part of the contents of this report (especially the conclusion of value) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of ScottMadden, Inc.

Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of ScottMadden, Inc. unless previous arrangements have been made in writing.

ScottMadden, Inc. is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. ScottMadden, Inc. does not conduct or provide environmental assessments and has not performed one for the subject property.

No change of any item in this valuation report shall be made by anyone other than ScottMadden, Inc., and it will not have any responsibility for any such unauthorized change.


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ScottMadden has received input from the current management of Beaver Falls concerning the past, present, and prospective operating results of the Subject Interest.

Except as noted, ScottMadden, Inc. has relied on the representations of the Engineering Assessment concerning the value and useful condition of all equipment, real estate, and any other assets, except as specifically stated to the contrary in this report.

ScottMadden, Inc. has no financial interest or contemplated financial interest in the Company that is the subject of this report.


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## APPENDIX B: VALUATION ANALYSTS' REPRESENTATIONS

The analyses, opinions, and conclusion of value included in the valuation report are subject to the specified assumptions and limiting conditions (see Appendix A), and they are the personal analyses, opinions, and conclusion of value of the valuation analysts.

The economic and market data included in the valuation report have been obtained from various printed or electronic reference sources that the valuation analyst believes to be reliable. The valuation analysts have not performed any corroborating procedures to substantiate that data.

The valuation engagement was performed in accordance with the American Institute of Certified Public Accountants Statement on Standards for Valuation Services and the Uniform Standards of Professional Appraisal Practice.

The parties for which the information and use of the valuation report is restricted are identified; the valuation report is not intended to be and should not be used by anyone other than such parties.

The analysts' compensation is fee-based and is not contingent upon the development or reporting of a predetermined value or direction of value that favors the cause of the Aqua, the amount of the estimate of value, or the attainment of a stipulated result.

The valuation analysts relied upon the representations of the Engineering Assessment for estimated reproduction costs and original costs of certain assets during the valuation engagement.

The valuation analysts have no obligation to update the report or the opinion of value for information that comes to their attention after the date of the report.

Signatures of the Analysts:



Dylan W. D'Ascendis, CVA, CRRA
Partner
ScottMadden, Inc.



Matthew R. Howard
Manager
ScottMadden, Inc.


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### *Summary*

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). Dylan joined ScottMadden in 2016 and has become a leading expert witness with respect to cost of capital and capital structure. He has served as a consultant for investor-owned and municipal utilities and authorities for 13 years. Dylan has testified as an expert witness on over 100 occasions regarding rate of return, cost of service, rate design, and valuation before more than 30 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

### *Professional Qualifications & Memberships*

- North Carolina Utility Commission Qualified Utility Valuation Expert
- Pennsylvania Public Utility Commission Registered Utility Valuation Expert
- Member of the Society of Utility and Regulatory Financial Analysts
- Member of the National Association of Certified Valuation Analysts

### *Areas of Specialization*

- Utility Appraisals and Valuations
- Regulation and Rates
- Rate of Return
- Regulatory Strategy

### *Recent Expert Testimony Submission/Appearance*

- Pennsylvania Public Utility Commission - Valuation
- Regulatory Commission of Alaska – Capital Structure
- Federal Energy Regulatory Commission – Rate of Return
- Public Utility Commission of Texas – Return on Equity
- Hawaii Public Utilities Commission – Cost of Service / Rate Design

### *Recent Assignments*

- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the City
- Co-authored a valuation report on behalf of a large investor-owned utility company in response to a new state regulation which allowed the appraised value of acquired assets into rate base
- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies

### *Recent Articles and Speeches*

- Co-Author of: "Decoupling, Risk Impacts and the Cost of Capital", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal, March, 2020
- Co-Author of: "Decoupling Impact and Public Utility Conservation Investment", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal, 130 (2019), 311-319
- "Establishing Alternative Proxy Groups", before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum, April 4, 2019, New Orleans, LA
- "Past is Prologue: Future Test Year", Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit, May 2, 2017, Savannah, GA.
- Co-author of: "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley, The Electricity Journal, May, 2013.


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| Sponsor | Date | Assets Valued | Description |
|---|---|---|---|
| Confidential | 02/2022 | Electric Distribution System | Co-authored valuation report for Internal purposes |
| Confidential | 10/2021 | Water Operations | Co-authored valuation report for Internal purposes |
| Confidential | 10/2021 | Water & Wastewater Operations | Co-authored valuation report for Internal purposes |
| City of York, PA | 06/2021 | Wastewater Operations | Co-authored Valuation Report, which will be a part of an Act 12 Filing |
| Aqua New Jersey, Inc. | 05/2021 | Confidential Water and Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 05/2021 | Confidential Water and Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Ohio, Inc. | 05/2021 | Confidential Water Operations in OH | Authored Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 04/2021 | Confidential Wastewater Operations in PA | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 04/2021 | Confidential Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 02/2021 | Confidential Wastewater Operations in PA | Authored Valuation Report for internal purposes |
| Artesian Water Company, Inc. | 01/2021 | Wastewater Operations for Delaware City, DE | Authored valuation report for internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Fiber Optic Cable Assets | Fiber optic cable available for lease for Internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Duct Bank Assets | Duct banks available for lease for Internal purposes |
| Borough of Lewistown, PA | 08/2020 | Water Operations | Authored valuation report for internal purposes |
| Artesian Water Company, Inc. | 06/2020 | Wastewater Operations for Town of Frankford, DE | Authored valuation report for internal purposes |
| Foster Township, PA | 04/2020 | Water Operations | Authored valuation report for internal purposes |
| City of Erie, PA | 04/2020 | Water Operations | Authored valuation report for internal purposes |
| Delaware County Regional Water Quality Control Authority | 02/2020 | Wastewater Operations | Authored Valuation Report, which is part of an Act 12 Filing |
| Aqua North Carolina, Inc. | 02/2020 | Confidential Water Operations in NC | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 02/2020 | Confidential Water Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Ohio, Inc. | 11/2019 | Confidential Wastewater Operations in OH | Authored Valuation Report for internal purposes |
| Steelton Water Authority | 06/2018 | Water Operations | Authored Valuation Report, which is part of an Act 12 Filing |
| Sara Golvinveaux McGinnes Trust | 04/2018 | Electric Operations of Block Island Power Company | Authored Valuation Report for Superior Court Trial |
| Mahoning Township, PA | 09/2017 | Water and Sewer Assets | Authored Valuation Report, which is part of an Act 12 Filing |
| Atmos Energy Corporation | 09/2016 | Intrastate Natural Gas Pipeline | Authored Valuation for internal purposes. |


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| Sponsor | Date | Assets Valued | Description |
|---|---|---|---|
| Springfield Township, PA | 08/2014 | Water and Sewer Assets | Co-Authored Valuation Report, which was part of House Bill 1379 Filing (similar to PA Act 12) |
| Aqua Illinois, Inc. | 07/2014 | Village of Glenview, IL (North Maine Utilities) Sewer Assets | Co-Authored Valuation report for internal purposes |
| Erie City Water Authority, Erie, PA | 12/2013 | Water Assets | Sponsored Valuation Testimony in Arbitration Hearing |
| City of Allentown, PA | 12/2012 | Water and Sewer Assets | Assisted in the generation of Valuation Report |


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### *Summary*

Matthew is an experienced consultant and a Certified Rate of Return Analyst (CRRA). He has authored and co-authored valuation reports on several occasions and provided primary support on multiple occasions. In addition, he has extensive experience working across a variety of regulatory matters, having supported over 100 proceedings and filings. Mr. Howard earned a B.A. in psychology from the University of Colorado and an M.B.A. with honors, concentrating in finance, from Babson College. Mr. Howard also has experience managing funds for Babson College's endowment and conducting investment research at an investment advisory during a summer internship.

### *Areas of Specialization*

- Return on Equity
- Valuation
- Capital structure
- Rates and regulation
- Business risk assessment
- Capital market assessment
- Financial modeling

### *Recent Assignments*

- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Co-authored valuation report on behalf of investor-owned utility for internal planning purposes
- Provides ongoing primary support across various Return on Equity proceedings

| Sponsor | Date | Assets Valued | Description |
|---|---|---|---|
| CSWR-Texas Utility Operating Company, LLC | 04/2022 | North Orange Water & Sewer, LLC | Authored Valuation Report for Sale, Transfer, or Merger Filing in Texas. |
| Confidential | 02/2022 | Electric Distribution System | Co-authored valuation report for Internal purposes |
| Confidential | 10/2021 | Water Operations | Co-authored valuation report for Internal purposes |
| Confidential | 10/2021 | Water & Wastewater Operations | Co-authored valuation report for Internal purposes |
| City of York, PA | 06/2021 | Wastewater Operations | Co-authored Valuation Report, which will be a part of an Act 12 Filing |
| Aqua New Jersey, Inc. | 05/2021 | Confidential Water and Wastewater Operations in NJ | Co-authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 05/2021 | Confidential Water and Wastewater Operations in NJ | Co-authored Valuation Report for internal purposes |
| Aqua Ohio, Inc. | 05/2021 | Confidential Water Operations in OH | Co-authored Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 04/2021 | Confidential Wastewater Operations in PA | Co-authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 04/2021 | Confidential Wastewater Operations in NJ | Supported Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 02/2021 | Confidential Wastewater Operations in PA | Supported Valuation Report for internal purposes |


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| Sponsor | Date | Assets Valued | Description |
|---|---|---|---|
| Artesian Water Company, Inc. | 01/2021 | Wastewater Operations for Delaware City, DE | Co-authored valuation report for internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Fiber Optic Cable Assets | Co-authored valuation report for Internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Duct Bank Assets | Co-authored valuation report for Internal purposes |
| Borough of Lewistown, PA | 08/2020 | Water Operations | Supported valuation report for internal purposes |
| Artesian Water Company, Inc. | 06/2020 | Wastewater Operations for Town of Frankford, DE | Co-authored valuation report for internal purposes |
| Foster Township, PA | 04/2020 | Water Operations | Supported valuation report for internal purposes |
| Delaware County Regional Water Quality Control Authority | 02/2020 | Wastewater Operations | Supported Valuation Report, which will be a part of an Act 12 Filing |
| Aqua North Carolina, Inc. | 02/2020 | Confidential Water Operations in NC | Supported Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 02/2020 | Confidential Water Operations in NJ | Supported Valuation Report for internal purposes |
| Steelton Water Authority | 06/2018 | Water Operations | Supported Valuation Report, which will be a part of an Act 12 Filing |


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# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/11/2022

| Bill To |
|---|
| Big Beaver Borough Sewer Fund<br>114 Forest Drive<br>Darlington, PA 16115 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 1,573 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 6,732.44 |
| 2,074 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 8,876.72 |
| 663 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 2,837.64 |

Please make check payable to Joint Sewer Users

**Total** $18,446.80

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
09/29/2021

| Bill To |
|---|
| Big Beaver Borough Sewer Fund<br>114 Forest Drive<br>Darlington, PA 16115 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 1,737 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 7,434.36 |
| 2,025 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 8,667.00 |
| 675 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 2,889.00 |

Please make check payable to Joint Sewer Users

**Total** $18,990.36

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
06/21/2021

| Bill To |
|---|
| Big Beaver Borough Sewer Fund<br>114 Forest Drive<br>Darlington, PA 16115 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 1,851 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 7,922.28 |
| 1,829 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 7,828.12 |
| 904 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 3,869.12 |
| | | **Total** | $19,619.52 |

Please make check payable to Joint Sewer Users

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
03/22/2021

| Bill To |
|---|
| Big Beaver Borough Sewer Fund<br>114 Forest Drive<br>Darlington PA 16115 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 1,383 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 5,753.28 |
| 2,778 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 11,889.84 |
| 721 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 3,085.88 |

Please make check payable to Joint Sewer Users

**Total** $20,729.00

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 12/31/2021 | DEC21 |

PAID
03/01/2022

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/30/2022 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 508.8 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 2,177.66 |
| 15 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/QUALITY LIQUID FEED-WASTEWATER | 4.28 | 64.20 |
| 2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 8.56 |
| 4.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 19.26 |
| 50.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 214.86 |
| 43.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 186.18 |
| 33.031 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 141.37 |
| 711.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 3,043.94 |

Please make check payable to Joint Sewer Users

**Total** $5,856.03

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 11/30/2021 | NOV21 |

PAID
03/01/2022

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 12/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 515.1 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 2,204.63 |
| 12.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 53.50 |
| 2.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 9.42 |
| 15 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN TRANSFER-LEACHATE | 4.28 | 64.20 |
| 23.6 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 101.01 |
| 7.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/QUALITY LIQUID FEED-WASTEWATER | 4.28 | 32.10 |
| 24 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 102.72 |
| 557.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,385.67 |

Please make check payable to Joint Sewer Users

**Total** $4,953.25

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 10/31/2021 | OCT21 |

PAID
03/01/2022

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 11/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 715.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 3,061.91 |
| 5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 21.40 |
| 2.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 11.56 |
| 21 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 89.88 |
| 32.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 139.10 |
| 21 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/QUALITY LIQUID FEED-WASTEWATER | 4.28 | 89.88 |
| 582.9 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,494.81 |

Please make check payable to Joint Sewer Users

**Total** $5,908.54

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 9/30/2021 | SEPT21 |

PAID
10/27/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 602.3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 2,577.84 |
| 6.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 27.82 |
| 2.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 9.42 |
| 17.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 74.47 |
| 9 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN TRANSFER-LEACHATE | 4.28 | 38.52 |
| 48 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 205.44 |
| 12 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/QUALITY LIQUID FEED-WASTEWATER | 4.28 | 51.36 |
| 706.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 3,023.82 |

Please make check payable to Joint Sewer Users

**Total** $6,008.69

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | AUG21 |

PAID
10/07/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 9/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 650.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL -WASTEWATER | 4.28 | 2,784.14 |
| 2.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 9.42 |
| 3.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE- WASTEWATER | 4.28 | 14.98 |
| 41.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 177.62 |
| 42.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 181.90 |
| 687.6 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,942.93 |

Please make check payable to Joint Sewer Users

**Total** $6,110.99

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 7/31/2021 | JULY21 |

PAID
10/07/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 8/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 648.55 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 2,775.79 |
| 5.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 24.40 |
| 25.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 110.00 |
| 7.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN TRANSFER STATION-LEACHATE | 4.28 | 32.10 |
| 26 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 111.28 |
| 22.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/QUALITY LIQUID FEED-WASTEWATER | 4.28 | 96.30 |
| 24.704 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 105.73 |
| 572.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,449.02 |

Please make check payable to Joint Sewer Users

**Total** $5,704.62

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 6/30/2021 | JUNE21 |

PAID
10/07/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 610.8 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 2,614.22 |
| 3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 12.84 |
| 10.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 43.66 |
| 51.6 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 220.85 |
| 51 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 218.28 |
| 6.287 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 26.91 |
| 698 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,987.44 |

Please make check payable to Joint Sewer Users

**Total** $6,124.20

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | MAY21 |

PAID
07/12/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 6/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 715.3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 3,061.48 |
| 7.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/6K ADDITIVES-WASTEWATER | 4.28 | 32.10 |
| 19.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.28 | 83.46 |
| 7.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 31.67 |
| 19.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN TRANSFER-WASTEWATER | 4.28 | 83.46 |
| 46 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELK RUN-LEACHATE | 4.28 | 196.88 |
| 1.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MINOTTE-WASTEWATER | 4.28 | 5.14 |
| 26 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 111.28 |
| 39.777 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 170.25 |
| 913.1 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 3,908.07 |

Please make check payable to Joint Sewer Users

**Total** $7,683.79

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 4/30/2021 | APR21 |

PAID
07/12/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 5/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 701.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 3,003.28 |
| 2.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 11.56 |
| 54.2 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 231.98 |
| 1.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MINOTTE-WASTEWATER | 4.28 | 5.99 |
| 4.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN TRANSFER STATION-LEACHATE | 4.28 | 19.26 |
| 38 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 162.64 |
| 645.7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 2,763.60 |

Please make check payable to Joint Sewer Users

**Total** $6,198.31

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 3/31/2021 | MAR21 |

PAID
04/20/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City, PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 736.065 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 3,150.36 |
| 2.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 10.70 |
| 53.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 228.98 |
| 45.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 194.74 |
| 22.694 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 97.13 |
| 794.8 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 3,401.74 |

Please make check payable to Joint Sewer Users

**Total** $7,083.65

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | FEB21 |

PAID
04/07/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 3/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 859.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.28 | 3,678.23 |
| 4.1 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.28 | 17.55 |
| 47.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.28 | 203.30 |
| 17.809 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.28 | 76.22 |
| 58.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.28 | 250.38 |
| 765 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.28 | 3,274.20 |

Please make check payable to Joint Sewer Users

**Total** $7,499.88

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 1/31/2021 | JAN21 |

PAID
03/02/2021

| Bill To |
|---|
| Dalton's Service Co<br>1230 Mercer Rd<br>Ellwood City PA 16117 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 3/2/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 751.3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MUNICIPAL-WASTEWATER | 4.16 | 3,125.41 |
| 3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/CB MINING-WASTEWATER | 4.16 | 12.48 |
| 3 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/PTC ALLIANCE-WASTEWATER | 4.16 | 12.48 |
| 62.4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/ELKRUN-LEACHATE | 4.16 | 259.58 |
| 24.276 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NALCO-WASTEWATER | 4.16 | 100.99 |
| 45.5 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/HONEYWELL-WASTEWATER | 4.16 | 189.28 |
| 1,068 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAHONING LANDFILL-LEACHATE | 4.16 | 4,442.88 |

Please make check payable to Joint Sewer Users

**Total** $8,143.10

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/12/2022

| Bill To |
|---|
| Diane Izzo, Boro Secretary<br>Eastvale Borough<br>510 2nd Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 6 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 25.68 |
| 10 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 42.80 |
| 787 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 3,368.36 |

Please make check payable to Joint Sewer Users

**Total** $3,436.84

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
10/05/2021

| Bill To |
|---|
| Diane Izzo, Boro Secretary<br>Eastvale Borough<br>510 2nd Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 0 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 0.00 |
| 0 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 0.00 |
| 884 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 3,783.52 |

Please make check payable to Joint Sewer Users

**Total** $3,783.52

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
07/21/2021

| Bill To |
|---|
| Diane Izzo, Boro Secretary<br>Eastvale Borough<br>510 2nd Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 0 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 0.00 |
| 0 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 0.00 |
| 807 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 3,453.96 |

Please make check payable to Joint Sewer Users

**Total** $3,453.96

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
04/19/2021

| Bill To |
|---|
| Diane Izzo, Boro Secretary<br>Eastvale Borough<br>510 2nd Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 9 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 37.44 |
| 0 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 0.00 |
| 859 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 3,676.52 |

Please make check payable to Joint Sewer Users

**Total** $3,713.96

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 12/31/2021 | DEC21 |

PAID
01/27/2022

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/30/2022 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 2,603 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 11,140.84 |

Please make check payable to Joint Sewer Users

**Total** $11,140.84

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 11/30/2021 | NOV21 |

PAID
01/03/2022

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 12/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,417 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 14,624.76 |

Please make check payable to Joint Sewer Users

**Total** $14,624.76

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 10/31/2021 | OCT21 |

PAID
01/03/2022

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 11/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 2,775 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 11,877.00 |

Please make check payable to Joint Sewer Users

**Total** $11,877.00

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 9/30/2021 | SEPT21 |

PAID
11/02/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,438 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 14,714.64 |

Please make check payable to Joint Sewer Users

**Total** $14,714.64

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | AUG21 |

PAID
10/04/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 9/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,644 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 15,596.32 |

Please make check payable to Joint Sewer Users

**Total** $15,596.32

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 7/31/2021 | JULY21 |

PAID
08/24/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 8/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,315 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 14,188.20 |

Please make check payable to Joint Sewer Users

**Total** $14,188.20

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 6/30/2021 | JUNE21 |

PAID
07/27/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 4,075 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 17,441.00 |

Please make check payable to Joint Sewer Users

**Total** $17,441.00

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | MAY21 |

PAID
06/17/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 6/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,001 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 12,844.28 |

Please make check payable to Joint Sewer Users

**Total** $12,844.28

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 4/30/2021 | APR21 |

PAID
06/01/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 5/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,012 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 12,891.36 |

Please make check payable to Joint Sewer Users

**Total** $12,891.36

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 3/31/2021 | MAR21 |

PAID
04/19/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 2,803 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 11,996.84 |

Please make check payable to Joint Sewer Users

**Total** $11,996.84

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 2/28/2021 | FEB21 |

PAID
03/10/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 3/30/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,221 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 13,785.88 |

Please make check payable to Joint Sewer Users

**Total** $13,785.88

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 1/31/2021 | JAN21 |

PAID
03/08/2021

| Bill To |
|---|
| North Sewickley Twp Sewer Authority<br>893 Mercer Rd<br>Beaver Falls PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 3/2/2021 | Net 30 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 3,078 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE | 4.28 | 13,173.84 |

Please make check payable to Joint Sewer Users

**Total** $13,173.84

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/27/2022

| Bill To |
|---|
| Borough Secretary<br>Borough of Patterson Heights<br>600 7th Avenue<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 12 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 51.36 |
| 2,886 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 12,352.08 |
| 11 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 47.08 |

Please make check payable to Joint Sewer Users

**Total** $12,450.52

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
09/21/2021

| Bill To |
|---|
| Borough Secretary<br>Borough of Patterson Heights<br>600 7th Avenue<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 7 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 29.96 |
| 2,627 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 11,243.56 |
| 9 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 38.52 |

Please make check payable to Joint Sewer Users

**Total** $11,312.04

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
06/29/2021

| Bill To |
|---|
| Borough Secretary<br>Borough of Patterson Heights<br>600 7th Avenue<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 13 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 55.64 |
| 2,528 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 10,819.84 |
| 9 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 38.52 |

Please make check payable to Joint Sewer Users

**Total** $10,914.00

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
03/29/2021

| Bill To |
|---|
| Borough Secretary<br>Borough of Patterson Heights<br>600 7th Avenue<br>Beaver Falls PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 4 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 16.64 |
| 2,699 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 11,551.72 |
| 6 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 25.68 |

Please make check payable to Joint Sewer Users

**Total** $11,594.04

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/12/2022

| Bill To |
|---|
| Patterson Township<br>1600 19th Ave.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 874 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 3,740.72 |
| 13,054 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 55,871.12 |
| 703 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 3,008.84 |

Please make check payable to Joint Sewer Users

**Total** $62,620.68

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
10/21/2021

| Bill To |
|---|
| Patterson Township<br>1600 19th Ave.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 941 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 4,027.48 |
| 12,554 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 53,731.12 |
| 755 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 3,231.40 |

Please make check payable to Joint Sewer Users

**Total** $60,990.00

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
06/17/2021

| Bill To |
|---|
| Patterson Township<br>1600 19th Ave.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 800 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 3,424.00 |
| 12,538 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 53,662.64 |
| 835 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 3,573.80 |

Please make check payable to Joint Sewer Users

**Total** $60,660.44

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
03/22/2021

| Bill To |
|---|
| Patterson Township<br>1600 19th Ave.<br>Beaver Falls PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 785 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 3,265.60 |
| 12,848 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 54,989.44 |
| 720 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 3,081.60 |

Please make check payable to Joint Sewer Users

**Total** $61,336.64

# Invoice

City of Beaver Falls
Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/12/2022

| Bill To |
|---|
| Patricia Lansberry, Secty<br>West Mayfield Borough<br>3700 W 9th St.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 650 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 2,782.00 |
| 6,107 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 26,137.96 |
| 753 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 3,222.84 |

Please make check payable to Joint Sewer Users

**Total** $32,142.80

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
09/21/2021

| Bill To |
|---|
| Patricia Lansberry, Secty<br>West Mayfield Borough<br>3700 W 9th St.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 356 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 1,523.68 |
| 5,264 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 22,529.92 |
| 632 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 2,704.96 |

Please make check payable to Joint Sewer Users

**Total** $26,758.56

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
06/14/2021

| Bill To |
|---|
| Patricia Lansberry, Secty<br>West Mayfield Borough<br>3700 W 9th St.<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 680 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 2,910.40 |
| 5,659 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 24,220.52 |
| 490 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 2,097.20 |

Please make check payable to Joint Sewer Users

**Total** $29,228.12

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
03/15/2021

| Bill To |
|---|
| Patricia Lansberry, Secty<br>West Mayfield Borough<br>3700 W 9th St.<br>Beaver Falls PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 369 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 1,535.04 |
| 4,854 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 20,775.12 |
| 631 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 2,700.68 |

Please make check payable to Joint Sewer Users

**Total** $25,010.84

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 11/30/2021 | 4Q21 |

PAID
01/12/2022

| Bill To |
|---|
| White Township<br>2511 13th Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 1/14/2022 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 749 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/SEPTEMBER | 4.28 | 3,205.72 |
| 4,351 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/OCTOBER | 4.28 | 18,622.28 |
| 719 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/NOVEMBER | 4.28 | 3,077.32 |

Please make check payable to Joint Sewer Users

**Total** $24,905.32

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 8/31/2021 | 3Q21 |

PAID
10/18/2021

| Bill To |
|---|
| White Township<br>2511 13th Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 10/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 696 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JUNE | 4.28 | 2,978.88 |
| 4,317 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JULY | 4.28 | 18,476.76 |
| 622 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/AUGUST | 4.28 | 2,662.16 |

Please make check payable to Joint Sewer Users

**Total** $24,117.80

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 5/31/2021 | 2Q21 |

PAID
07/14/2021

| Bill To |
|---|
| White Township<br>2511 13th Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 7/15/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 730 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MARCH | 4.28 | 3,124.40 |
| 4,323 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/APRIL | 4.28 | 18,502.44 |
| 685 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/MAY | 4.28 | 2,931.80 |

Please make check payable to Joint Sewer Users

**Total** $24,558.64

# City of Beaver Falls

Water Pollution Control Plant
715 15th St
Beaver Falls, PA 15010

# Invoice

| Date | Invoice # |
|---|---|
| 2/28/2021 | 1Q21 |

PAID
04/19/2021

| Bill To |
|---|
| White Township<br>2511 13th Ave<br>Beaver Falls, PA 15010 |

| Phone # | Fax # |
|---|---|
| 724-843-7184 | 724-843-6787 |

| Due Date | Terms |
|---|---|
| 4/14/2021 | NET 45 |

| Quantity | Description | Rate | Amount |
|---|---|---|---|
| 622 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/DECEMBER | 4.16 | 2,587.52 |
| 4,317 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/JANUARY | 4.28 | 18,476.76 |
| 712 | SEWAGE CHARGE PER THOUSAND GALLONS OF WATER USAGE/FEBRUARY | 4.28 | 3,047.36 |

Please make check payable to Joint Sewer Users

**Total** $24,111.64

# City of Beaver Falls

**Beaver County, Pennsylvania**

# ENGINEERS ASSESSMENT of WASTEWATER SYSTEM ASSETS

**DRAFT #1 - November 24, 2021**

**DRAFT #2 – February 1, 2022**

**FINAL – June 9, 2022**




GANNETT FLEMING

**Pittsburgh, Pennsylvania**

# Contents

1.0 Executive Summary ..... 1

2.0 List of Facilities..... 2

3.0 List of Projects ..... 3

4.0 Methodology ..... 5

5.0 Condition Assessment and Photos ..... 6

6.0 Engineering Support ..... 57

Appendix A – Original Cost of Inventory/Assets

Appendix B – City of Beaver Falls Sewer Maps

# 1.0 Executive Summary

The City of Beaver Falls authorized Gannett Fleming, Inc. on November 5, 2021 to prepare an Act 12 Engineers Assessment Study for sale of its Wastewater System Assets to Aqua, PA. Pennsylvania Act 12 of 2016, amended Chapter 13 of the Pennsylvania Public Utility Code and the Final Implementation Order entered by the Public Utility Commission at Docket No. M-2016-2543193 (collectively, "Act 12") by adding section §1329 Valuation of acquired water and wastewater systems.

The Beaver Falls Wastewater System began initial installation in 1936-1938. The system components covered by this Study consists of gravity separate sanitary sewers and appurtenances within the City of Beaver Falls, one (1) sewage pump station in nearby Eastvale Borough, a sewage force main riding the SR0588 bridge over the Beaver River from Eastvale Borough to Beaver Falls, one (1) wastewater treatment plant (WWTP) and various plant equipment used to operate the WWTP.

An inventory of assets and a determination of original cost of installation as of 2021 is included in Appendix A. The Grand Total Original Cost, as shown on the summary of assets in Appendix A organized by the National Association of Regulatory Utility Commissioners System of Accounts for water and wastewater systems (NARUC account number) = $12,898,487.

A map of the City of Beaver Falls sewers and service area is contained in Appendix B. Photos are contained in the Report Section 5 – Condition Assessment.

## 2.0 List of Facilities:

Based on available records of construction and input from City staff, the following is a list of wastewater facilities:

### 2.1 Sanitary Sewers (See Appendix B):

- Total of 190,442 (36.1 miles) LF of PVC, VCP and CIP-Lined VCP ranging in size from 8-Inch to 24-inch diameter.
- Total of approximately 60,318 LF of service laterals from 3,351 connections.
- Total of 536 brick and 138 concrete manholes.
- Total of approximately 1,400 LF of 8-inch DIP force main connecting the Eastvale Pump Station to the City sewers.
- Total of six meter stations located at the City's boundary with adjacent municipalities along the western edge.

### 2.2 Eastvale Pump Station:

- Gorman-Rupp wet well mounted suction lift pumps installed over a new wet well connected to the original wet well/pump chamber.
- Prefabricated enclosure and packaged controls.
- Onsite emergency power generator (natural gas fueled).

### 2.3 Wastewater Treatment Plant:

- WWTP rated at 4.7 MGD Average Daily Flow (ADF) with primary settling tanks (3), biological contact oxidation towers (2), secondary settling tanks (5), chlorine disinfection tanks (2), anaerobic sludge digesters (2), belt filter press (1), grit separator (1), grease separator (1), various piping, pumps, blowers and controls. Dewatered sludge and process residuals are disposed at a regional landfill.
- Onsite emergency power generator (diesel fuel).
- Operating under NPDES Permit No. PA0026883, effective November 1, 2018 and expires October 31, 2023.

- Constructed under PADEP Part II Sewage Permit No. 0472402 as amended from time to time.

## 3.0 List of Projects:

Based on available records of construction and input from City staff, the following is a list of projects completed by the City:

### 3.1 Sanitary Sewers (See Appendix B):

- 1936-1938 Original VCP gravity sewers and brick manholes installed within the City of Beaver Falls. Sewers ranged in size from 8-inch to 15-inch diameter. Original sewer remaining in service include: 145,990 LF of 8-inch VCP; 4,000 LF of 10-inch VCP; 1,400 LF of 12-inch VCP; 4,200 LF of 15-inchVCP; and 5,100 LF of 8-inch Cured in Place (CIP) Lined VCP.
- 1990 Installed 1,800 LF of 8-inch PVC, 1,700 LF of 15-inch PVC and concrete manholes. The majority of this sewer replaced original sewers. The section from MH 60C to MH 245 eliminated a small pump station.
- 1991 Installed 4,800 LF of 12-inch PVC and concrete manholes to serve West Mayfield Borough and a portion of White Township.
- 1993 Installed 370 LF of 8-inch and 960 LF of 12-inch PVC and concrete manholes to replace original sewers.
- 1996 Replaced and upsized the East Trunk Sewer with 7,700 LF of 18-inch PVC, 11,607 LF of 24-inch PVC and concrete manholes.
- 1998 Replaced 815 LF of 8-inch VCP with 8-inch PVC and installed Cured-in-Place lining of 2,700 LF of 8-inch VCP sewer to rehabilitate and replace original sewers.
- 2008 Cured-in-Place lined 2,100 LF of 8-inch VCP sewer to rehabilitate original sewers.
- 2011 Cured-in-Place lined 300 LF of 8-inch VCP sewer to rehabilitate original sewers.

### 3.2 Eastvale Pump Station:

- 2006 Replacement of the original pump station along with a new force main riding the SR0588 bridge over the Beaver River.

**3.3 Wastewater Treatment Plant:**

- 1936-1938 Original plant consisting of Settling Tanks, Sludge Drying Beds and Anaerobic Digesters/Gas Control Building. Only the Anaerobic Digesters/Gas Control Building and a small portion of the Sludge Drying Beds from the original plant remain in service today.
- 1964 First major plant upgrade/expansion consisting of demolition of the original settling tanks and construction of the "Primary Treatment Plant" with installation of the Main Equipment Building, the Primary Settling Tanks 1-2-3 and the Outfall. All of these facilities remain in service today.
- 1974 Second major plant upgrade/expansion consisting of the construction of the "Secondary Treatment Plant" with installation of the Secondary Pump Station, Oxidation Tower #1, Final Settling Tanks 1-2, Chlorine Contact Tank, new Outfall connecting to the original outfall and the Garage (now known as the tool shop). All of these facilities remain in service today.
- 1996 Third major plant upgrade consisting of the expansion of the Secondary Plant with the installation of the Oxidation Tower #2, the Final Settling Tanks 3-4-5, the Grit Wash and Grease Separator Building, the Aerated Sludge Holding Tank, the Thickened Sludge Storage Tank, the Split Faced Block Garage/Belt Filter Press Building and upgrades to the Secondary Pump Station. All of these facilities remain in service today.
- 2010 Expansion of the Secondary Pump Station Wet Well. This facility remains in service today.
- 2010 Installed the three-bay Equipment Storage Building with Office. This facility remains in service today.

**3.4 Future Plant:**

- To our knowledge, there is no plant held for future use.

## 4.0 Cost Methodology

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and retrieved various records of assets.

A list of inventory/assets was developed of the used and useful utility plant assets (including land and land rights) and any utility plant held for future use that is part of the System Assets. The assets were assigned an account number that conforms to the National Association of Regulatory Utility Commissioners (NARUC) System of Accounts for water and wastewater systems. The List of Inventory/Assets for the City of Beaver Falls wastewater system is shown in Appendix A.

The tables in Appendix A are organized to support the order of the List of Assets summary. Each table includes the following:

- The NARUC Account Number, Asset Description and year installed.
- Quantity, unit and unit price (if applicable) of each asset.
- Original Cost: Values in this column were derived from a found record of the cost at the time of installation.
- Replacement Value Today: If there was not a record of the Original Cost , the Replacement Value Today was derived from Gannett Fleming's opinion of probable cost based on our records from relevant and similar projects. The Replacement Value Today was then trended back to the year of installation using the ENR Construction Cost Index to determine an approximate Original Cost.

## 5.0 Condition Assessment

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and assessed the condition of the assets. Conditions are noted in the section titles.

## 5.1 Sanitary Sewers Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.1.1 Gravity Sewers – Good Condition

The City has diligently pursued routine maintenance, repair, renewal and replacement of the collection system since 1990 as documented in section 3.1. Operations staff reports minimal I&I coming from the City sewers. Plant staff tracks boundary meter flow data and assigns that to the tributary municipalities, then compares that data to the total plant and assigns the difference to the City. The following table summarizes the flow per EDU for the tributary municipalities and the City for several months in 2021.

| 2021 | Dec-20 | JAN | FEB | MAR | APR | MAY | JUN | JUL |
|---|---|---|---|---|---|---|---|---|
| RAIN INCHES | 2.97 | 1.64 | 2.23 | 2.71 | 2.88 | 4.41 | 3.23 | 4.56 |
| EVPS | 5,292,000 | 5,035,000 | 4,648,000 | 5,341,000 | 4,191,000 | 5,875,000 | 3,887,000 | 4,279,000 |
| METER 1 | 6,314,000 | 5,354,000 | 4,193,000 | 5,526,000 | 3,801,000 | 4,666,000 | 2,297,000 | 7,909,000 |
| METER 2 | 5,391,000 | 5,665,000 | 4,991,000 | 6,132,000 | 4,931,000 | 5,764,000 | 3,801,000 | 4,456,000 |
| METER 3 | 3,763,000 | 3,407,000 | 3,917,000 | 6,690,000 | 3,742,000 | 4,363,000 | 3,367,000 | 3,779,000 |
| METER 4 | 2,967,000 | 2,404,000 | 2,317,000 | 2,847,000 | 2,457,000 | 2,446,000 | 1,029,000 | 1,502,000 |
| METER 5 | 2,421,000 | 2,015,000 | 2,533,000 | 3,085,000 | 1,936,000 | 2,237,000 | 1,586,000 | 2,388,000 |
| METER 6 | 4,987,000 | 4,236,000 | 3,312,000 | 5,013,000 | 4,200,000 | 6,747,000 | 3,541,000 | 3,525,000 |
| Trib Total Flow = | 31,135,003 | 28,116,002 | 25,911,002 | 34,634,003 | 25,258,003 | 32,098,004 | 19,508,003 | 27,838,005 |
| Trib EDUs (60 gpcd) = | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 | 2,732 |
| Days/Mo = | 31 | 31 | 28 | 31 | 30 | 31 | 30 | 31 |
| Trib GPD/EDU = | 368 | 332 | 339 | 409 | 308 | 379 | 238 | 329 |
| | | | | | | | | |
| | | | | | | | | |
| BBMA | 1,693,000 | 1,472,000 | 1,382,000 | 1,849,000 | 1,391,000 | 1,955,000 | 1,243,000 | 1,176,000 |
| DALTON | 1,411,600 | 1,957,476 | 1,752,309 | 1,655,059 | 1,448,200 | 1,795,277 | 1,430,887 | 1,332,854 |
| VAL. WASTE | 15,953 | 12,485 | 15,953 | 15,953 | 13,178 | 11,791 | 15,953 | 13,178 |
| TOTAL | 34,255,556 | 31,557,963 | 29,061,264 | 38,154,015 | 28,110,381 | 35,860,072 | 22,197,843 | 30,360,037 |
| PLANT FLOW | 65,290,000 | 67,540,000 | 57,940,000 | 73,750,000 | 57,910,000 | 80,280,000 | 47,660,000 | 53,410,000 |
| CITY OF B.F. | 31,034,444 | 35,982,037 | 28,878,736 | 35,595,985 | 29,799,619 | 44,419,928 | 25,462,157 | 23,049,963 |
| City EDUs (60 gpcd) = | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 | 3,553 |
| Days/Mo = | 31 | 31 | 28 | 31 | 30 | 31 | 30 | 31 |
| City GPD/EDU = | 282 | 327 | 290 | 323 | 280 | 403 | 239 | 209 |

### 5.1.2 Service Sewers – Fair Condition

Per City Ordinance 4044, the customer is responsible for maintenance from their structure to the curb line and the City is responsible for maintenance from the curb line to the main. The City has occasionally assisted customers with issues, such as backwater preventers to stop basement backups.

### 5.1.3 Manholes – Fair Condition

Of the 674 manholes in the City, approximately 80% are brick and 20% are concrete. Operations staff reports minimal I&I from manholes, which indicates they are intact and structurally sound.

### 5.1.4 Meter Stations – Good Condition

The City owns and maintains six (6) boundary meters along the western edge of the City collection system. These meters measure flows contributed by the tributary municipalities. The meters are routinely visited and serviced as needed.

### 5.1.5 Force Main – Good Condition

The City owns and maintains the 8-inch force main from the Eastvale Pump Station, which rides the SR0588 Bridge over the Beaver River and discharges to MH 91. The force main was installed in 2006. There are no known or reported issues with the operation or integrity of the force main.



FIGURE 5.1-1: EASTVALE PUMP STATION FORCE MAIN RIDING THE SR0588 BRIDGE

## 5.2 Eastvale Pump Station Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.2.1 Wet Well – Fair Condition

The Eastvale pump station was upgraded in 2006. The wet well is the original wet well from circa 1993, was determined to be suitable for the expected life of the facility and was not replaced.

### 5.2.2 Pumps and Controls – Good Condition

New wet well mounted, suction lift pumps were installed with the 2006 upgrade. The City routinely checks the pump station and services the pumps as necessary.

### 5.2.3 Enclosure – Good Condition

During the 2006 upgrade, a new enclosure was provided as part of the Gorman-Rupp prepackaged pump station. All electrical and HVAC components are functioning properly.

### 5.2.5 Emergency Power – Good Condition

The emergency generator is natural gas powered. The City performs routine preventative maintenance to keep the generator functioning reliably.

### 5.2.6 Facility Photos



FIGURE 5.2-1: EASTVALE PUMP STATION VICINITY AND SECURITY FENCING



FIGURE 5.2-2: EASTVALE PUMP STATION SITE




FIGURE 5.2-3: EASTVALE PUMP STATION SUCTION LIFT PUMPS



FIGURE 5.2-4: EASTVALE PUMP STATION PUMP CONTROLS




FIGURE 5.2-5: EASTVALE PUMP STATION NATURAL GAS POWERED EMERGENCY GENERATOR

## 5.3 Wastewater Treatment Plant Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

### 5.3.1 Headworks-Preliminary Treatment – Fair Condition

The Headworks facility was constructed with the 1964 upgrade. The screening equipment is original, has been maintained and is serving its intended function. The raw sewage / primary settling pumps and electrical were replaced with the 1996 upgrade.



FIGURE 5.3 - 1: HEADWORKS-PRELIMINARY TREATMENT BUILDING



FIGURE 5.3 - 2: MANUAL BAR SCREEN



FIGURE 5.3 - 3: MECHANICAL BAR SCREEN



FIGURE 5.3 - 4: RAW SEWAGE PUMPS

### 5.3.2 Process Pumps and Blowers – Good Condition

The secondary pumps and the process air blowers were replaced with the 1996 upgrade and remain in service today.



FIGURE 5.3 - 5: SECONDARY/PRIMARY EFFLUENT PUMPS



FIGURE 5.3 - 6: PROCESS BLOWERS

### 5.3.3 Primary Settling – Fair Condition

The primary settling tanks were installed with the 1964 upgrade and remain in service today. While there is some evidence of minor seepage along the tank walls, the tanks appear to be providing the intended treatment.



FIGURE 5.3 - 7: PRIMARY SETTLING TANKS-TOP VIEW



FIGURE 5.3 - 8: PRIMARY SETTLING TANKS-SIDE VIEW

### 5.3.4 Secondary Aeration / Oxidation Towers – Good Condition

Oxidation Tower #1 with the brick façade was installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remains in service today. Oxidation Tower #2 with the bolted steel tank was installed as part of the 1996 expansion and remains in service today.



FIGURE 5.3 - 9: OXIDATION TOWER-TOP VIEW

### 5.3.5 Secondary Settling Tanks – Good Condition

Secondary settling tanks 1 and 2 were installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remain in service today. Secondary settling tanks 3-4-5 were installed as part of the 1996 expansion and remain in service today.




FIGURE 5.3 - 10: SECONDARY SETTLING TANKS AND OXIDATION TOWERS

### 5.3.6 Chlorine Disinfection System and Tanks – Good Condition

The chlorine disinfection system, chlorinator and chlorine contact tanks were installed as part of the 1974 upgrade/expansion and remain in service today.




FIGURE 5.3 - 11: CHLORINE SCALES



FIGURE 5.3 - 12: CHLORINATOR



FIGURE 5.3 - 13: CHLORINE CONTACT TANKS-TOP VIEW

### 5.3.7 Aerated Sludge Thickener – Good Condition

The aerated sludge thickening tank was installed as part of the 1996 upgrade/expansion and remains in service today.



FIGURE 5.3 - 14: SLUDGE THICKENING TANK

### 5.3.8 Thickened Sludge Holding Tank– Good Condition

The thickened sludge holding tank was installed as part of the 1996 upgrade/expansion and remains in service today. The air scrubber system shown in Figure 5.3-15 remains in service today.



FIGURE 5.3 - 15: THICKENED SLUDGE TANK AND AIR SCRIBBER - TOP VIEW

### 5.3.9 Sludge Dewatering Building and Belt Filter Press – Good Condition

The sludge dewatering building and belt filter press used for sludge dewatering were installed as part of the 1996 upgrade/expansion and remain in service today.



FIGURE 5.3 - 16: SLUDGE DEWATERING BUILDING AND SLUDGE CAKE ROLLOFF BOX



FIGURE 5.3 - 17: BELT FILTER PRESS



FIGURE 5.3 - 18: BELT FILTER PRESS

### 5.3.10 Residuals Handling, Grit Separator, Oil/Grease Separator – Good Condition

The residuals handling building, grit separator and oil & grease separator equipment were installed as part of the 1996 upgrade/expansion and remain in service today.



FIGURE 5.3 - 19: RESIDUALS HANDLING BUILDING




FIGURE 5.3 - 20: GRIT SEPARATOR EQUIPMENT




FIGURE 5.3 - 21: OIL & GREASE SEPARATOR

### 5.3.11 Anaerobic Digestion – Poor to Fair Condition

The anaerobic digesters, control building and sludge drying beds (4) were installed as part of the original plant constructed in 1936-1938. The digesters and control building remain in service today. Two of the sludge drying beds were demolished in 2010 to make room for the three-bay garage. Two of the sludge drying beds remain but are not necessarily used as part of normal plant operations. Operators report that the beds are only used to store excessive grit received after a heavy rain fall. They then use their front loader to scoop a little bit out at a time and put it in the roll off dumpster. Operators report they do not routinely use the beds for anything else and are not sure if they can draw sludge from the digesters into the bed. New gas meters and heat exchanger were installed as part of the 1996 upgrade.



FIGURE 5.3 - 22: ANAEROBIC DIGESTER – TOP VIEW - FLOATING COVER



FIGURE 5.3 - 23: ANAEROBIC DIGESTER TANKS - SIDE VIEW



FIGURE 5.3 - 24: DIGESTER BUILDING



FIGURE 5.3 - 25: DIGESTER WASTE GAS BURNER



FIGURE 5.3 - 26: REMAINING SLUDGE DRYING BED



FIGURE 5.3 - 27: ANAEROBIC DIGESTER PIPING AND EQUIPMENT




FIGURE 5.3 - 28: ANAEROBIC DIGESTER WASTE GAS METER

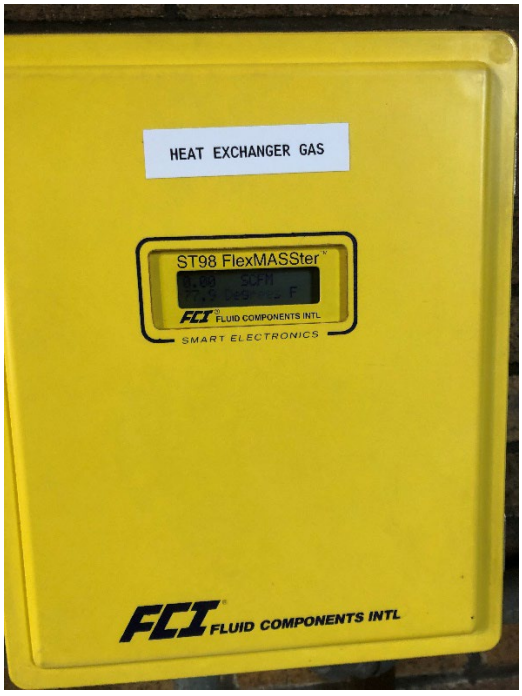



FIGURE 5.3 - 29: ANAEROBIC DIGESTER HEAT EXCHANGER GAS METER

### 5.3.12 Process and Inter-Unit Piping – Good Condition

Process piping was installed during the respective upgrades/expansions and remains in service. Likewise, inter-unit piping that runs between the facilities was installed during the respective upgrades/expansions and remains in service. Inter-unit piping is buried, could not be viewed so condition is assumed good based on discussions with operations staff.

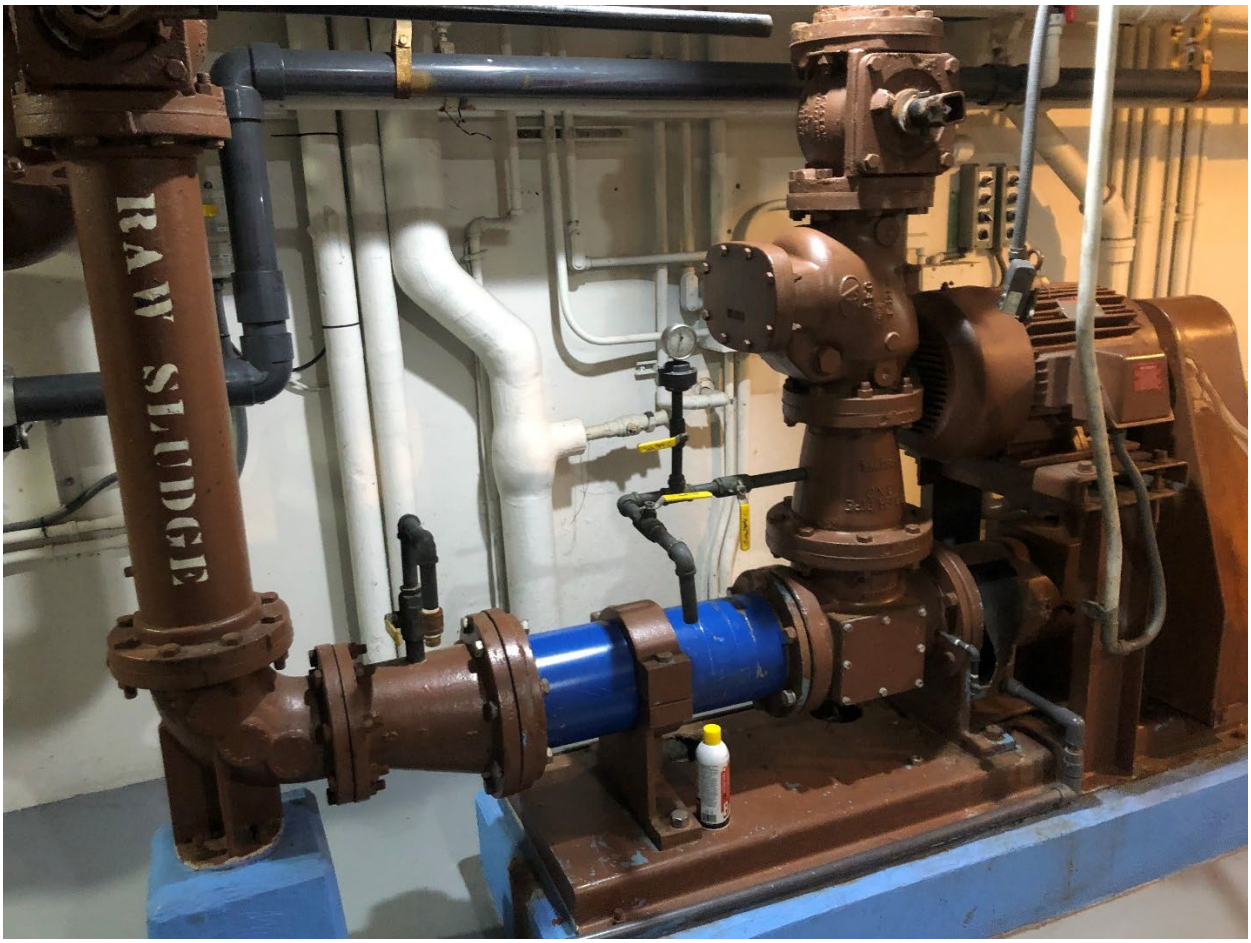



FIGURE 5.3 - 30: SLUDGE TRANSFER PUMPS




FIGURE 5.3 - 31: PRIMARY TANK FEED PIPING

### 5.3.13 Laboratory Equipment – Good Condition

The onsite lab consist of commercial quality casework installed as part of the 1996 upgrade and is used primarily for process control.




FIGURE 5.3 - 32: LAB FUME HOOD



FIGURE 5.3 - 33: LAB CASEWORK AND FUME HOOD

### 5.3.14 Electrical & Instrumentation Facilities – Good Condition

Motor Control Centers, distribution panels, lighting panels, duct banks etc were installed as part of each plant upgrade/expansion to service buildings and equipment being installed with each project.



FIGURE 5.3 - 34: MOTOR CONTROL CENTERS




FIGURE 5.3 - 35: AUTOMATIC TRANSFER SWITCH



FIGURE 5.3 - 36: MOTOR CONTROL CENTER



FIGURE 5.3 - 37: EMERGENCY GENERATOR




FIGURE 5.3 - 38: PLANT FLOW METER

### 5.3.15 HVAC Facilities – Good Condition

Heating, ventilation and air conditioning systems are a combination of electric unit heaters, gas fired unit heaters, roof top AC units, portable AC units, window AC units and a combination heat/AC unit.



FIGURE 5.3 - 39: ELECTRIC UNIT HEATER-GRIT BUILDING



FIGURE 5.3 - 40: ELECTRIC UNIT HEATER OFFICE AREA




FIGURE 5.3 - 41: GAS FIRED UNIT HEATER GARAGE AREA



FIGURE 5.3 - 42: PORTABLE AC UNIT



FIGURE 5.3 - 43:  ROOF TOP AC UNIT OFFICE AREA



FIGURE 5.3 - 44: COMBO HEAT-AC UNIT

### 5.3.16 Three Bay Garage – Good Condition

The three bay garage was installed in 2010 as a stand alone project. This building is used to store the various plant vehicle and equipment and includes a climate controlled office space for operations staff.



FIGURE 5.3 - 45: PEMB VEHICLE AND EQUIPMENT STORAGE BUILDING




FIGURE 5.3 - 46: OFFICE SPACE INSIDE THREE BAY GARAGE



FIGURE 5.3 - 47: WORK STATION IN THREE BAY GARAGE OFFICE SPACE



FIGURE 5.3 - 48: WORK STATION INSIDE GARAGE OFFICE SPACE



FIGURE 5.3 - 49: WORK STATION INSIDE GARAGE OFFICE SPACE




FIGURE 5.3 - 50: WORK STATION INSIDE GARAGE OFFICE SPACE

### 5.3.17 Maintenance Garage – Fair Condition

The maintenance garage was installed as part of the 1964 upgrade/expansion and is used to house various tools, welding equipment and machining equipment, all of which remain in service today.



FIGURE 5.3 - 51: MAINTENANCE GARAGE AND TOOL SHOP BUILDING




FIGURE 5.3 - 52: MAINTENANCE TOOLS




FIGURE 5.3 - 53: MAINTENANCE TOOLS



FIGURE 5.3 - 54: MAINTENANCE TOOLS



FIGURE 5.3 - 55: MAINTENANCE TOOLS

### 5.3.18 Vehicles and Garage Equipment – Good Condition

The following photos show equipment typically stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Tables 8 and 10 of the List of Assets.




FIGURE 5.3 - 56: MOWERS AND BOBCAT SKID STEER




FIGURE 5.3 - 57: PORTABLE PUMP




FIGURE 5.3 - 58: BACKHOE




FIGURE 5.3 - 59: 1992 F350 1-TON DUMP




FIGURE 5.3 - 60: 2020 F250 4X4



FIGURE 5.3 - 61: 2014 F150 4X4

### 5.3.19 Miscellaneous Equipment and Tools

The following photos show equipment and tools stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Table 10 of the List of Assets.



FIGURE 5.3 - 62: SHOP EQUIPMENT




FIGURE 5.3 - 63: SHOP EQUIPMENT AND TOOL CHEST



FIGURE 5.3 - 64: SHOP SUPPLIES

## 6.0 Engineering Support

The Engineer will respond to RFIs on this Study from the buyers and seller's UVE consultants as well as RFIs / questions from the PUC process reviews (BI&E, OCA, etc).

END OF REPORT

# APPENDIX A

# Original Cost of Inventory/Assets

City of Beaver Falls
Beaver, Pennsylvania

**WASTEWATER SYSTEM**
**ORIGINAL COST OF INVENTORY/ASSETS**

# ORGANIZED BY ACCOUNT NUMBER

| ACCOUNT | PROPERTY DESCRIPTION | REFERENCE TABLE | ORIGINAL COST | COMMENTS |
|---|---|---|---|---|
| **353 - Land and Land Rights** | | | | |
| 353.2 | Land & ROW - Collection Sewers | 4 | $ 109.00 | 109 Easements at $1 each |
| 353.3 | Land & ROW - Pumping Station (Eastvale) | 2 | $ 1.00 | 1 Easement at $1 each |
| 353.4 | Land & ROW - Treatment Plant | 1 | $ 36,900.00 | Several lots combined on same deeds |
| | | | **$ 37,010.00** | |
| **354 - Structures and Improvements** | | | | |
| 354.3 | Structures & Imp. - Pumping Station (Eastvale) | 2 | $ 133,168.00 | |
| | | | | |
| 354.4 | Structures & Imp. - WWTP | 1 | $ 4,519,461.75 | |
| | | | **$ 4,652,629.75** | |
| **355 - Power Generation Equipment** | | | | |
| 355.3 | Power Gen. Equip. - Pumping Station | 2 | $ 4,972.78 | |
| 355.4 | Power Gen. Equip. - WWTP | 1 | $ 87,502.00 | |
| | | | **$ 92,474.78** | |
| **360 - Collection Sewers - Force** | | | | |
| | | 3 | **234,542.22** | |
| **361 - Collection Sewers - Gravity** | | | | |
| | | 4 | **$ 3,804,748.05** | |
| **363 - Services to Customers** | | | | |
| | | 5 | **$ 170,292.73** | |
| **364 - Flow Measuring Devices** | | | | |
| | | 6 | **$ 57,104.19** | |
| **371 - Pumping Equipment** | | | | |
| 371.3 | Pumping Equip. - Pumping Station | 2 | $ 236,966.95 | |
| 371.4 | Pumping Equip. - WWTP | 1 | $ 350,796.01 | |
| 371.4 | Pumping Equip. - WWTP Raw Influent Pumping Station | 1 | $ 142,799.00 | |
| | | | **$ 730,561.96** | |
| **380 - Treatment and Disposal Equipment** | | | | |
| 380.4 | Treatment & Disp. - WWTP | 1 | **$ 1,928,800.48** | |
| **381 - Plant Sewers** | | | | |
| 381.4 | Plant Sewers - WWTP | 1 | **$ 721,765.15** | |

City of Beaver Falls
Beaver, Pennsylvania

**WASTEWATER SYSTEM**
**ORIGINAL COST OF INVENTORY/ASSETS**

# ORGANIZED BY ACCOUNT NUMBER

| ACCOUNT | PROPERTY DESCRIPTION | REFERENCE TABLE | ORIGINAL COST | COMMENTS |
|---|---|---|---|---|
| **382 - Outfall Sewer Lines** | | | | |
| 382.4 | Outfall Sewer Lines - WWTP | 1 | $ 70,212.80 | |
| **389 - Other Plant and Misc Equipment** | | | | |
| 389.4 | Other Plant & Misc. Equip. - WWTP | 1 | $ 27,490.27 | |
| **390 - Office Furniture and Equipment** | | | | |
| 390.7 | Office Furniture & Equip. - General Plant | 7 | 8,606.74 | |
| **391 - Transportation Equipment** | | | | |
| 391.7 | Transportation Equip. - General Plant | 8 | 175,120.82 | |
| | | | | |
| **392 - Stores Equipment** | | | | |
| 392.7 | Stores Equip. - General Plant | 9 | $ 14,999.28 | |
| **393 - Tools, Shop, and Garage Equipment** | | | | |
| 393.7 | Tools, Shop, & Garage Equip. - General Plant | 10 | 104,839.62 | |
| **394 - Laboratory Equipment** | | | | |
| 394 | Laboratory Equip. - General Plant | 11 | $ 53,688.11 | |
| **395 - Power Operated Equipment** | | | | |
| 395.7 | Power Operated Equip. - General Plant | 12 | - | |
| **396 - Communication Equipment** | | | | |
| 396.7 | Communication Equip. - General Plant | 13 | 11,600.00 | |
| **397 - Miscellaneous Equipment** | | | | |
| 397.7 | Misc. Equip. - General Plant | 14 | 2,000.00 | |

**GRAND TOTAL ORIGINAL COST = $ 12,898,486.94**
Check **$ 12,898,486.94**

(1) See Reference Tables for project cost break down and corresponding account numbers per pay item.

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| **353.4** | **Land & ROW - Treatment Plant** | | | | | |
| 353.4 | Parcel 01-001-0100.002 | 1930 | 1 | EA | | |
| 353.4 | Parcel 01-001-0100.003 | 1930 | 1 | EA | | |
| 353.4 | Parcel 01-001-0100.004 - DBV 865, pg 279 | 1964 | 1 | EA | $ 10,800.00 | |
| 353.4 | Parcel 01-001-0100.001- DBV 1005, pg 137 | 1973 | 1 | EA | $ 26,100.00 | |
| 353.4 | Parcel 01-001-0100.007- DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-001-0111.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-002-0100.001 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| 353.4 | Parcel 01-002-0101.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | |
| | | | | **SUBTOTAL** | **$ 36,900.00** | |
| | | | **Subtotal** | **Used** | | |
| | | | | | | |
| **354.4** | **Structures & Imp. - WWTP** | | | | | |
| 354.4 | Architect's plans and specifications | 1974 | 1 | LS | $ 150,878.66 | |
| 354.4 | Legal | 1974 | 1 | LS | $ 10,000.00 | |
| 354.4 | Adminstration | 1974 | 1 | LS | $ 3,000.00 | |
| 354.4 | Indirect Costs | 1974 | 1 | LS | $ 8,000.00 | |
| 354.4 | Site | 1974 | 1 | LS | $ 25,000.00 | |
| 354.4 | Architect's plans and specifications | 1996 | 1 | LS | $ 487,083.25 | |
| 354.4 | Legal | 1996 | 1 | LS | $ 26,460.48 | |
| 354.4 | Permits | 1996 | 1 | LS | $ 20,500.00 | |
| 354.4 | Land | 1996 | 1 | LS | $ 10,737.50 | |
| 354.4 | Erosion Control | 1996 | 1 | LS | $ 5,800.00 | |
| 354.4 | Landscaping/Final Grade | 1996 | 1 | LS | $ 14,600.00 | |
| 354.4 | Paving/Subbase | 1996 | 1 | LS | $ 36,000.00 | |
| 354.4 | Ongrade Slab/Sidewalk | 1996 | 1 | LS | $ 17,800.00 | |
| 354.4 | Fences | 1996 | 1 | LS | $ 11,600.00 | |
| 354.4 | Main Equipment Building Original Remaining in Service-Above Grade | 1964 | 1 | LS | $ 30,586.12 | $ 391,800.00 |
| 354.4 | Main Equipment Building Original Remaining in Service-Below Grade | 1964 | 1 | LS | $ 36,456.65 | $ 467,000.00 |
| 354.4 | Power Feed Mains | 1964 | 1 | LS | $ 7,416.24 | $ 95,000.00 |
| 354.4 | Grit Chamber Rebuild CO#1 | 1996 | 1 | LS | $ 5,791.10 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Grit Chamber Painting CO#1 | 1996 | 1 | LS | $ 1,412.82 | |
| 354.4 | Replace Roof Over Existing Bldg CO#3 | 1996 | 1 | LS | $ 39,768.12 | |
| 354.4 | Roof Improvements CO#5 | 1996 | 1 | LS | $ 20,000.00 | |
| 354.4 | Ex. Primary Settling Tank Mech Mods. | 1996 | 1 | LS | $ 11,000.00 | |
| 354.4 | Primary Settling Tanks 1, 2,3 original Remaining in Service | 1964 | 1 | LS | $ 32,006.91 | $ 410,000.00 |
| 354.4 | Ex. Primary Settling Tank General Mods. | 1996 | 1 | LS | $ 20,000.00 | |
| 354.4 | Electrical - Primary Settling Tanks | 1996 | 1 | LS | $ 5,020.00 | |
| 354.4 | Ex Prim Eff Pump Station Gratings/Supports | 1996 | 1 | LS | $ 6,000.00 | |
| 354.4 | Ex Pump Stations Grating & Supports | 1996 | 1 | LS | $ 1,000.00 | |
| 354.4 | Expansion of existing Secondary Pump Station wetwell | 2010 | 1 | LS | $ 146,773.41 | $ 200,000.00 |
| 354.4 | Oxidation Tower 1 - Remaining in Service | 1996 | 1 | LS | $ 136,300.00 | |
| 354.4 | Oxidation Tower 1 - Modification/EPDM | 1996 | 1 | LS | $ 12,095.00 | |
| 354.4 | Oxidation Tower 1 -Brick/Mortar Work | 1996 | 1 | LS | $ 4,800.00 | |
| 354.4 | Ex Ox Tower Stairs/Railings | 1996 | 1 | LS | $ 14,200.00 | |
| 354.4 | Oxidation Tower 2 - Excavate | 1996 | 1 | LS | $ 5,600.00 | |
| 354.4 | Oxidation Tower 2 - Reinforce Steel | 1996 | 1 | LS | $ 26,900.00 | |
| 354.4 | Oxidation Tower 2 - Pipe Encase & Fottomg | 1996 | 1 | LS | $ 8,200.00 | |
| 354.4 | Oxidation Tower 2 - Trough Pour | 1996 | 1 | LS | $ 7,600.00 | |
| 354.4 | Oxidation Tower 2 - Sub-base | 1996 | 1 | LS | $ 6,300.00 | |
| 354.4 | Oxidation Tower 2 - Base slab | 1996 | 1 | LS | $ 41,100.00 | |
| 354.4 | Oxidation Tower 2 - Ring Wall | 1996 | 1 | LS | $ 16,600.00 | |
| 354.4 | Oxidation Tower 2 - Beams | 1996 | 1 | LS | $ 12,600.00 | |
| 354.4 | Oxidation Tower 2 - Vent Walls | 1996 | 1 | LS | $ 5,200.00 | |
| 354.4 | Oxidation Tower 2 - Grout | 1996 | 1 | LS | $ 1,600.00 | |
| 354.4 | Oxidation Tower 2 - Anchor bolts/Tank Plate | 1996 | 1 | LS | $ 4,600.00 | |
| 354.4 | Oxidation Tower 2 - Stair System Piers/Excavate/Reinforce/Pour | 1996 | 1 | LS | $ 8,400.00 | |
| 354.4 | New Ox Tower#2 Grating/frames/ Stairs/Railings | 1996 | 1 | LS | $ 17,500.00 | |
| 354.4 | Ladders Ox Tower CO#3 | 1996 | 1 | LS | $ 1,741.30 | |
| 354.4 | Electrical - Oxidation Towers 1 and 2 | 1996 | 1 | LS | $ 3,220.00 | |
| 354.4 | Recirculation/Distribution Structure | 1996 | 1 | LS | $ 19,000.00 | |
| 354.4 | Manhole "A" | 1996 | 1 | LS | $ 3,700.00 | |
| 354.4 | Recirc/Dist STR. Grating & Supports | 1996 | 1 | LS | $ 4,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Fin. Settling Tanks - Excavate | 1996 | 1 | LS | $ 9,600.00 | |
| 354.4 | Fin. Settling Tanks - Gravel Base | 1996 | 1 | LS | $ 5,600.00 | |
| 354.4 | Fin. Settling Tanks - Slab Reinforcement | 1996 | 1 | LS | $ 21,000.00 | |
| 354.4 | Fin. Settling Tanks - Slab Form & Pour | 1996 | 1 | LS | $ 62,600.00 | |
| 354.4 | Fin. Settling Tanks - Hoppers/Reinforcement | 1996 | 1 | LS | $ 13,000.00 | |
| 354.4 | Fin. Settling Tanks - Hoppers/Form & Pour | 1996 | 1 | LS | $ 21,600.00 | |
| 354.4 | Fin. Settling Tanks - Walls/Reinforcement | 1996 | 1 | LS | $ 24,000.00 | |
| 354.4 | Fin. Settling Tanks - Walls/Form & Pour | 1996 | 1 | LS | $ 74,000.00 | |
| 354.4 | Fin. Settling Tanks - Grout | 1996 | 1 | LS | $ 9,600.00 | |
| 354.4 | Fin. Settling Tanks - Walkways/Form & Pour Embedded Items | 1996 | 1 | LS | $ 13,600.00 | |
| 354.4 | Fin. Settling Tanks - Embedded Items | 1996 | 1 | LS | $ 3,600.00 | |
| 354.4 | Fin. Settling Tanks - Offsite Dirt Handling - All | 1996 | 1 | LS | $ 22,000.00 | |
| 354.4 | Final Sed Tanks-Grating/ Frames/Stairs/Railings | 1996 | 1 | LS | $ 34,000.00 | |
| 354.4 | Ground Stabilization at Final Tanks CO#1 | 1996 | 1 | LS | $ 10,343.30 | |
| 354.4 | Electrical - Final Settling Tanks | 1996 | 1 | LS | $ 9,551.00 | |
| 354.4 | Electrical - Settling Tank Lighting | 1996 | 1 | LS | $ 8,611.00 | |
| 354.4 | Utility Water from Chlorine Tanks to Belt Press Bldg. | 1996 | 1 | LS | $ 13,400.00 | |
| 354.4 | Electrical - Sampler | 1996 | 1 | LS | $ 9,465.00 | |
| 354.4 | Grit Washer/ScumConcentrator/Stairs,Platforms, Railing | 1996 | 1 | LS | $ 4,200.00 | |
| 354.4 | Electrical - Grit Washer | 1996 | 1 | LS | $ 2,265.00 | |
| 354.4 | Aerated Sludge Holding Tank - Excavation | 1996 | 1 | LS | $ 17,600.00 | |
| 354.4 | Aerated Sludge Holding Tank - Gravel Base | 1996 | 1 | LS | $ 9,900.00 | |
| 354.4 | Aerated Sludge Holding Tank - Slab Reinforcement | 1996 | 1 | LS | $ 39,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Slab Form & Pour | 1996 | 1 | LS | $ 49,600.00 | |
| 354.4 | Aerated Sludge Holding Tank - Wall Reinforcement | 1996 | 1 | LS | $ 31,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Wall Form & Pour | 1996 | 1 | LS | $ 77,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Footer Drainage | 1996 | 1 | LS | $ 6,000.00 | |
| 354.4 | Aerated Sludge Holding Tank - Grout | 1996 | 1 | LS | $ 11,000.00 | |
| 354.4 | Thickened Sludge/Belt Press - Reinforcement | 1996 | 1 | LS | $ 12,900.00 | |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | $ 36,800.00 | |
| 354.4 | Thickened Sludge/Belt Press - Slab on Decking | 1996 | 1 | LS | $ 12,600.00 | |
| 354.4 | Thickened Sludge/Belt Press - Excavation | 1996 | 1 | LS | $ 6,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Thickened Sludge/Belt Press - Gravel Base | 1996 | 1 | LS | $ 2,800.00 | |
| 354.4 | Thickened Sludge/Belt Press - Slab Reinforcement | 1996 | 1 | LS | $ 18,000.00 | |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | $ 38,600.00 | |
| 354.4 | Thickened Sludge/Belt Press - Sump/Reinforce/Pour | 1996 | 1 | LS | $ 3,100.00 | |
| 354.4 | Thickened Sludge/Belt Press - Wall Reinforcement | 1996 | 1 | LS | $ 12,900.00 | |
| 354.4 | Thickened Sludge/Belt Press - Wall Form & Pour | 1996 | 1 | LS | $ 22,000.00 | |
| 354.4 | Anerobic Digesters 1 & 2 Original Remaining in Service | 1936-1938 | 1 | LS | $ 5,648.47 | $ 300,105.00 |
| 354.4 | Remove Sludge from Digestor #2 CO#3 | 1996 | 1 | LS | $ 29,447.05 | |
| 354.4 | Add Clean/Patch/Paint Interior Wall s of Digestor #2 CO#3 | 1996 | 1 | LS | $ 7,746.40 | |
| 354.4 | Sludge Drying Bed (one) Remaining in Service | 1936-1938 | 1 | LS | $ 2,823.25 | $ 150,000.00 |
| 354.4 | Digester Control Building Remaining in Service | 1936-1938 | 1 | LS | $ 2,992.64 | $ 159,000.00 |
| 354.4 | Belt Press Bldg - Doors & Windows | 1996 | 1 | LS | $ 21,265.00 | |
| 354.4 | Belt Press Bldg- Access Hatch | 1996 | 1 | LS | $ 4,600.00 | |
| 354.4 | Belt Press Bldg - Ceiling | 1996 | 1 | LS | $ 2,600.00 | |
| 354.4 | Belt Press Bldg - HVAC & Gas Lines | 1996 | 1 | LS | $ 26,300.00 | |
| 354.4 | Belt Press Bldg - Roof/Flr Drains and Plumbing | 1996 | 1 | LS | $ 19,400.00 | |
| 354.4 | Belt Prss Bldg - Carpet Paint/Finishers | 1996 | 1 | LS | $ 12,000.00 | |
| 354.4 | Belt Press Bldg - pipe encasement | 1996 | 1 | LS | $ 5,800.00 | |
| 354.4 | Belt Press Bldg - Roof/Flash | 1996 | 1 | LS | $ 34,000.00 | |
| 354.4 | Belt Press Bldg - Concrete Masonry Unit | 1996 | 1 | LS | $ 48,000.00 | |
| 354.4 | Belt Press Bldg - Insulation | 1996 | 1 | LS | $ 4,000.00 | |
| 354.4 | Belt Filter Press Bldg- Walkways/Railings/Support | 1996 | 1 | LS | $ 79,000.00 | |
| 354.4 | Electrical - Belt Filter Press | 1996 | 1 | LS | $ 15,220.00 | |
| 354.4 | Utility Water Booster System | 1996 | 1 | LS | $ 57,800.00 | |
| 354.4 | Electrical - BFP/Garge, Misc. | 1996 | 1 | LS | $ 12,658.00 | |
| 354.4 | Laboratory/Garage - Excavate & Pour | 1996 | 1 | LS | $ 6,600.00 | |
| 354.4 | Laboratory/Garage - Slab Complete | 1996 | 1 | LS | $ 13,600.00 | |
| 354.4 | Electrical - Lab Office | 1996 | 1 | LS | $ 4,177.00 | |
| 354.4 | Electrical - Garage | 1996 | 1 | LS | $ 4,177.00 | |
| 354.4 | Painting | 1996 | 1 | LS | $ 94,600.00 | |
| 354.4 | Electrical Lighting | 1996 | 1 | LS | $ 7,703.00 | |
| 354.4 | Electrical - Entrance Area Lighting | 1996 | 1 | LS | $ 6,931.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 354.4 | Road Between Existing Bldg & Primary Tanks CO#3 | 1996 | 1 | LS | $ 2,384.32 | |
| 354.4 | Replace Existing Handrail CO#3 | 1996 | 1 | LS | $ 36,563.98 | |
| 354.4 | Additional Fence CO#5 | 1996 | 1 | LS | $ 24,926.85 | |
| 354.4 | Electrical - Panel MCP | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Blowers | 1996 | 1 | LS | $ 2,975.00 | |
| 354.4 | Electrical - Breaker Panels - 2 | 1996 | 1 | LS | $ 4,175.00 | |
| 354.4 | Electrical - Transformers | 1996 | 1 | LS | $ 1,555.00 | |
| 354.4 | Electrical - Panel DP-2 | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Square D Breakers - 2 | 1996 | 1 | LS | $ 3,998.00 | |
| 354.4 | Electrical - Main Pump Building Misc. | 1996 | 1 | LS | $ 12,058.00 | |
| 354.4 | Electrical - Panel DP-1 | 1996 | 1 | LS | $ 66,306.00 | |
| 354.4 | Electrical - Westinghouse Breaker | 1996 | 1 | LS | $ 1,999.00 | |
| 354.4 | Electrical - Duct Banks | 1996 | 1 | LS | $ 11,369.00 | |
| 354.4 | Electrical - ESP System | 1996 | 1 | LS | $ 24,710.00 | |
| 354.4 | Electrical - Interlink RTU | 1996 | 1 | LS | $ 11,097.00 | |
| 354.4 | Electrical Secondary Pump Station Power Feed Mains | 2020 | 1 | LS | $ 69,810.20 | $ 73,000.00 |
| 354.4 | Secondary Pump Station, Garage, Oxidation Tower, Final Settling Tanks 1 & 2 and Chlorine Contact Tanks 1 & 2 original to remain in service | 1974 | 1 | LS | $ 874,793.45 | |
| 354.4 | Three-Bay Metal Vehicle and Equipment Storgae Building with Interior Office Space | 2010 | 1 | LS | $ 376,657.27 | $ 513,250.00 |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 4,519,461.75** | |
| | | | | | | |
| | | | | | | |
| **355.4** | **Power Gen. Equip. - WWTP** | | | | | |
| 355.4 | Electrical - Generator | 1996 | 1 | LS | $ 87,502.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 87,502.00** | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| **371.3** | **Pumping Equip. - WWTP** | | | | | |
| 371.3 | Mission - Grit Pump | 1996 | 1 | EA | $ 10,700.00 | |
| 371.3 | Electrical - Grit Pump | 1996 | 1 | LS | $ 1,910.00 | |
| 371.3 | Flygt Model CT3300 Centrifugal Primary Effluent Pumps | 1996 | 4 | EA | $ 88,000.00 | |
| 371.3 | Ex. Primary Eff. Pump Mods/Control Valve/Mtrs | 1996 | 1 | LS | $ 14,100.00 | |
| 371.3 | Electrical - Primary Pumps | 1996 | 1 | LS | $ 7,641.00 | |
| 371.3 | Install Sewage Sump Simplex system | 1996 | 1 | LS | $ 12,400.00 | |
| 371.3 | Install Sewage Sump Duplex system Zoeller Model #282 | 1996 | 1 | LS | $ 18,900.00 | |
| 371.3 | Electrical - Sump Pumps | 1996 | 1 | LS | $ 1,430.00 | |
| 371.3 | Digester Recirculation Pumps | 1996 | 2 | EA | $ 27,000.00 | |
| 371.3 | Moyno Progressive Cavity Pump, 2000 Series, Model 1G090G1CDQAAA, #AS4702896A, 200GPM, 25', 235RPM, Single Stage, 8 X 8, 7.5HP AC Totally Enclosed Fan Cooled Motor, 1200RPM, Extreme Duty, Unit Base Steel, Complete with piping, connections, wiring and controls. | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 371.3 | PIONEER Self-Priming Pump, Model SBHCP3F-0036DD, #2462, 4 X 4, 3HP with wiring, conrols, piping and connections | 2020 | 1 | LS | $ 2,868.91 | $ 3,000.00 |
| 371.3 | Yale 2-ton capacity spur geared chain hoist with 4 wheel trolley and rail | 2020 | 1 | LS | $ 860.67 | $ 900.00 |
| 371.3 | Moyno Progressive Cavity Primary Sludge Pumps, Model #IHII5GI, 15 HP | 1996 | 2 | EA | $ 32,000.00 | |
| 371.3 | Electrical - Primary Sludge Pumps | 1996 | 1 | LS | $ 3,820.00 | |
| 371.3 | Mission - 4" x 3" x 13" Secondary Sludge Pumps | 1996 | 2 | EA | $ 30,300.00 | |
| 371.3 | Electrical - Secondary Pumps | 1996 | 1 | LS | $ 3,820.00 | |
| 371.3 | Moyno Model #IHII5GICDQAAA - Gravity Belt Thickener Pumps | 1996 | 2 | EA | $ 15,600.00 | |
| 371.3 | Moyno Model IG065GICDQAAA Thickened Sludge Pumps | 1996 | 2 | EA | $ 29,100.00 | |
| 371.3 | Electrical - Sludge Pumps (4) | 1996 | 1 | LS | $ 11,902.00 | |
| 371.3 | Monorail Crane With coffing electric chain hoist and crane rail | 2020 | 1 | LS | $ 1,912.61 | $ 2,000.00 |
| 371.3 | Monorail Crane, 2 ton capacity with Little Mule 2 Ton Capacity Electric Chain Hoist, 4 wheel trolley & 6' tank lift beam | 2020 | 1 | LS | $ 2,677.65 | $ 2,800.00 |
| 371.3 | Wright Safeway 2 Ton Capacity Spur Geared Chain Hoist on 4 Wheel Trolley, complete with Rail and Yale Electric Chain Hoist. | 2020 | 1 | LS | $ 3,251.43 | $ 3,400.00 |
| 371.3 | Flygt Submersible Sewage Pump, Model 3201.180-131011, 3201.180-0380 | 2020 | 1 | LS | $ 23,907.60 | $ 25,000.00 |
| | | | **Subtotal** | **SUBTOTAL** | **$ 350,796.01** | |
| | | | | | | |
| **371.3** | **Raw Sewage Pump Station** | | | | | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 371.3 | Flygt dry pit submersible pumps - Raw | 1996 | 4 | EA | $ 112,400.00 | |
| 371.3 | Concrete Pump Supports Raw Sewage and Prime Sludge Pump | 1996 | 1 | LS | $ 3,900.00 | |
| 371.3 | Core holes and install water seal for pumps | 1996 | 1 | LS | $ 3,600.00 | |
| 371.3 | Chain Hoist filler Plates | 1996 | 1 | LS | $ 3,200.00 | |
| 371.3 | Electrical - Pump Station Misc. | 1996 | 1 | LS | $ 12,058.00 | |
| 371.3 | Electrical - Raw Sewage Pumps | 1996 | 1 | LS | $ 7,641.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 142,799.00** | |
| **380.4** | **Treatment & Disp. - WWTP** | | | | | |
| **380.4** | **Preliminary Treatment Building** | | | | | |
| 380.4 | Fine Screen #1 Remaining in Service | 1964 | 1 | EA | $ 42,311.58 | $ 542,000.00 |
| 380.4 | Fine Screen #2 Remaining in Service | 1964 | 1 | EA | $ 42,311.58 | $ 542,000.00 |
| 380.4 | Install Self Cleaning Wiese-Flo Mechanical Bar Screen & Compactor | 1996 | 1 | LS | $ 56,000.00 | |
| 380.4 | Install Auxiliary Auger for Bar Screen CO#3 | 1996 | 1 | LS | $ 41,342.37 | |
| 380.4 | Install Grit Chamber Equipment | 1996 | 1 | LS | $ 36,000.00 | |
| 380.4 | Worthington Air Compressor | 2020 | 1 | LS | $ 430.34 | $ 450.00 |
| 380.4 | Manning Sampler, Model 6901-DC, #980213AA690102 with refrigerated cabinet base | 2020 | 1 | LS | $ 1,147.56 | $ 1,200.00 |
| 380.4 | Chlorine Gas Monitoring System - Siemens W&T Acute 35 with wiring and controls | 2020 | 1 | LS | $ 3,442.69 | $ 3,600.00 |
| 380.4 | Chlorination System - 2 chlorinators/regulators, 1-Halogen Valve System, 2 - Chlorinators and wiring and controls | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 380.4 | Exhaust Fan, Thru-Wall, 1/3 HP complete with conduit and wiring | 2020 | 1 | LS | $ 143.45 | $ 150.00 |
| 380.4 | ROOTS Connerville Blower, Type FF-Size 610 | 2020 | 1 | LS | $ 1,434.46 | $ 1,500.00 |
| 380.4 | **Primary Settling Tanks 1,2 & 3** | | 3 | EA | | |
| 380.4 | Install Weir/Troughs Ex Prim | 1996 | 1 | LS | $ 36,500.00 | |
| 380.4 | **Oxidation Towers 1** | | | | | |
| 380.4 | Install Media EX tower | 1974 | 1 | LS | $ 155,974.50 | |
| 380.4 | Rotary Distributors | 1974 | 1 | LS | $ 23,907.00 | |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1974 | 1 | LS | $ 2,875.44 | $ 17,067.49 |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 380.4 | **Oxidation Towers 2** | | | | | |
| 380.4 | Install Syn Media New Tower | 1996 | 1 | LS | $ 205,000.00 | |
| 380.4 | Rotary Distributors | 1996 | 1 | LS | $ 65,400.00 | |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1996 | 1 | LS | $ 8,000.00 | |
| 380.4 | **Final Settling Tanks 1 and 2** | | | | | |
| 380.4 | Equipment for Final Settling Tanks 1 & 2 | 1974 | 1 | LS | $ 92,435.00 | |
| 380.4 | **Final Settling Tanks 3, 4 &5** | | | | | |
| 380.4 | Install Fiberglass Troughs/Weirs | 1996 | 1 | LS | $ 36,500.00 | |
| 380.4 | Install Elec and Manual Telescoping Valves | 1996 | 1 | LS | $ 18,000.00 | |
| 380.4 | Sluice Gates | 1996 | 1 | LS | $ 19,000.00 | |
| 380.4 | Install Collectors Final Clarifiers piping | 1996 | 1 | LS | $ 120,000.00 | |
| 380.4 | **Chlorine Contact Tanks 1 & 2 Remaining in Service** | | 2 | EA | | |
| 380.4 | 1-ton cylinder/scale - Remaining in Service | 1996 | 1 | EA | $ 1,640.55 | $ 3,500.00 |
| 380.4 | 150# cylinders and scale - Remaining in Service | 1996 | 4 | EA | $ 1,171.82 | $ 2,500.00 |
| 380.4 | **Anaerobic Digesters 1&2** | | 2 | EA | | |
| 380.4 | Install Digester Meters | 1996 | 1 | LS | $ 11,000.00 | |
| 380.4 | Install Comp Heater & Heat Exchanger (Envirex) | 1996 | 1 | LS | $ 76,000.00 | |
| 380.4 | Duo Deck Conversion | 1996 | 1 | LS | $ 110,000.00 | |
| 380.4 | Install Digester Mixer | 1996 | 1 | LS | $ 48,000.00 | |
| 380.4 | Polytron 2XP Digital Meter | 1996 | 1 | LS | $ 117.18 | $ 250.00 |
| 380.4 | Polysonic Hydra SX40 DFD Flowmeter, Digital Readout | 1996 | 1 | LS | $ 1,218.69 | $ 2,600.00 |
| 380.4 | Siemens Hydra Ranger 200 Flow meter, Digital Readout | 1996 | 1 | LS | $ 890.58 | $ 1,900.00 |
| 380.4 | Maxus Air Compressor, Model EX840100AJ, #10/16/06-00340, 3.2 HP, 60 Gallon Capacity Vertical Tank With Wiring and Controls | 1996 | 1 | LS | $ 257.80 | $ 550.00 |
| 380.4 | **Sludge Holding Tank** | | | | | |
| 380.4 | Sludge Holding Tank aeration system | 1996 | 1 | LS | $ 28,500.00 | |
| 380.4 | Install Blower System | 1996 | 1 | LS | $ 33,600.00 | |
| 380.4 | **Belt Filter Press Building** | | | | | |
| 380.4 | 1.2 meter Roediger Belt Filter Press | 1996 | 1 | LS | $ 165,000.00 | |
| 380.4 | Install Belt Filter Press Conveyors | 1996 | 1 | LS | $ 67,000.00 | |
| 380.4 | Kent Taylor Mag Master Flow Meter, Digital Readout | 1996 | | | $ 374.98 | $ 800.00 |
| 380.4 | Install Polymer Feed & Chlorination Equipment | 1996 | 1 | LS | $ 63,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 380.4 | Floor Drains - Grit Washer | 1996 | 1 | LS | $ 1,500.00 | |
| 380.4 | Install Scum & Grease Floatation/Removal System | 1996 | 1 | LS | $ 47,600.00 | |
| 380.4 | Install Grit Separation Classification System | 1996 | 1 | LS | $ 52,000.00 | |
| 380.4 | Install Sewage Sump Simplex system | 1996 | 1 | LS | $ 12,400.00 | |
| 380.4 | Install Sewage Sump Duplex system | 1996 | 1 | LS | $ 18,900.00 | |
| 380.4 | Install Trickling Filter Tank | 1996 | 1 | LS | $ 89,000.00 | |
| 380.4 | Install submersible Mixer | 1996 | 1 | LS | $ 20,000.00 | |
| 380.4 | Install Odor Control Scrubber System | 1996 | 1 | LS | $ 28,500.00 | |
| 380.4 | Scrubber at Sludge Storage Tank | 1996 | 1 | LS | $ 2,600.00 | |
| 380.4 | Exhaust Hood CO#5 | 1996 | 1 | LS | $ 1,843.84 | |
| 380.4 | PFT Gas Burner | 1996 | 1 | EA | $ 1,124.95 | $ 2,400.00 |
| 380.4 | Equipment for Secondary Pumping Station | 1974 | 1 | LS | $ 29,910.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 1,928,800.48** | |
| **381.4** | **Plant Sewers - WWTP** | | | | | |
| 381.4 | 6" Thickened Sludge Line | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | 24" DIP Oxidation Tower 2 FM | 1996 | 1 | LS | $ 33,500.00 | |
| 381.4 | 24" & 30" DIP Oxidation Tower Effluent | 1996 | 1 | LS | $ 37,100.00 | |
| 381.4 | 16" DIP Oxidation Tower Recirculation | 1996 | 1 | LS | $ 11,000.00 | |
| 381.4 | 24" DIP Overflow | 1996 | 1 | LS | $ 9,700.00 | |
| 381.4 | 24" DIP Final Sed. Tank 3,4&5 Effluent | 1996 | 1 | LS | $ 4,300.00 | |
| 381.4 | 30" DIP Final Sed. Tank Effluent | 1996 | 1 | LS | $ 26,000.00 | |
| 381.4 | 6" Scum Drain/Final Settling Tanks | 1996 | 1 | LS | $ 1,300.00 | |
| 381.4 | 6" DIP Primary Sludge to Sludge Holding Tank | 1996 | 1 | LS | $ 5,200.00 | |
| 381.4 | 6" DIP Primary Sludge from aerated S1 to digesters | 1996 | 1 | LS | $ 7,700.00 | |
| 381.4 | 6" DIP Primary Sludge Well Decant | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | 6" DIP Primary Sludge Pump Suction | 1996 | 1 | LS | $ 2,600.00 | |
| 381.4 | 6" DIP Primary Sludge pump Discharge | 1996 | 1 | LS | $ 4,200.00 | |
| 381.4 | 6" DIP Secondary Sludge Discharge | 1996 | 1 | LS | $ 6,300.00 | |
| 381.4 | 8" DIP Secondary Sludge Suction | 1996 | 1 | LS | $ 8,300.00 | |
| 381.4 | Ex. 8" DIP Tank Drain | 1996 | 1 | LS | $ 9,000.00 | |
| 381.4 | 8" DIP Tank Drain | 1996 | 1 | LS | $ 11,100.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | 6" & 4" DIP Oxidation Tower FM drain | 1996 | 1 | LS | $ 3,400.00 | |
| 381.4 | 4" DIP Grit Slurry Discharge | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | 8" DIP Utility Water Service | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Scum Concentrator/Grit Washer Drains | 1996 | 1 | LS | $ 4,750.00 | |
| 381.4 | Scum Concentrator frm existing line | 1996 | 1 | LS | $ 2,106.00 | |
| 381.4 | 8" PVC Storm Sewer | 1996 | 1 | LS | $ 4,400.00 | |
| 381.4 | 6" PVC Storm Sewer | 1996 | 1 | LS | $ 2,700.00 | |
| 381.4 | 4" , 3", 2" PVC Utility Water | 1996 | 1 | LS | $ 8,600.00 | |
| 381.4 | 2" PVC Potable Water | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Scum Drain to Final Tank Drain | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Belt Filter Press Feed Pump Suction | 1996 | 1 | LS | $ 7,700.00 | |
| 381.4 | Belt Filter Press Feed Discharge | 1996 | 1 | LS | $ 6,000.00 | |
| 381.4 | Belt Filter Press Filtrate | 1996 | 1 | LS | $ 3,100.00 | |
| 381.4 | Thickened Sludge Pump suction | 1996 | 1 | LS | $ 1,450.00 | |
| 381.4 | Drain, 6" DIP Primary Sludge tank drain & 10" DIP drain | 1996 | 1 | LS | $ 9,500.00 | |
| 381.4 | Digester Sludge frm Ex to Belt Press Pumps | 1996 | 1 | LS | $ 3,700.00 | |
| 381.4 | Grit Pump Suction/Discharge | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Grit Washer Overflow | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Scum Conc. Influent | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Scum Conc. Drain | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Scum Conc. Effluent | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Replacement Drain | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Secondary Sludge to Sludge Holding Tank | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Primary Effluent Pump Suction | 1996 | 1 | LS | $ 9,100.00 | |
| 381.4 | Primary Effluent Pump Discharge | 1996 | 1 | LS | $ 16,000.00 | |
| 381.4 | Manhole A | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Sludge Recirc Pumps Suction | 1996 | 1 | LS | $ 1,800.00 | |
| 381.4 | Sludge Recirc Pumps Discharge | 1996 | 1 | LS | $ 2,900.00 | |
| 381.4 | Thickened/Primary Sludge (Dwg 53) | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Aerated Sludge Blowers Intakes | 1996 | 1 | LS | $ 7,300.00 | |
| 381.4 | Aerated Sludge Blowers Discharge | 1996 | 1 | LS | $ 3,600.00 | |
| 381.4 | 16 yard Hydrants and Gate Valves | 1996 | 1 | LS | $ 19,800.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | 27-inch VCP Plant Infl Sewer | 1974 | 300 | LF | $ 10,108.50 | $ 60,000.00 |
| 381.4 | 24-inch DIP Primary Sedimentation Tank Effluent | 1974 | 92 | LF | $ 3,099.94 | $ 18,400.00 |
| 381.4 | 18-inch DIP Oxidation Tower Force Main | 1974 | 178 | LF | $ 5,997.71 | $ 35,600.00 |
| 381.4 | 24-inch DIP Oxidation Tower Effluent | 1974 | 20 | LF | $ 673.90 | $ 4,000.00 |
| 381.4 | 24-inch DIP Overflow | 1974 | 26 | LF | $ 876.07 | $ 5,200.00 |
| 381.4 | 24-inch DIP Final Sedimentation Tanks Effluent | 1974 | 20 | LF | $ 673.90 | $ 4,000.00 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent | 1974 | 266 | LF | $ 8,962.87 | $ 53,200.00 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent Overflow | 1974 | 30 | LF | $ 1,010.85 | $ 6,000.00 |
| 381.4 | 6-inch DIP Primary Sludge Decant | 1974 | 25 | LF | $ 631.78 | $ 3,750.00 |
| 381.4 | 8-inch DIP Secondary Sludge Suction | 1974 | 8 | LF | $ 202.17 | $ 1,200.00 |
| 381.4 | 8-inch DIP Scum Suction | 1974 | 56 | LF | $ 1,415.19 | $ 8,400.00 |
| 381.4 | 8-inch DIP Tank Drain | 1974 | 88 | LF | $ 2,223.87 | $ 13,200.00 |
| 381.4 | 4-inch DIP Force Main Drain | 1974 | 22 | LF | $ 555.97 | $ 3,300.00 |
| 381.4 | 8-inch DIP Digested Sludge Discharge | 1974 | 195 | LF | $ 4,927.89 | $ 29,250.00 |
| 381.4 | 6-inch DIP Scum Discharge | 1974 | 61 | LF | $ 1,541.55 | $ 9,150.00 |
| 381.4 | 2.5-inch PVC Chlorine Solution Discharge | 1974 | 114 | LF | $ 1,920.61 | $ 11,400.00 |
| 381.4 | 10-inch DIP Sewer from Digester Building and Drying Beds | 1936-1938 | 29 | LF | $ 81.87 | $ 4,350.00 |
| 381.4 | 8-inch DIP Sewer from Digester Building and Drying Beds | 1936-1938 | 51 | LF | $ 143.99 | $ 7,650.00 |
| 381.4 | 8-inch DIP Digester Supernatant Drain | 1936-1938 | 5 | LF | $ 14.12 | $ 750.00 |
| 381.4 | 4-inch DIP Sanitary Drain | 1936-1938 | 7 | LF | $ 19.76 | $ 1,050.00 |
| 381.4 | 8-inch DIP Sludge Drying Bed Drain | 1936-1938 | 73 | LF | $ 206.10 | $ 10,950.00 |
| 381.4 | 8-inch DIP Potable Water Main | 1974 | 107 | LF | $ 2,704.02 | $ 16,050.00 |
| 381.4 | 6-inch Potable Water Main | 1974 | 262 | LF | $ 6,621.07 | $ 39,300.00 |
| 381.4 | 4-inch Potable Water Main to Main Equipment Building | 1974 | 110 | LF | $ 2,779.84 | $ 16,500.00 |
| 381.4 | 4-inch Potable Water Main to Primary Effluent Pump Station | 1974 | 301 | LF | $ 7,606.65 | $ 45,150.00 |
| 381.4 | 24-inch DIP Plant Bypass | 1974 | 45 | LF | $ 1,516.27 | $ 9,000.00 |
| 381.4 | 24-inch Primary Tank Bypass | 1974 | 26 | LF | $ 876.07 | $ 5,200.00 |
| 381.4 | 24-inch Abandoned Plant Effluent | 1974 | 19 | LF | $ 640.20 | $ 3,800.00 |
| 381.4 | 24-inch DIP Plant/Primary Tank Bypass | 1974 | 67 | LF | $ 2,257.56 | $ 13,400.00 |
| 381.4 | 24-inch Storm Sewer Line | 1974 | 42 | LF | $ 1,238.29 | $ 7,350.00 |
| 381.4 | 18-inch Storm Sewer Line | 1974 | 18 | LF | $ 454.88 | $ 2,700.00 |
| 381.4 | 8-inch Storm Sewer Line | 1974 | 25 | LF | $ 421.19 | $ 2,500.00 |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | **Plug Valves** | | | | | |
| 381.4 | Raw Sewage Pump Suction | 1996 | 1 | LS | $ 4,500.00 | |
| 381.4 | Raw Pump Sewage Discharge | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Primary Sludge Pump | 1996 | 1 | LS | $ 2,700.00 | |
| 381.4 | Primary Sludge Pump Header | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Primary Sludge Pump Drain | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Primary Sludge Pump Holding Tank | 1996 | 1 | LS | $ 2,400.00 | |
| 381.4 | Primary/Secondary Sludge Connection | 1996 | 1 | LS | $ 1,700.00 | |
| 381.4 | Grit Pump (6") | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Grit Pump (3") | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Scum/Ex Concentrator Feed | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Scum/Drain | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Scum Cone/Influent | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Scum Cone/Drain | 1996 | 1 | LS | $ 1,200.00 | |
| 381.4 | Secondary Sludge Pump | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | Secondary Sludge/Header | 1996 | 1 | LS | $ 1,600.00 | |
| 381.4 | Secondary Sludge/Line | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Effluent Pump/Suction | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Effluent Pump/Discharge | 1996 | 1 | LS | $ 8,000.00 | |
| 381.4 | Oxidation Twr Force Mn | 1996 | 1 | LS | $ 9,000.00 | |
| 381.4 | Ox Twr Force Main Drain | 1996 | 1 | LS | $ 2,200.00 | |
| 381.4 | Final Tank Drain-off | 1996 | 1 | LS | $ 8,500.00 | |
| 381.4 | Utility Water | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | $ 3,700.00 | |
| 381.4 | Belt Press Feed Header | 1996 | 1 | LS | $ 2,600.00 | |
| 381.4 | Heat Exchanger Sludge Recirc | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Overflow Supernatent at Digester | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Digested Sludge (8") | 1996 | 1 | LS | $ 2,100.00 | |
| 381.4 | Digested Sludge (6") | 1996 | 1 | LS | $ 1,800.00 | |
| 381.4 | Pumping Station: 14-inch DIP eccentric plug valve | 1974 | 1 | EA | $ 842.37 | $ 5,000.00 |
| 381.4 | **Check Valves** | | | | | |
| 381.4 | Raw Sewage Pump Discharge | 1996 | 1 | LS | $ 4,700.00 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | Primary Sludge Pump Discharge | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Secondary Sludge Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Primary Effluent Pumps | 1996 | 1 | LS | $ 12,000.00 | |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Thickened Sludge Pumps | 1996 | 1 | LS | $ 2,300.00 | |
| 381.4 | Recirculated Pumps | 1996 | 1 | LS | $ 1,900.00 | |
| 381.4 | Air Cushioned Check Valves | 1974 | 1 | LS | $ 2,228.00 | |
| 381.4 | **Air Check Valves** | | | | | |
| 381.4 | Blower Discharges | 1996 | 1 | LS | $ 2,500.00 | |
| 381.4 | **Mud Valves** | | | | | |
| 381.4 | Final Tank Scum Box | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Chlorine Tank Drains | 1996 | 1 | LS | $ 3,500.00 | |
| 381.4 | Utility Water | 1996 | 1 | LS | $ 2,000.00 | |
| 381.4 | Aeration Sludge Hldg Tank | 1996 | 1 | LS | $ 4,500.00 | |
| 381.4 | **Butterfly Valves** | | | | | |
| 381.4 | Ox Twr Recycle Line | 1996 | 1 | LS | $ 6,200.00 | |
| 381.4 | **Hydrostatic PRV's** | | | | | |
| 381.4 | Final Tanks | 1996 | 1 | LS | $ 2,800.00 | |
| 381.4 | **Gate Valves** | | | | | |
| 381.4 | Final Tank Drains | 1996 | 1 | LS | $ 3,300.00 | |
| 381.4 | Sludge Drain-Off From Final Tanks | 1996 | 1 | LS | $ 4,200.00 | |
| | Pumping Station- Gate Valve | 1974 | 1 | EA | $ 842.37 | $ 5,000.00 |
| 381.4 | **Butterfly Air Line Valves** | | | | | |
| 381.4 | Blower Intakes | 1996 | 1 | LS | $ 2,100.00 | |
| 381.4 | Blower Discharge | 1996 | 1 | LS | $ 1,400.00 | |
| 381.4 | Air Header at Sludge Tank | 1996 | 1 | LS | $ 1,500.00 | |
| 381.4 | Reinsulate pipe at Digester Control Bldg CO#1 | 1996 | 1 | LS | $ 4,092.50 | |
| 381.4 | Gas Line CO#2 | 1996 | 1 | LS | $ 6,367.59 | |
| 381.4 | Water Line CO#2 | 1996 | 1 | LS | $ 5,827.66 | |
| 381.4 | Decant Line CO#2 | 1996 | 1 | LS | $ 1,940.27 | |
| 381.4 | Replace 24" Pipe From Primary Tanks CO#3 | 1996 | 1 | LS | $ 11,429.52 | |
| 381.4 | Piping to Provide Water for Mech Screen CO#3 | 1996 | 1 | LS | $ 9,544.15 | |

## TABLE 1 - WASTEWATER TREATMENT PLANT

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 381.4 | Sampler Valves CO#5 | 1996 | 1 | LS | $ 8,933.43 | |
| 381.4 | Pumping Station: 20-inch DIP | 1974 | 11 | LF | $ 148.26 | $ 880.00 |
| 381.4 | Pumping Station: 18-inch C.I. | 1974 | 3 | LF | $ 37.91 | $ 225.00 |
| 381.4 | Pumping Station: 14-inch DIP | 1974 | 2 | LF | $ 23.59 | $ 140.00 |
| 381.4 | Control Building: 4-inch sludge feed line | 1974 | 1 | LF | $ 8.42 | $ 50.00 |
| 381.4 | Primary Sedimentation Tank: 2.5-inch chlorine feed line | 1974 | 67 | LF | $ 282.20 | $ 1,675.00 |
| 381.4 | Chlorine Contact Tank: 8-inch DIP drain | 1974 | 18 | LF | $ 303.25 | $ 1,800.00 |
| 381.4 | Secondary Pump Station Process Piping, Chlorine Tanks, Final Settling Tanks 1 & 2, Oxidation Tower No. 1 Exterior Piping | 1974 | 1 | LS | $ 71,673.00 | |
| 381.4 | Sluice Gates | 1974 | 1 | LS | $ 21,995.00 | |
| 381.4 | Misc. Sewage Treatment Plant Equipment | 1974 | 1 | LS | $ 13,335.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 721,765.15** | |
| **382.4** | **Outfall Sewer Lines - WWTP** | | | | | |
| 382.4 | 24-inch DIP | 1936-38 | 827 | LF | $ 70,212.80 | $ 149,794.51 |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 70,212.80** | |
| **389.4** | **Other Plant & Misc. Equip. - WWTP** | | | | | |
| 389.4 | Asbestos Abatement | 1996 | 1 | LS | $ 12,490.27 | |
| 389.4 | Asbestos Abatement | 2021 | 1 | LS | $ 15,000.00 | |
| | | | | | | |
| | | | **Subtotal** | **SUBTOTAL** | **$ 27,490.27** | |

**Column Total = Column Totals = $ 7,885,727.46**

## TABLE 2 - PUMPING STATION

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| **353.3** | **Land & ROW** | | | | | | |
| 353.3 | Land & ROW - Pumping Station | | 1 | EA | $ 1.00 | $ 1.00 | |
| | | | | | | | |
| **354.3** | **Structures & Imp. - Pumping Station** | | | | | | |
| 354.3 | Trash Basket and Hoist Assembly | 2006 | 1 | LS | $ 6,468.00 | $ 6,468.00 | |
| 354.3 | 12-inch Drain in front of PS | 2006 | 1 | LS | $ 6,125.00 | $ 6,125.00 | |
| 354.3 | Pump Station Pit Conversion | 2006 | 1 | LS | $ 4,500.00 | $ 4,500.00 | |
| 354.3 | Sandblasting/Painting of Pump Station Wet Well | 2006 | 1 | LS | $ 18,200.00 | $ 18,200.00 | |
| 354.3 | 16" SDR 35 PVC | 2006 | 10 | LF | $ 300.00 | $ 3,000.00 | |
| 354.3 | 16" SDR 35 PVC 45° elbow | 2006 | 1 | EA | $ 650.00 | $ 650.00 | |
| 354.3 | 1" Copper Tube | 2006 | 100 | LF | $ 17.00 | $ 1,700.00 | |
| 354.3 | Water Service Connection | 2006 | 1 | LS | $ 1,000.00 | $ 1,000.00 | |
| 354.3 | Yard Hydrants, Lockable | 2006 | 1 | EA | $ 375.00 | $ 375.00 | |
| 354.3 | Natural Gas Service | 2006 | 1 | LS | $ 1,000.00 | $ 1,000.00 | |
| 354.3 | 1-1/2 " Gas Line | 2006 | 100 | LF | $ 25.00 | $ 2,500.00 | |
| 354.3 | Fencing | 2006 | 150 | LF | $ 75.00 | $ 11,250.00 | |
| 354.3 | Site Preparation | 2006 | 1 | LS | $ 5,000.00 | $ 5,000.00 | |
| 354.3 | Bituminous Pavement/Driveway Restoration | 2006 | 60 | LF | $ 55.00 | $ 3,300.00 | |
| 354.3 | Final Seeding, grading, mulching | 2006 | 1 | LS | $ 2,500.00 | $ 2,500.00 | |
| 354.3 | Portable Bypass Pump System | 2006 | 1 | LS | $ 42,000.00 | $ 42,000.00 | |
| 354.3 | Bypass pumping | 2006 | 60 | Days | $ 325.00 | $ 19,500.00 | |
| 354.3 | Erosion and Sedimentation Control | 2006 | 1 | LS | $ 4,100.00 | $ 4,100.00 | |
| | | | | | | | |
| | | | | **Subtotal** | | **$ 133,168.00** | $ - |
| **355.3** | **Power Gen. Equip. - Pumping Station** | | | | | | |
| 355.3 | Kohler Generator 7KW with transfer switch | 2020 | 1 | EA | | $ 4,972.78 | $ 5,200.00 |
| | | | | **Subtotal** | | **$ 4,972.78** | |
| | | | | | | | |

## TABLE 2 - PUMPING STATION

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| **371.3** | **Pumping Equip. - Pumping Station** | | | | | | |
| 371.3 | Gorman Rupp Package Pump Unt consisting of 2-self priming pumps, model T6A3s-B/WWS, #1355279, 15 Hp, belt dirven, backup natural gas engine, 4 cylinder with cntrols, related piping and 1 control panel model D4-11174, JPP No. GR-8103-1, #06-990-AR4 | 2006 | 1 | LS | | $ 221,670.00 | |
| 371.3 | Electrical Service | 2006 | 1 | LS | | $ 12,000.00 | |
| 371.3 | Hach Sigma 950 rain gauge/controller monitor with wiring | 2006 | 1 | LS | | $ 1,680.80 | $ 2,600.00 |
| 371.3 | Mission RTU Unit | 2006 | 1 | EA | | $ 1,292.92 | $ 2,000.00 |
| 371.3 | Stainless Steel Davit Crane | 2006 | 1 | EA | | $ 323.23 | $ 500.00 |
| | | | | **Subtotal** | | **$ 236,966.95** | |
| | | | | | **Column Total =** | **$375,108.73** | |

## TABLE 3 - Collection Sewers - Force

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 360 | 8" Ductile Iron Pipe | 2006 | 600 | LF | $ 44.00 | $ 26,400.00 | |
| 360 | 8" DIP 90 Degree Long Radius Bends | 2006 | 2 | EA | $ 500.00 | $ 1,000.00 | |
| 360 | 8" DIP 45 Degree Bends | 2006 | 4 | EA | $ 480.00 | $ 1,920.00 | |
| 360 | 8" DIP 22.5 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | |
| 360 | 8" DIP 11.25 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | |
| 360 | 8" DI Pipe (with mc-urethane primer) | 2006 | 800 | LF | $ 130.00 | $ 104,000.00 | |
| 360 | 8"x 6" DIP Tee (with mc-urethane primer) | 2006 | 1 | EA | $ 1,500.00 | $ 1,500.00 | |
| 360 | 8"x 8" Cross Fittings (with mc-urethane primer) | 2006 | 2 | EA | $ 1,750.00 | $ 3,500.00 | |
| 360 | Concrete Pedestals | 2006 | 2 | EA | $ 2,800.00 | $ 5,600.00 | |
| 360 | Manhole Connection | 2006 | 1 | EA | $ 1,000.00 | $ 1,000.00 | |
| 360 | Expansion Joints | 2006 | 2 | EA | $ 3,500.00 | $ 7,000.00 | |
| 360 | Pipe Guide Hangers | 2006 | 150 | EA | $ 175.00 | $ 26,250.00 | |
| 360 | Pipe Insulation Assembly | 2006 | 40 | LF | $ 50.00 | $ 2,000.00 | |
| 360 | Painting DIP | 2006 | 1 | LS | $ 37,000.00 | $ 37,000.00 | |
| 360 | Air/Vacuum Breaker Valves | 2006 | 3 | EA | $ 2,600.00 | $ 7,800.00 | |
| 360 | Additional Cost for Deep Bury for Force Main | 2006 | 1 | LS | | $ 7,612.22 | |
| | | | | | | | |
| | | | | | **Column Total =** | **$ 234,542.22** | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 10010100006 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10010101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10020200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10030203000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 10030303000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020102000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020105000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020713000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20020800000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030313000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030314000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030315000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030317000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030318000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030416000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030417000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030419000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20030431000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20050107000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 20060300000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060301000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060302000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060303000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060305000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060700000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060702000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060902000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 20060923000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40020600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40030104000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40030109000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 40040103000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50010100001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 05001010000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040308000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040400000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50040604000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50050100002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 50050200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 50050314000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 05006010000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60020301000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60030702000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60050100000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 06005040000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60060901000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60061402000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60061901000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60070601000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 60070602000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70010202000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70010300000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021510001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021510002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021600000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70021610000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022000000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022002000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022100001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 70022102001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70022102003 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 07002220000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030101000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030101001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030103000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030105000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030108000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030112000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030115000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030123000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030124000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030125000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030126000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030137000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030138000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030250000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030251000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030252000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030253000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030254000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 70030255000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030256000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030257000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030258000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030259000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030260000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030261000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70030262000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70041400000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70041900000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70042000000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70042009000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 07004230000E | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050200000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050201000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050203000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050208000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209001 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209002 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050209003 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| 353.2 | Land & ROW: Parcel 70050500000 | 1936-38 | 1 | EA | $ 1.00 | $ 1.00 | |
| | | | | | **Subtotal** | **$ 109.00** | |

## TABLE 4 - Collection Sewers - Gravity

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 361 | 8-inch VCP Sewer | 1936-38 | 145,990 | LF | $ 165.00 | $ 453,382.71 | $ 24,088,350.00 |
| 361 | 8-inch PVC Sewer | 1990 | 1,800 | LF | $ 165.00 | $ 117,215.56 | $ 297,000.00 |
| 361 | 8-inch PVC Sewer | 1993 | 370 | LF | $ 165.00 | $ 26,528.18 | $ 61,050.00 |
| 361 | 8-inch PVC Sewer | 1998 | 815 | LF | $ 165.00 | $ 66,396.83 | $ 134,475.00 |
| 361 | 8-inch CIP Sewer | 1998 | 2,700 | LF | $ 165.00 | $ 219,964.95 | $ 445,500.00 |
| 361 | 8-inch CIP Sewer | 2008 | 2,100 | LF | $ 165.00 | $ 240,153.18 | $ 346,500.00 |
| 361 | 8-inch CIP Sewer | 2011 | 300 | LF | $ 165.00 | $ 37,445.24 | $ 49,500.00 |
| 361 | 10-inch VCP Sewer | 1936-38 | 4,000 | LF | $ 180.00 | $ 13,551.59 | $ 720,000.00 |
| 361 | 12-inch VCP Sewer | 1936-38 | 1,400 | LF | $ 195.00 | $ 5,138.31 | $ 273,000.00 |
| 361 | 12-inch PVC Sewer | 1991 | 4,800 | LF | $ 195.00 | $ 377,447.37 | $ 936,000.00 |
| 361 | 12-inch PVC Sewer | 1993 | 960 | LF | $ 195.00 | $ 81,344.40 | $ 187,200.00 |
| 361 | 15-inch VCP Sewer | 1936-38 | 4,200 | LF | $ 225.00 | $ 17,786.47 | $ 945,000.00 |
| 361 | 15-inch PVC Sewer | 1990 | 1,700 | LF | $ 225.00 | $ 150,959.43 | $ 382,500.00 |
| 361 | 18-inch SDR 35 PVC Sewer | 1996 | 7,700 | LF | | $ 638,937.00 | |
| 361 | 24-inch SDR 35 PVC Sewer | 1996 | 11,607 | LF | | $ 1,036,038.00 | |
| 361 | Brick Manholes | 1936-38 | 536 | EA | $ 5,100.00 | $ 51,450.89 | $ 2,733,600.00 |
| 361 | Concrete Manholes | 1936-38 | 138 | EA | $ 5,100.00 | $ 13,246.68 | $ 703,800.00 |
| 361 | Project Development | 1996 | 1 | LS | | $ 257,761.25 | |
| | | | | | **Subtotal** | **$ 3,804,748.05** | |
| | | | | | | | |
| | | | 190,442 | | **Column Total =** | **$ 3,804,857.05** | |

## TABLE 5 - Service to Customers

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 363 | 6-inch Sanitary Service Laterals | 1936-38 | 60,318 | LF | $ 150.00 | $ 170,292.73 | $ 9,047,700.00 |
| | | | | | | | |
| | | | | Column Total = | | **$ 170,292.73** | |

## TABLE 6 - Flow Measuring Device

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 364.3 | Chart Recorder for Flow Meters (Secondary PS) | 2012 | 1 | EA | $ 2,738.00 | |
| 364.3 | Healy-Ruff Co. Depthin feet indicator, #45279-1 with steel tape unit | 2020 | 1 | EA | $ 95.63 | $ 100.00 |
| 364.3 | Endress+Hauser Flow Rate Meter | 2020 | 1 | EA | $ 2,868.91 | $ 3,000.00 |
| 364.3 | Analog Level Meter with Tape | 2020 | 1 | EA | $ 95.63 | $ 100.00 |
| 364.3 | Seimens Sitrans LUT400 Flow Meter Digital Readout | 2020 | 1 | EA | $ 4,494.63 | $ 4,700.00 |
| 364.3 | Echo Flow Hunter II flow and level indicator with Transducer and Wiring | 2020 | 1 | EA | $ 2,486.39 | $ 2,600.00 |
| 364.4 | Electrical Flow Meter | 1996 | 1 | LS | $ 1,555.00 | |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | $ 10,070.00 | |
| 364.4 | Electrical Level Transmitter | 1996 | 1 | LS | $ 4,315.00 | |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | $ 10,070.00 | |
| 364.4 | Electrical Level Transmitter | 1998 | 1 | LS | $ 4,315.00 | |
| 364.4 | Eastvale PS Flow Meters and Chart Recorder | 2006 | 1 | LS | $ 14,000.00 | |
| | | | | **Column Total =** | **$ 57,104.19** | |

## TABLE 7 - Office Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 390.7 | Office Furniture and fixtures - workstations | 2020 | 1 | LS | $ 2,390.76 | $ 2,500.00 |
| 390.7 | Computers, laptops, printers, etc. | 2020 | 1 | LS | $ 4,781.52 | $ 5,000.00 |
| 390.7 | Miscellaneous EDP Equipment, computers, printers | 2020 | 1 | LS | $ 1,434.46 | $ 1,500.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 8,606.74** | |

## TABLE 8 - Transportation Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 391.7 | Ford F250 4x4 Truck, 1,466 miles. | 2020 | EA | 1 | $ 42,707.00 | |
| 391.7 | Ford F150 4x4 Truck, VIN NO. 1FTMF1EM4EKG07810, 36,779 Miles | 2014 | EA | 1 | $ 25,656.00 | |
| 391.7 | Ford F350 1-ton Dump Truck YEAR 1992, VIN No. 1FDKF37GXNNA08298, 90,687Miles, Manual Transmission | 1992 | EA | 1 | $ 29,103.64 | $ 70,000.00 |
| 391.7 | Case Backhoe/Loader Model 580 SUPER L EXTEND-A-HOE, #JJG0195825, 5,828 Hrs, 4 X 4 | 1998 | EA | 1 | $ 49,374.85 | $ 100,000.00 |
| 391.7 | Bobcat Skid Steer Loader, Model 553 C Series, #513012370, 864 Hrs. | 1999 | EA | 1 | $ 20,213.66 | $ 40,000.00 |
| 391.7 | Car Mate Trailer VIN NO. 5A3Y510S12L003959, 5 X 10, 13" Sidewalls | 2002 | EA | 1 | $ 3,217.22 | $ 5,900.00 |
| 391.7 | Mansfield Flatbed Trailer, VIN NO. 1M9BU142X6M620139, 6 X 10 Diamond Plate Deck, Tandem Axle | 2006 | EA | 1 | $ 4,848.45 | $ 7,500.00 |
| | | | | | | |
| | | | **Column Total =** | | **$ 175,120.82** | |

## TABLE 9 - Stores Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| | | | | | | |
| 392.7 | Misc | 1996 | 1 | LS | $ 2,343.64 | $ 5,000.00 |
| 392.7 | Chlorine Scales | 1996 | 2 | LS | $ 7,030.91 | $ 15,000.00 |
| 392.6 | Lockers | 1996 | 3 | LS | $ 937.45 | $ 2,000.00 |
| 392.8 | Shelving | 1996 | 4 | LS | $ 2,343.64 | $ 5,000.00 |
| 392.9 | Storage bins | 1996 | 5 | LS | $ 2,343.64 | $ 5,000.00 |
| | | | | **Column Total =** | **$ 14,999.28** | |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | Gorman-Rupp Trailer Mounted Pump | 2020 | 1 | EA | $ 17,213.47 | $ 18,000.00 |
| 393.7 | Cub Cadet Zero Turn Mower | 2020 | 1 | EA | $ 4,781.52 | $ 5,000.00 |
| 393.7 | Lawn Tractor, Toro Wheel Horse Model 73542, #000000111, Hydrostatic, 1071 HRS | 2020 | 1 | EA | $ 10,136.82 | $ 10,600.00 |
| 393.7 | Capital Equipment TP300 Industrial Trash Pump, 3", Gas 208 CC Engine | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| | Industrial Plus Industrial Trash Pump, 3", 8HP, Gas Fired | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| 393.7 | Drill Press DELTA ModelL 17-900, #8810 | 2020 | 1 | EA | $ 1,434.46 | $ 1,500.00 |
| 393.7 | Miller MIG Welder, Multimatic 220 | 2020 | 1 | EA | $ 2,868.91 | $ 3,000.00 |
| 393.7 | Lincoln Welder, Gas Fired | 2020 | 1 | EA | $ 1,147.56 | $ 1,200.00 |
| 393.7 | Capital Equipment PW3000 Industrial Pressure Washer | 2020 | 1 | EA | $ 956.30 | $ 1,000.00 |
| 393.7 | Stihl TS800 Cutoff Saw with 16-inch wheel | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | Toro CCR3650 Snow blower 6Hp | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | I-R Air Compressor, Gas Fired T10 Series | 2020 | 1 | EA | $ 669.41 | $ 700.00 |
| 393.7 | Capital Equipment 7500D Portable Generator, Diesel Fired, 10 Hrs | 2020 | 1 | EA | $ 2,103.87 | $ 2,200.00 |
| 393.7 | I-R Portable Air Compressor, Gas Fired, T10 SERIES | 2020 | 1 | EA | $ 286.89 | $ 300.00 |
| 393.7 | Porter Cable Portable Air Compressor, Jet Stream Series, Model CPL55GH810, 55HP Gas Engine, 8 Gallon Tank | 2020 | 1 | EA | $ 812.86 | $ 850.00 |
| 393.7 | BOSCH Brute Electric Demolition Jackhammer with hand truck and tooling | 2020 | 1 | EA | $ 908.49 | $ 950.00 |
| 393.7 | HONDA Portable Generator, 8HP, 4000 Watt | 2020 | 1 | EA | $ 1,625.72 | $ 1,700.00 |
| 393.7 | Ridgid KOLLMANN K1500 Sectional Sewer Cleaning Machine | 2020 | 1 | EA | $ 2,486.39 | $ 2,600.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | WEN Construction Zone Series Plate Compactor, 212 CC Gas Engine | 2020 | 1 | EA | $ 669.41 | $ 700.00 |
| 393.7 | I-R Air Compressor, Model TS5, #NAR10524662, 5HP, Vertical Tank With Wiring, Control and Hose Reel | 2020 | 1 | EA | $ 1,912.61 | $ 2,000.00 |
| 393.7 | Shop Crane | 2020 | 1 | EA | $ 239.08 | $ 250.00 |
| 393.7 | VENTUR Electric Truck Bed | 2020 | 1 | EA | $ 286.89 | $ 300.00 |
| 393.7 | Rotary Automotive Lift, Model DP10AN100BBL, #NEP11E0057, 10,000# Capacity with Wiring and Controls | 2020 | 1 | EA | $ 3,538.33 | $ 3,700.00 |
| 393.7 | Western Snowplow Model ProPlow$60390, 8' with mount | 2020 | 1 | EA | $ 3,442.69 | $ 3,600.00 |
| 393.7 | Minor Equipment - shelves, fire ext., time clock, vacuum, floor machine, valet, spare motors, lockers, fans, etc. | 2020 | 1 | LS | $ 4,781.52 | $ 5,000.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 114.76 | $ 120.00 |
| 393.7 | Fairbanks Morse, No. 27 Platform Scale, Twin Beams, 4 x 5 Platform with Mettler Toledo Digital Readout | 2020 | 1 | LS | $ 1,147.56 | $ 1,200.00 |
| 393.7 | Minor Equipment consisting of fire extinguisher and shelving | 2020 | 1 | LS | $ 382.52 | $ 400.00 |
| 393.7 | Minor Equipment - Fire extinguisher , ladder, etc. | 2020 | 1 | LS | $ 143.45 | $ 150.00 |
| 393.7 | Minor Equipment - Trucks, chairs, Fire extinguisher , etc. | 2020 | 1 | LS | $ 248.64 | $ 260.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 114.76 | $ 120.00 |
| 393.7 | Minor Equipment yard tools, cabinets, vacuum, shelf/Cabinet, respirators | 2020 | 1 | LS | $ 1,530.09 | $ 1,600.00 |
| 393.7 | Confined Space Set complete with tripod and lift | 2020 | 1 | LS | $ 1,912.61 | $ 2,000.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 393.7 | Kellogg-America Air Compressor, single stage, 5HP with vertical 60 gallong capacity Tank, complete with piping, connectins, wiring and controls | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Continental Shop Press Model HV100, #10776, 30 ton capacity, hydraulic | 2020 | 1 | LS | $ 478.15 | $ 500.00 |
| 393.7 | Minor equipment consisting of hand tools, power tools, jack, racks, fire extinguisher, etc. | 2020 | 1 | LS | $ 2,773.28 | $ 2,900.00 |
| 393.7 | Rigid 535 Pipe Threader with tooling | 2020 | 1 | LS | $ 2,295.13 | $ 2,400.00 |
| 393.7 | Steel shop table, 8 x 5 with Jib Crane, Vise and Pipe Vise | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Proto tool chest, 4x2x5 1/2 with hand tools | 2020 | 1 | LS | $ 6,694.13 | $ 7,000.00 |
| 393.7 | Lincoln Idealarc 250 Welder | 2020 | 1 | LS | $ 765.04 | $ 800.00 |
| 393.7 | Jet Drill Press Model JDP-20MF, #14046692 | 2020 | 1 | LS | $ 812.86 | $ 850.00 |
| 393.7 | Jet Horizontal Band Saw, Model HBS-916W, #414468 | 2020 | 1 | LS | $ 2,773.28 | $ 2,900.00 |
| 393.7 | Minor Equipment - Fire extinguisher , fan, pump, etc. | 2020 | 1 | LS | $ 286.89 | $ 300.00 |
| 393.7 | Minor Equipment - Desk, Chair, File, Bookcase, Vaccum, Fire extinguisher , air conditioner, etc. | 2020 | 1 | LS | $ 1,721.35 | $ 1,800.00 |
| 393.7 | Minor equipment consisting of ladder, yard tools and fire extinguisher, etc. | 2020 | 1 | LS | $ 172.13 | $ 180.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Devicefor Primary Settling Tanks | 2020 | 1 | LS | $ 573.78 | $ 600.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device ffor Final Settling Tanks 1 & 2 | 2020 | 1 | LS | $ 382.52 | $ 400.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for Final Settling Tanks 3, 4 and 5 | 2020 | 1 | LS | $ 573.78 | $ 600.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for chlorine tanks | 2020 | 1 | LS | $ 382.52 | $ 400.00 |

## TABLE 10 - Tools, Shop and Garage Equipment

| | | | | | | Replacement |
|---|---|---|---|---|---|---|
| NARUC | | | | | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Today |
| 393.7 | Minor equipment consisting of battery chargers. Drum pumps, airless painter, counters, sprayers, ladders, pressure washer, space heaters, air compressor, hand and power tools, hand trucks, fire extinguishers, shop lights, jacks, refrigerators, chain saw, leaf blowers, string trimmers, utility cart, sandblaster, yard tools, files credenza, chairs, vacuum, safety cabinets | 2020 | 1 | LS | $ 7,650.43 | $ 8,000.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 104,839.62** | |

## TABLE 11 - Laboratory Equipment

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|
| 394 | Orio Ph/ RDO/DO meter | 1996 | 1 | LS | $ 1,171.82 | $ 2,500.00 |
| 394 | Glassware | 1996 | 1 | LS | $ 937.45 | $ 2,000.00 |
| 394 | Refrigerator | 1996 | 1 | LS | $ 468.73 | $ 1,000.00 |
| 394 | Manning effluent composite sampler | 2021 | 1 | LS | $ 6,581.00 | $ 6,581.00 |
| 394 | Process Control Equipment | 1996 | 1 | LS | $ 4,687.27 | $ 10,000.00 |
| 394 | Lab Equip & Furniture | 1996 | 1 | LS | $ 39,841.83 | $ 85,000.00 |
| | | | | | | |
| | | | | **Column Total =** | **$ 53,688.11** | |

## TABLE 12 - Power Operated Equipment

| | | | | | | Replacement |
|---|---|---|---|---|---|---|
| NARUC | | | | | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Today |
| 395.7 | See Table 10 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | Column Total = | | $ - | |

## TABLE 13 - Communication Equipment

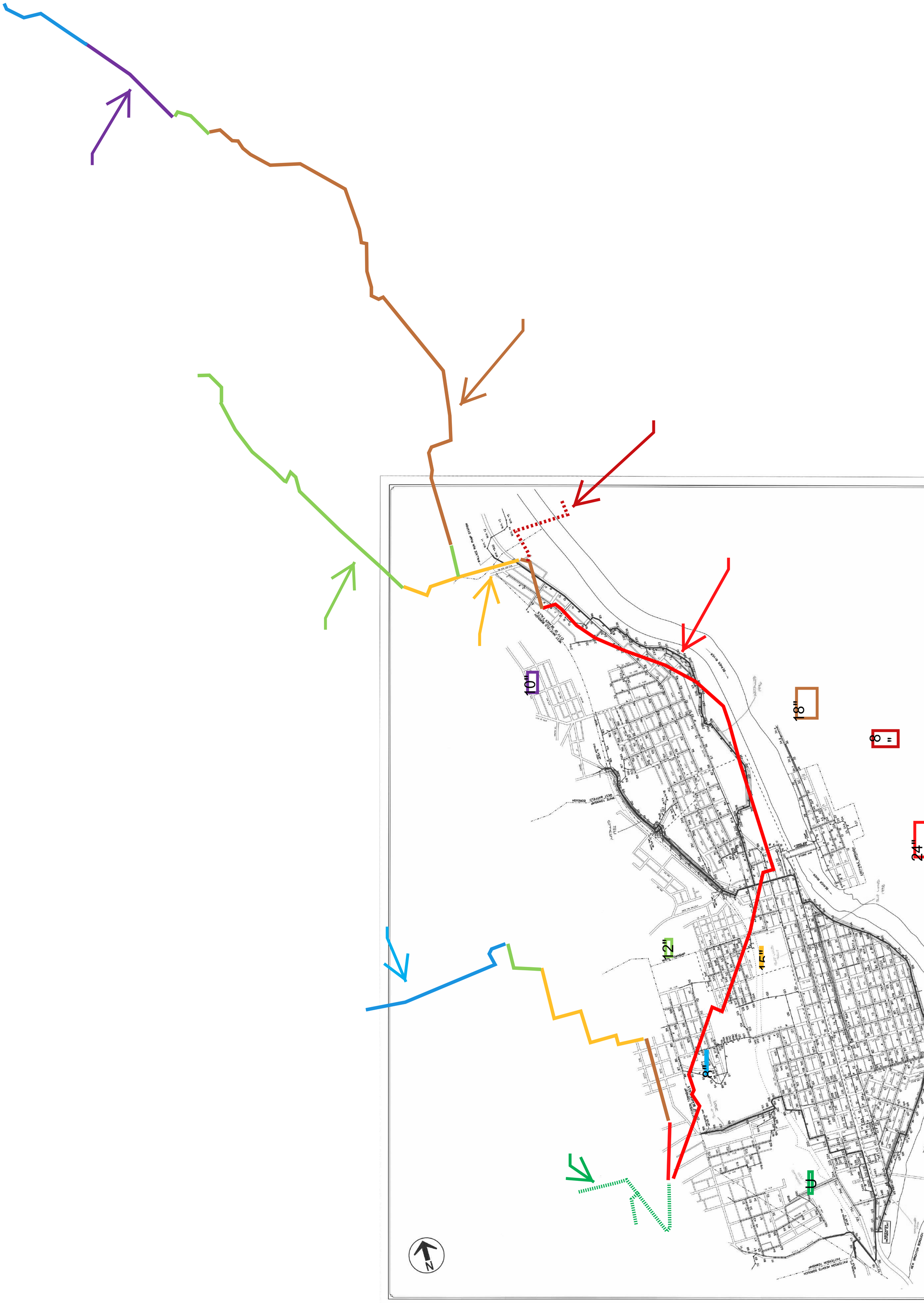
| NARUC Account | Description | Year | Quantity | Unit | Unit Cost | Original Cost | Replacement Value Today |
|---|---|---|---|---|---|---|---|
| 396.7 | iPhone XR's | 2021 | 2 | EA | $ 500.00 | $ 1,000.00 | |
| 396.7 | iPads (4G) | 2021 | 5 | EA | $ 400.00 | $ 2,000.00 | |
| 396.7 | NEC Master Telephone System With PA, Amplifier and phones | 2020 | 1 | LS | $ 8,600.00 | $ 8,600.00 | |
| | | | | **Column Total =** | | **$ 11,600.00** | |

## TABLE 14 - Misc. Equipment

| | | | | | | Replacement |
|---|---|---|---|---|---|---|
| NARUC | | | | | Original | Value |
| Account | Description | Year | Quantity | Unit | Cost | Today |
| 397.9 | Surveillance System - 4-cameras, 2-monitor, 1-controller | 2020 | 1 | LS | $ 1,400.00 | |
| 397.9 | DVR Recorder | 2018 | 2 | LS | $ 600.00 | |
| | | | | | | |
| | | | | Column Total = | **$ 2,000.00** | |

# APPENDIX B

# Appendix B – City of Beaver Falls Sewer Maps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18"
8"
24"
12"
15"
8"
D
N

BUILD ON THE WORLD'S BROADEST RANGE OF SINGLE COUNTRY ETFs.[1] EXPLORE > iShares by BLACKROCK +
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**Business (Http://Www.Philly.Com/Business)**

# Aqua America buys Gilbertsville's Superior Water Co. for $16.8M

**Updated:** JANUARY 6, 2016 — 1:08 AM EST

by **Andrew Maykuth**, Staff Writer @Maykuth (http://twitter.com/@Maykuth) | amaykuth@phillynews.com (mailto:amaykuth@phillynews.com)

Aqua America Inc., of Bryn Mawr, has acquired a private Montgomery County water utility that serves a growing part of Southeastern Pennsylvania.

Aqua's Pennsylvania subsidiary bought Superior Water Co. Inc. in Gilbertsville for $16.8 million in stock Monday. Superior's five water systems serve 3,868 customers in Berks, Chester, and Montgomery Counties.

The Pennsylvania Public Utility Commission, which approved the merger Sept. 17, said the ownership change will be transparent to Superior's customers, who will continue to receive service under the same rates and terms.

The agreement provides for Superior to be operated as Aqua's subsidiary. The companies said the merger would provide economies of scale that would multiply as Superior is folded into Aqua.

Last year, North Coventry Water Authority, whose Chester County territory adjoins Superior's Suburbia water system, protested, then dropped its opposition of the merger. North Coventry said state environmental regulators had found "persistent" water-quality violations in Suburbia's system.

Aqua spokeswoman Donna Alston said there are no longer problems. "Currently, all of the Superior water systems are compliant with state environmental regulations," she said.

Aqua serves three million people in eight states, including 420,000 connections representing a population of 1.4 million in 31 Pennsylvania counties. Last year, it acquired 16 systems that added 10,588 connections to its base.





amaykuth@phillynews.com (mailto:amaykuth@phillynews.com)

215-854-2947 @maykuth

Read more by **Andrew Maykuth**

**Published:** January 5, 2016 — 5:44 PM EST | **Updated:** January 6, 2016 — 1:08 AM EST

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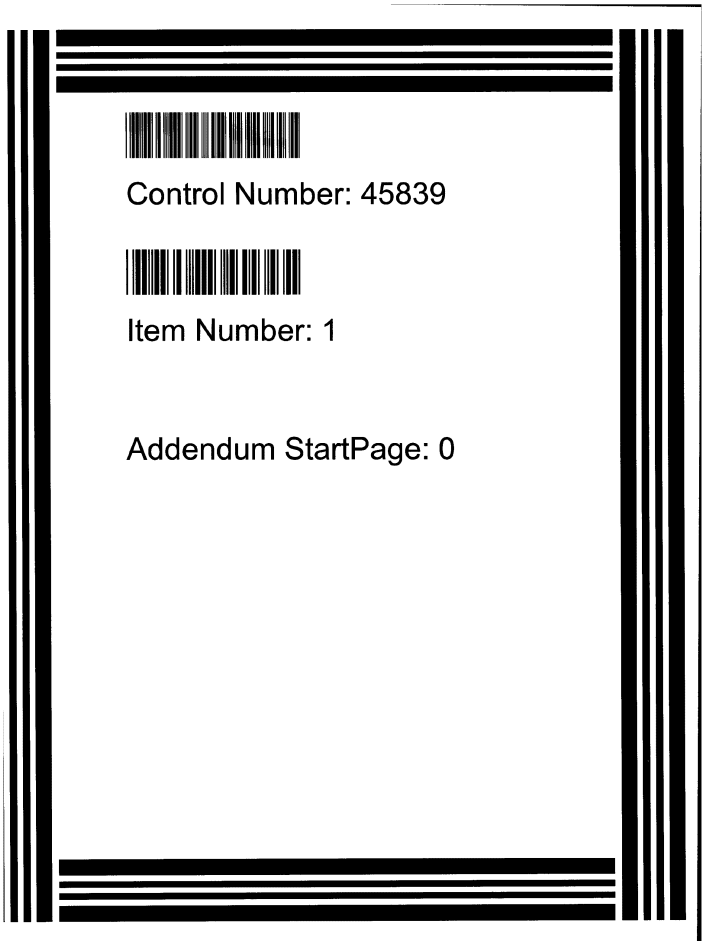

# Application for Sale, Transfer, or Merger of a Retail Public Utility

Pursuant to Chapter 13.251 of the Texas Water Code

**Docket Number: 45839**

(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

RECEIVED
2016 APR 11 AM 10:36
PUBLIC UTILITY COMMISSION FILING CLERK

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

TABLE OF CONTENTS

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 9
**Part E – Projected Information** ..... 12
**Part F – Public Water System Information** ..... 16
**Part G – Oaths and Notices** ..... 18



## Part A – General Information

*RN# [ ] *CN# [ ] * (PRIOR TCEQ ID numbers)

1. Proposed action of application (check all the boxes that apply):
   - [ ] Sale of [X] All [ ] Portion of the [X] Water system(s) under CCN No.: 13125
   - [X] Acquisition [ ] Sewer system(s) under CCN No.:
   - [ ] Lease/Rental

   [X] Transfer of [X] All [ ] Portion of the [X] Certificated water service area – CCN No.: 13125
   [ ] Certificated sewer service area – CCN No.:

   If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

   N/A

   and to:
   - [ ] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
   - [X] Amend the transferee's CCN No.: 13118
   - [ ] Merge or consolidate public utilities
   - [ ] Cancel CCN of the transferor (seller)

2. Proposed effective date of this transaction: 9/1/2016
   (Must be at least 120 days after proper notice is provided)

## Part B – Current Service Provider or Seller Information

☞ **Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
   A. Name: Security State Bank and Trust
   (Individual, Corporation or Other Legal Entity)
   who is a(n):of [ ] Individual [X] Corporation [ ] WSC [ ] HOA or POA [ ] Other [ ]

   B. Utility Name (if different than above): [ ]
   Address: 607 N. Main Street, Boerne, Texas 78006-1621 Telephone: (AC) (830) 249-9292

   C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
   Name: Bret W. Fenner Title: Engineer
   Address: 913 Hyde Park DR., Round Rock, TX 78665 Telephone: (AC) (512) 264-9124



Fax: (512) 692-1967 Email: bretfenner@yahoo.com

4. About the last rate increase for the system or facilities being transferred:
   A. What was the effective date of the last rate increase? 6/10/2011

   B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
   [ ] No [X] Yes- Application/Docket Number: TCEQ Docket No. 36937-S Date June 6, 2011

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| (Utility does not have any customer deposits) | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
   Applicant: Bandera East Utility, LP.
   (Individual, Corporation, or Other Legal Entity)
   Utility Name: [ ]
   (If different than above)
   Utility Address: P.O. Box 2501, Boerne, TX 78006
   Fax: [ ] Email: [ ] Telephone (AC): (830) 537-5755
   CCN Numbers held prior to the filing of this application: 13118

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
   - [ ] Individual
   - [ ] Home or Property Owners Association
   - [ ] Partnership; attach copy of partnership agreement
   - [X] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas: 801792893
   - [ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:



- [ ] Municipally-owned utility
- [ ] District (MUD, SUD, WCID, etc.)
- [ ] County
- [ ] Other (please explain): [ ]

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| Name: | | Email | |
|---|---|---|---|
| Address | | | |
| Telephone (AC): | | Fax (AC): | |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers or partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | John Mark Matkin | Telephone (AC): | (830) 537-5755 |
| Address: | P.O. Box 2501, Boerne TX 78006 | | |
| Position: | President | Ownership % (if applicable): | 100.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

– Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from: (See Attached Account Status)

Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | Bret W. Fenner, P.E. | Title: | Engineer |
| Address: | 913 Hyde Park DR., Round Rock, TX 78665 | Telephone (AC): | (512) 264-9124 |
| Fax # | (512) 692-1967 | Email | bretfenner@yahoo.com |
| Relationship to the applicant: | None | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.

A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

The applicant will manage and operate this utility along with other utilities it operates in the region. The applicant is a local company which owns and operates a number of water and wastewater systems in the region. The applicant will maintain this utility in compliance with the rules and regulations of the TCEQ, as well as federal and local laws, rules and regulations.

B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [ ] Yes [X] No

If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.

The utility has the financial capability to make improvements from cash flow generated from its operation and ownership of both water and sewer utilities in the local region.



D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

There will be an impact on the quality of utility service, as the applicant has an other operatiions located in the region and will be able to response quickly to emergencies.

E. How will the transaction serve the public interest?

The applicant will maintain this utility in compliance with the rules and regulations of the PUC, TCEQ, as well as federal and local laws, rules and regulations.

12. Please describe the nature of the proposed transaction:

The purpose of this transaction is for Bandera East Utility, LP to purchase the water assets of the Latigo Ranch Subdivision (PWS No. 0100096) and to transfer this water service area to to Bandera East Utility, LP. CCN service area. (See attached Commercial Contract Between the Parties)

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

A.
- Total Purchase Price: $ 80,000.00
- Total Original Cost (as recorded on books of seller or merging entity): $ 80,000.00
- Accumulated Depreciation as of the proposed effective date of the transaction: $ 0.00
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC: $ 0.00
  - Revenues from explicit customer agreements: $ 0.00
  - Developer Contributions (please explain):

None

  - Other Contributions (please explain):

None

Total Contributions in Aid of Construction $ 0.00

- Net Book Value: $ 80,000.00



☞ If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

Application/Docket Number: N/A Date:

☞ If the applicant is not under the rate jurisdiction of the TCEQ, only the purchase price and information related to Contributions in Aid of Construction is required.

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application. [attach additional sheet(s) if necessary]:

This application is only for the purchase and transfer of the existing water service area. No additional service area is being requested.

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | $ 80,000.00 |
| Plant Acquisition Adjustment: | $ 0.00 |
| Extraordinary Loss on Purchase: | $ 0.00 |
| Accumulated Depreciation of Plant: | $ 0.00 |
| Cash: | $ 0.00 |
| Notes Payable: | $ 0.00 |
| Mortgage Payable: | $ 0.00 |
| Others (please list): | N/A |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: JM Date: 3/23/2016

14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

[X] All the customers will be charged the same rates as they were charged before the transaction.
[ ] Some [ ] All customers will be charged different rates than they were charged before the transaction.



If rates are changing, please explain:

No change in the rates charged customers will results from this transaction.

[ ] Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

[ ] Other. Please explain:

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

(See Attached List)

16. Financial, Managerial and Technical information for the acquiring entity.

## Part D – Historical Financial Information

| HISTORICAL BALANCE SHEETS | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| CURRENT ASSETS | | | | | | |
| Cash | | | | | | |
| Accounts Receivable | | | | | | |
| Inventories | | | | | | |
| Income Tax Receivable | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| FIXED ASSETS | | | | | | |
| Land | | | | | | |
| Collection/Distribution System | | | | | | |
| Buildings | | | | | | |
| Equipment | | | | | | |
| Other | | | | | | |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | | | | | | |
| **TOTAL ASSETS** | | | | | | |
| CURRENT LIABILITIES | | | | | | |
| Accounts Payable | | | | | | |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | | | | | | |
| **TOTAL** | | | | | | |
| LONGTERM LIABILITIES | | | | | | |
| Notes Payable, Long-term | | | | | | |
| Other | | | | | | |
| **TOTAL LIABILITIES** | | | | | | |
| OWNER'S EQUITY | | | | | | |
| Paid in Capital | | | | | | |
| Retained Equity | | | | | | |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | | | | | | |
| **TOTAL LIABILITIES AND EQUITY** | | | | | | |
| **WORKING CAPITAL** | | | | | | |
| **CURRENT RATIO** | | | | | | |
| **DEBT TO EQUITY RATIO EQUITY TO TOTAL ASSETS** | | | | | | |

See Attached Financial Statements



| HISTORICAL INCOME STATEMENT | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| METER NUMBER | | | | | | |
| Existing Number of Taps | | | | | | |
| New Taps Per Year | | | | | | |
| **Total Meters at Year End** | | | | | | |
| METER REVENUE | | | | | | |
| Fees Per Meter | | | | | | |
| Cost Per Meter | | | | | | |
| **Operating Revenue Per Meter** | | | | | | |
| GROSS WATER REVENUE | | | | | | |
| Fees | | | | | | |
| Other | | | | | | |
| **Gross Income** | | | | | | |
| OPERATING EXPENSES | | | | | | |
| General & Administrative | | | | | | |
| Interest | | | | | | |
| Other | | | | | | |
| **NET INCOME** | | | | | | |

See Attached Financial Statements



| HISTORICAL EXPENSE DETAIL | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| GENERAL/ADMINISTRATIVE EXPENSES | | | | | | |
| Salaries | | | | | | |
| Office Expense | | | | | | |
| Computer Expense | | | | | | |
| Auto Expense | | | | | | |
| Insurance Expense | | | | | | |
| Telephone Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | | | | | | |
| OPERATIONAL EXPENSES | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | | | | | | |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | | | | | | |
| ASSUMPTIONS | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |

See Attached Financial Statements



## Part E – Projected Information

**PROJECTED BALANCE SHEETS**

| | START UP | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|---|---|---|---|---|---|---|
| CURRENT ASSETS | | | | | | |
| Cash | | | | | | |
| Accounts Receivable | | | | | | |
| Inventories | | | | | | |
| Income Tax Receivable | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **FIXED ASSETS** | | | | | | |
| Land | | | | | | |
| Collection/Distribution System | | | | | | |
| Buildings | | | | | | |
| Equipment | | | | | | |
| Other | | | | | | |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | | | | | | |
| **TOTAL ASSETS** | | | | | | |
| CURRENT LIABILITIES | | | | | | |
| Accounts Payable | | | | | | |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| LONGTERM LIABILITIES | | | | | | |
| Notes Payable, Long-term | | | | | | |
| Other | | | | | | |
| **TOTAL LIABILITIES** | | | | | | |
| OWNER'S EQUITY | | | | | | |
| Paid in Capital | | | | | | |
| Retained Equity | | | | | | |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | | | | | | |
| **TOTAL LIABILITIES AND EQUITY** | | | | | | |
| **WORKING CAPITAL** | | | | | | |
| **CURRENT RATIO** | | | | | | |
| **DEBT TO EQUITY RATIO** | | | | | | |
| **EQUITY TO TOTAL ASSETS** | | | | | | |

See Attached Financial Statements

**PROJECTED INCOME STATEMENT**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| METER NUMBER | | | | | | |
| Existing Number of Taps | | | | | | |
| New Taps Per Year | | | See Attached Financial Statements | | | |
| **Total Meters at Year End** | | | | | | |
| METER REVENUE | | | | | | |
| Fees Per Meter | | | | | | |
| Cost Per Meter | | | | | | |
| **Operating Revenue Per Meter** | | | | | | |
| GROSS WATER REVENUE | | | | | | |
| Fees | | | | | | |
| Other | | | | | | |
| **Gross Income** | | | | | | |
| OPERATING EXPENSES | | | | | | |
| General & Administrative | | | | | | |
| Interest | | | | | | |
| Other | | | | | | |
| NET INCOME | | | | | | |



**PROJECTED EXPENSE DETAIL**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| GENERAL/ADMINISTRATIVE EXPENSES | | | | | | |
| Salaries | | | | | | |
| Office Expense | | | | | | |
| Computer Expense | | | See Attached Financial Statements | | | |
| Auto Expense | | | | | | |
| Insurance Expense | | | | | | |
| Telephone Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| OPERATIONAL EXPENSES | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | | | | | | |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ASSUMPTIONS | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |



**PROJECTED SOURCES AND USES OF CASH STATEMENTS**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| SOURCES OF CASH | | | | | | |
| Net Income | | | | | | |
| Depreciation (If Funded) | | | | | | |
| Loan Proceeds | | | See Attached Financial Statements | | | |
| Other | | | | | | |
| **Total Sources** | | | | | | |
| USES OF CASH | | | | | | |
| Net Loss | | | | | | |
| Principle Portion of Pmts. | | | | | | |
| Fixed Asset Purchase | | | | | | |
| Reserve | | | | | | |
| Other | | | | | | |
| **Total Uses** | | | | | | |
| **NET CASH FLOW** | | | | | | |
| DEBT SERVICE COVERAGE | | | | | | |
| Cash Available for Debt | | | | | | |
| SERVICE (CADS) | | | | | | |
| Net Income (Loss) | | | | | | |
| Depreciation, or Reserve Interest | | | | | | |
| **Total** | | | | | | |
| REQUIRED DEBT SERVICE (RDS) | | | | | | |
| Principle Plus Interest | | | | | | |
| DEBT SERVICE COVERAGE RATIO | | | | | | |
| CADS Divided by RDS | | | | | | |



## Part F – TCEQ Public Water or Sewer System Information

☞ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems. TCEQ Public Water System Identification Number: 1 6 3 0 0 4 5

Date of last inspection: November 3, 2008

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q - 
-Name of Permitee:
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? ☐ Yes ☒ No. If yes, please explain:

B. Is there a moratorium on new connections? ☐ Yes ☒ No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| None | | |
| | | |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? ☐ Yes ☒ No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☞ Attach copy of franchise agreement or consent letter from the city or district.

20. Do you currently purchase water or sewer treatment capacity from another source? [ ] Yes [X] No
[ ] Water [ ] Sewer Purchased on a [ ] Regular [ ] Seasonal [ ] Emergency Basis

- Source: [ ] % of total supply: [0.00%]

21. List the number of existing connections to be effected by this transaction.

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | -Non Metered | | -2"meter | -Residential Connection | |
| 20 | -5/8" or 3/4" meter | | -3" meter | -Commercial Connection | |
| | -1" meter | | -4" meter | -Industrial Connection | |
| | -1 1/2" meter | | -Other | -Other | |
| | Total Water Connections: | 20 | | Total Sewer Connections | 0 |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? [ ] Yes [X] No
If yes, please explain what steps are being taken to address the capacity issues:

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| Stan Scott | C - Ground water | WG0007965 |
| | | |
| | | |
| | | |
| | | |

24. Attach the following maps with each copy of the application: (See Attached Maps)
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
2. A map showing only the proposed area by:
i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
iii. following verifiable natural and man-made landmarks, or
iv. a copy of recorded plat map with metes and bounds.
3. A written description of the proposed service area.



BusinessWire
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ILLINOIS AMERICAN WATER

## Illinois American Water Acquires Village of Ransom Water System

***Acquisition will add about 170 new water customers in Streator District***

April 26, 2016 03:24 PM Eastern Daylight Time

RANSOM, Ill.--(BUSINESS WIRE)--Illinois American Water President Bruce Hauk, today announced the Company's acquisition of the Village of Ransom water system. The purchase of the system adds approximately 170 customers to the Company's customer base in the Streator District and serves a population of nearly 370 residents.

The Village of Ransom Board voted in favor of the sale on Sept. 9, 2015 and the Illinois Commerce Commission (ICC) approved the sale for $175,000 on Feb. 24, 2016. Today, Illinois American Water acquired the water system.

"We look forward to investing in the Village of Ransom and ensuring customers have access to quality water service," said Hauk. "We are excited to join and contribute to the Ransom community."

Acting Village of Ransom President Matt Hauser is also enthusiastic in his support of the acquisition. He said, "We are looking forward to Illinois American Water joining our community and helping us meet our water needs. Their knowledge and ability to provide reliable water service to our residents is an investment in our public health and economic future."

Currently the drinking water in Ransom has exceedingly high levels of Radium. Bottled water will continue to be distributed at Village Hall until the Village of Ransom is connected to Illinois American Water's Streator District water distribution system. This investment of approximately $2 million to install 10 miles of water main will ensure quality drinking water that meets all EPA requirements. Barring no unforeseen circumstances, this project is expected to be completed by the end of 2016.

Additional information will be provided to customers in an Illinois American Water welcome packet in the mail. This packet will include information about online account management, billing and more. Typical water service customers use between 4,500 and 6,000 gallons of water per month. A Village of Ransom customer using 5,000 gallons a month will pay approximately $45 for water service. This is a decrease of about $8 a month.

The appraisal process used for the Ransom water system was conducted under the supervision of the Illinois Commerce Commission (ICC) and established as part of the Illinois Water Systems Viability Act. According to Hauk, this new law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility. He said, "Previous law only allowed the investor-owned water or sewer utility to pay the original cost minus depreciation to acquire a small system, public or private. Because of this, systems were deprived of receiving adequate value for their system."

The Ransom water system will be incorporated into the company's Streator District, which currently serves residents in Streator, Kangley, Reading, Dana, Long Point and Ancona.

**About Illinois American Water**

Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.2 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, the company employs 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

Contacts
Illinois American Water
Karen Cotton
External Affairs Manager
309-566-4126

POCONO RECORD

## Tobyhanna sewer system sale

By David Pierce
Pocono Record Writer
Posted Apr 30, 2016 at 11:58 AM
Updated Apr 30, 2016 at 11:58 AM

Aqua America buys municipal operation for $5.5 million

Tobyhanna Township is about to get out of the sewage collection and treatment business through a $5.5 million sale of its system to Aqua America.

Tobyhanna Township supervisors unanimously approved sale of the Blakeslee treatment plant, sewer lines and pump station in February. Aqua — which has operated the system for the past 18 months under a management contract with the township — will receive all future revenue generated from about 800 residential and commercial customers.

The dormant Tobyhanna Township Sewer Authority has scheduled a 2016 reorganizational meeting and vote Monday to ratify the assets purchase agreement by Aqua Pennsylvania Wastewater, Inc. This will be the sewer authority's first, and presumably last, meeting of the year. The authority met once last year, Tobyhanna Township Manager Phyllis Haase said.

The sale also requires regulatory approval from the Pennsylvania Public Utility Commission before becoming final.

The township has held public hearings and discussions on possible sale of the plant for at least the past 18 months, Haase said. One other private company investigated possible purchase of the system, but Aqua was the only company to make an offer, according to minutes of a February supervisors' meeting posted on the township website.

An outside company performed a financial analysis for the township, to determine the sewage system's value.

The sale will relieve the township of a financial burden, Haase said. Tobyhanna has an outstanding $4.2 million note on the system, in addition to costs related to reconstruction of a treatment building.

"We still have a note on the plant," Haase said. "It's not like we're walking away with $5.5 million."

Even with ownership of the system, Aqua America will still have to meet provisions of the township's Act 537 plan, which sets regulations for how and where sewage is collected and treated. The 537 plan also is subject to approval by the state Department of Environmental Protection.

Customers shouldn't notice any changes in the quality of service due to the sale, Aqua America spokeswoman Gretchen Toner said.

"We don't plan any changes to the staff, and the rates will stay the same upon acquisition," Toner said. "Any future rate changes would be part of a broader Aqua rate request and set and approved by the state Public Utility Commission."

**MOST POPULAR STORIES**

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PENNSYLVANIA AMERICAN WATER

## Pennsylvania American Water Signs Agreement to Acquire New Cumberland Wastewater System

May 05, 2016 11:03 AM Eastern Daylight Time

HERSHEY, Pa.--(BUSINESS WIRE)--Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced today that it has signed an agreement to acquire the wastewater assets of the Borough of New Cumberland in Cumberland County. The total value of the transaction is approximately $23 million.

Pennsylvania American Water and the Borough will seek approval of the acquisition from the Pennsylvania Public Utility Commission and other necessary approvals from the Pennsylvania Department of Environmental Protection. The signing of the purchase agreement is the culmination of negotiations between Pennsylvania American Water and Borough officials since the Borough Council unanimously voted in March to accept the company's proposal. The Borough initially issued a request for bids in January 2016, for the potential acquisition of its wastewater system.

"Our company and our employees have been the water service provider for this community for many, many years, and we are excited for the opportunity to be the future provider of wastewater service to our New Cumberland customers," said Pennsylvania American Water President Kathy L. Pape. "We look forward to providing the technical expertise and financial resources needed to ensure the system meets all the environmental compliance challenges it will face in the future."

The New Cumberland wastewater system serves approximately 3,100 customers.

Pape said long-term rate stability is one of the most important benefits for wastewater customers, who faced significant rate increases if the Borough continued to operate the system. Under the purchase agreement, Pennsylvania American Water will not change wastewater rates any earlier than January 1, 2018, with a maximum 2.5 percent increase in both 2018 and 2019. The company's rates are regulated by the Public Utility Commission and future rate changes would have to be reviewed and approved by the PUC.

Pennsylvania American Water's purchase of the sewer system will enable the Borough to eliminate all debt, which is approximately $16 million, by retiring outstanding bonds within the next three years.

Pennsylvania American Water has also committed to invest $2 million in wastewater and/or water improvements within New Cumberland over the next five years. The company will partner with the Borough to identify areas where aging wastewater and water facilities can be replaced in conjunction with street and sidewalk improvements.

Pape said upon closing the acquisition that "we look forward to welcoming the Borough's five wastewater employees to the Pennsylvania American Water team." All active employees will be offered jobs, subject to standard pre-employment screening.

The company expects to close the transaction by the end of 2016, pending regulatory approvals.

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in Pennsylvania, providing high-quality and reliable water and/or wastewater services to approximately 2.3 million people. Founded in 1886, American Water is the largest publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, the company employs more than 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found at www.amwater.com.

Contacts
Pennsylvania American Water
Terry Maenza
T: 610-670-7789 ext. 1009
M: 610-849-6484
terry.maenza@amwater.com

Tweets by @paamwater

**PA American Water**
@paamwater
UPDATE: Work along Green Ridge Street has been postponed. Our contractor will be onsite beginning Monday, June 5... fb.me/102G2mYOu
2h

**PA American Water**
@paamwater
We're a day early for a #TBT, but a customer in Wilkes-Barre shared this water bill from January 1922 from the... fb.me/1n6DB6SmQ
21h

**PA American Water**
@paamwater
SCRANTON: Traffic restrictions will be in place along Green Ridge Street beginning tomorrow as contractors begin... fb.me/1AQsgtXmi
30 May

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#NewCumberland #acquisition #wastewater

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# PCOR Water USA ompletes Willow alley Water ompany cquisition

Marketwired May 9, 2016

PHOENIX, ARIZONA--(Marketwired - May 9, 2016) - EPCOR Water (USA) Inc. (EPCOR USA), a wholly owned subsidiary of EPCOR Utilities Inc. (EPCOR), has completed the previously announced acquisition of Willow Valley Water Company (Willow Valley).

"Willow Valley complements our existing regional footprint in northwestern Arizona and is a natural step as we continue to expand our business," said Joe Gysel, President of EPCOR USA. "We believe that our focus on customer service and operational excellence will benefit the customers of Willow Valley, now and in the future."

Through its Arizona subsidiary EPCOR Water Arizona Inc., EPCOR USA acquired substantially all of the assets and operations of Willow Valley Water Company for approximately US$2.27 million. The acquisition has received regulatory approval from the Arizona Corporation Commission.

Willow Valley provides water service to approximately 1,600 customer connections in the Bullhead City area, a service territory approximately 10 miles south of EPCOR USA's Mohave and North Mohave water districts.

With the acquisition of Willow Valley, EPCOR USA now provides water service to more than 21,000 connections in Mohave County. EPCOR USA also provides wastewater service to approximately 1,560 connections in Fort Mohave.

Willow Valley is the company's sixth acquisition since entering the United States. In 2011, the company acquired Chaparral City Water Company, followed by the 2012 acquisition of American Water's Arizona and New Mexico assets and operations. In 2013, EPCOR USA acquired North Mohave Valley Corporation in Arizona and Thunder Mountain Water Company in New Mexico, as well as the existing agreements and master-planning responsibilities to provide wastewater and recycled water services to a 7,000-acre development corridor in Glendale, Arizona.

Today, EPCOR USA is the largest, private regulated water utility in Arizona and New Mexico, providing water and wastewater service to

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| AQN Algonquin Power & Utilities Corp. | 10.46 | 0.13 | 1. |
| AGR Avangrid, Inc. | 45.63 | 0.20 | 0. |
| YHOO Yahoo! Inc. | 50.63 | 0.31 | 0. |
| DUK Duke Energy Corporation | 85.72 | 0.04 | 0. |
| AEP American Electric Power Company, Inc. | 72.06 | 0.28 | 0. |
| EMA.TO Emera Incorporated | 48.63 | 0.45 | 0. |

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meaning of Canadian securities laws as it relates to anticipated financial performance, events or strategies. When used in this context, words such as "will", "anticipate", "believe", "plan", "intend", "target" and "expect" or similar words suggest future outcomes. The purpose of forward-looking information is to provide investors with management's assessment of future plans and possible outcomes and may not be appropriate for other purposes. Forward-looking information in this news release includes expectations regarding the timing of regulatory approval of the acquisition.

These statements are based on the assumptions and analyses made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments and other factors it believes are appropriate. Readers are cautioned not to place undue reliance on forward-looking statements as actual results could differ materially from the plans, expectations, estimates or intentions expressed in the forward-looking statements. Except as required by law, EPCOR disclaims any intention and assumes no obligation to update any forward-looking statement even if new information becomes available, as a result of future events or for any other reason.

## About EPCOR Water USA

EPCOR USA is an indirect, wholly owned subsidiary of EPCOR Utilities Inc. Headquartered in Phoenix, Arizona, EPCOR USA's wholly owned subsidiaries build, own and operate water and wastewater treatment facilities and infrastructure in the southwestern United States. EPCOR USA is the parent company of EPCOR Water Arizona Inc.

## About EPCOR Utilities Inc.

EPCOR's wholly owned subsidiaries build, own and operate electrical transmission and distribution networks, water and wastewater treatment facilities and infrastructure in Canada and the United States. The Company's subsidiaries also provide electricity and water services and products to residential and commercial customers. EPCOR, headquartered in Edmonton, is an Alberta top 70 employer. EPCOR's website address is www.epcor.com.



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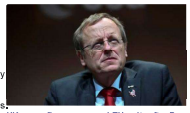

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Control Number: 46077

Item Number: 1

Addendum StartPage: 0

**Application for Sale, Transfer, or Merger of a Retail Public Utility**
Pursuant to Chapter 13.251 of the Texas Water Code

**Docket Number:** 46077

(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with:

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

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PUBLIC UTILITY COMMISSION FILING CLERK

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

TABLE OF CONTENTS

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 9
**Part E – Projected Information** ..... 12
**Part F – Public Water System Information** ..... 16
**Part G – Oaths and Notices** ..... 18



## Part A – General Information

*RN# Williamson County RN101217701 *CN# Aqua Texas CN604062463 Brushy Bend CN600646574 *

1. Proposed action of application (check all the boxes that apply):
[X] Sale of [ ] All [X] Portion [ ] of the [X] Water system(s) under CCN No.: 11773
[ ] Acquisition [ ] Sewer system(s) under CCN No.:
[ ] Lease/Rental

[X] Transfer of [ ] All [X] Portion of the [X] Certificated water service area – CCN No.: 11773
[ ] Certificated sewer service area – CCN No.:

If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

Brushy Bend Park Subdivision

and to:
[X] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
[ ] Amend the transferee's CCN No.: Aqua Texas requests a new SW Region water CCN number be issued for this transaction.
[ ] Merge or consolidate public utilities
[X] Cancel CCN of the transferor (seller): Cancellation of CCN 11773 requested in transfer area only.

2. Proposed effective date of this transaction: To be determined after approval.
(Must be at least 120 days after proper notice is provided)

## Part B – Current Service Provider or Seller Information

☞ **Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
A. Name: Brushy Creek Municipal Utility District
(Individual, Corporation or Other Legal Entity)
who is a(n):of [ ] Individual [ ] Corporation [ ] WSC [ ] HOA or POA [X] Other Municipal Utility District

B. Utility Name (if different than above):
Address: 16318 Great Oaks Drive, Round Rock, Texas 78681 Telephone: (AC) (512) 255-7871

C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
Name: Anthony S. Corbett Title: Attorney
Address: 8500 Bluffstone Cove, B-104, Austin, TX 78759 Telephone: (AC) (512) 717-4552

Fax: (512) 453-0865 Email: tcorbett@freemanandcorbett.com

4. About the last rate increase for the system or facilities being transferred:
   A. What was the effective date of the last rate increase? 6/11/2015
   B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
[X] No [ ] Yes- Application/Docket Number: Date

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| All deposits held by Brushy Creek MUD, if any, will be refunded prior to closing. Applicants request a waiver of production for this item. | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
Applicant: Aqua Texas, Inc.
(Individual, Corporation, or Other Legal Entity)
Utility Name:
(If different than above)
Utility Address: 1106 Clayton Lane, Ste. 400W, Austin, Texas 78723
Fax: (512) 990-4410 Email: Telephone (AC): (512) 990-4400
CCN Numbers held prior to the filing of this application: Aqua Texas holds multiple water and sewer CCNs but is requesting that a new SW Region water CCN number be issued for this transcation.

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
[ ] Individual
[ ] Home or Property Owners Association
[ ] Partnership; attach copy of partnership agreement
[X] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas: 32014405503
[ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:



[ ] Municipally-owned utility
[ ] District (MUD, SUD, WCID, etc.)
[ ] County
[ ] Other (please explain):

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| | | | |
|---|---|---|---|
| Name: | Not applicable. | Email | |
| Address | | | |
| Telephone (AC): | | Fax (AC): | |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers or partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | Please see Attachment 1. | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

- Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from:

Please see Attachment 2.



Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | Geoffrey P. Kirshbaum | Title: | Attorney |
| Address: | 810 West 10th Street, Austin, Texas 78701 | Telephone (AC): | (512) 474-9100 |
| Fax # | (512) 474-9888 | Email | gkirshbaum@terrillwaldrop.com |
| Relationship to the applicant: | Attorney for Aqua Texas | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.
A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

Aqua Texas is a subsidiary of Aqua America, Inc., one of the largest publicly traded water utilities in America. Aqua Texas currently operates more than 375 water systems in Texas. Aqua Texas has the financial ability to make all necessary repairs and improvements to the Brushy Bend Park (a/k/a Williamson County) water system to keep it in full compliance with all TCEQ and PUC regulations. Aqua Texas' experienced operators are thoroughly knowledgeable about water operations, as well as the requirements for continuous and adequate service.

B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [X] Yes [ ] No

If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

Aqua Texas, Inc. and its affiliates ("Aqua") own and operate hundreds of water and wastewater systems throughout Texas. In addition to implementing action items under an extensive Agreed Compliance Order inherited in 2003 from Aqua predecessors, Aqua has diligently worked to implement other needed improvements for systems it has acquired over the years. The documentation potentially responsive to this application item is significant due to the large number of facilities, condition upon acquisition for certain systems, and changes experienced in source water quality over the years. Providing such documentation is impractical, but it is publicly available. Aqua respectfully requests waiver of production of such records with this application, but is willing to work with Staff to address specific concerns or questions as they relate to enforcement actions.



C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.

Aqua has the financial ability through customer collections and infusions of capital from lenders, as well as capital contributions from its parent Aqua America, Inc., to make any required improvements necessary to meet TCEQ and PUC minimum requirements for continuous and adequate service.

D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

The quality of service will remain at a high level due to the experienced operators employed by Aqua. The quality of service will meet or exceed current levels. Aqua will deal promptly with any service issues which may arise.

E. How will the transaction serve the public interest?

Aqua owns several water systems near Brushy Bend Park (a/k/a Williamson County) water system to be acquired in the proposed transaction which are located outside the boundaries of Brushy Creek Municipal Utility District ("Seller" or "District"). This transaction is in the public interest because it will allow the District to focus its service on customers within its boundaries while still allowing for regional service by Aqua to transferred customers connected to the Brushy Bend Park water system. Further, the water rate tariff Aqua is proposing apply to Brushy Bend Park customers if the proposed transaction is approved would keep base rates (i.e., monthly minimum and gallonage charges) the same as Seller's outside-District base rates immediately following the transfer per current Commission policy. Miscellaneous fees will be different in certain instances (in part because the District is a political subdivision with authority to charge certain types of fees that investor-owned utilities cannot), but are not proposed higher than current District charges. Transferred customers will benefit from economies of scale provided by Aqua's larger customer base located throughout its Southwest Region.

12. Please describe the nature of the proposed transaction:

Aqua will acquire the Brushy Bend Park water system (PWS ID No. 2460050) assets owned by Brushy Creek Municipal Utility District ("Seller" or "District"). These assets are located outside the District's boundaries. For further details, please see a copy of the purchase agreement included in Attachment 3.

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

A.
- Total Purchase Price: $50,000.00, plus closing costs*
- Total Original Cost (as recorded on books of seller or merging entity): $535,665.00**
- Accumulated Depreciation as of the proposed effective date of the transaction: $384,578.00**
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC: $0.00***
  - Revenues from explicit customer agreements: $0.00***
  - Developer Contributions (please explain): $0.00***
  - Other Contributions (please explain): $0.00***

Total Contributions in Aid of Construction $0.00***

- Net Book Value: $151,087.00

* Please see "Assets Purchase Agreement" inlcuded in Attachment 3 ("APA"). The purchase price of $50,000 was agreed upon as consideration for the proposed transaction in Section 1.3. Aqua Texas may also be required to pay closing costs to complete the transaction.

** The proposed transaction is not allowed to close without PUC approval. Therefore, the "proposed effective date of the transaction" is not yet determined. Further, the values Aqua Texas is providing in this application section for Total Original Cost, Accumulated Depreciation, and Net Book Value are estimates developed using trending. Seller is not an investor-owned utility required to track asset values according to NARUC and Commission rule requirements. Seller was unable to provide such asset values to Aqua Texas per its books in the manner specified by those requirements which do not apply to Texas political subdivisions and there is good cause for Aqua Texas to use the trended values to book this acquisition since historic records to verify original cost of the assets are unavailable. No adjustment to the trended original cost values is justified. If the proposed transaction is approved, Aqua Texas will need to book the assets using trended original cost values less accumulated depreciation finally determined after closing.

*** See Attachment 10 Disclosure Statement regarding contributions. Brushy Creek Municipal Utility District has not recorded any contribution amounts on its books for the Brushy Bend Park water system assets proposed for transfer. All customer deposits, if any, will be refunded prior to closing and will not be received by Aqua Texas.



☞ If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

Application/Docket Number: Not applicable. Date:

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application.

This transaction strictly involves an asset sale/acquisition/transfer between Brushy Creek Municipal Utility District and Aqua Texas, Inc. This is not a stock purchase transaction. Legal ownership and responsibility for the Brushy Bend Park (a/k/a Williamson County) water system assets will be transferred to Aqua which will become the certificated retail public water utility for Brushy Bend Park water system customers in place of the District. Other District assets will remain owned and operated by the District. Day-to-day utility operations for transferred customers will remain the same or improve under Aqua's experienced management and operations personnel. Aqua plans to purchase water on a wholesale basis from Brushy Creek Municipal Utility District if the transaction is approved, but a master meter is already in place for distribution of water to Brushy Bend Park. The retail water rate tariff Buyer proposes apply to Brushy Bend Park customers if the proposed transaction is approved would keep base rates (*i.e.*, monthly minimum and gallonage charges) the same as the Seller's outside-District base rates currently charged to Brushy Bend Park customers immediately following the transfer per current Commission policy. Miscellaneous fees will be different in certain instances (in part because the District is a political subdivision with authority to charge certain types of fees that investor-owned utilities cannot), but are not proposed higher than current District charges. Aqua is requesting that its Southwest Region service policies apply going forward for Commission rule compliance and consistency with its Southwest Region water service elsewhere. Aqua plans to operate the Brushy Bend Park water system as part of its Southwest Region, but has no plans at this time to file a Southwest Region water rate case that would affect Brushy Bend Park customers.

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | $535,665.00* |
| Plant Acquisition Adjustment: | $101,087.00 (negative acquisition adjustment)* |
| Extraordinary Loss on Purchase: | N/A |
| Accumulated Depreciation of Plant: | $384,578.00* |
| Cash: | N/A |
| Notes Payable: | N/A |
| Mortgage Payable: | N/A |
| Others (please list): | Net Book Value: $151,087.00* |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: [initials] Date: 6/15/2016

for Aqua Texas, Inc.

* The proposed transaction is not allowed to close without PUC approval. Therefore, the "proposed effective date of the transaction" is not yet determined and the values provided in this application section should not be considered final. Further, the values Aqua is providing in this application section for Utility Plant in Service (i.e., Total Original Cost), Plant Acquisition Adjustment, Accumulated Depreciation of Plant, and Net Book Value are estimates developed using trending and the agreed upon purchase price of $50,000.00 (Aqua notes there may also be additional closing costs). Seller is not an investor-owned utility required to track asset values according to NARUC and Commission rule requirements. Seller was unable to provide such asset values to Aqua per its books in the manner specified by those requirements and there is good cause for Aqua to use the trended values to book this acquisition since historic records to verify original cost of the assets are unavailable. No adjustment to the trended original cost values is justified. If the proposed transaction is approved, Aqua will need to book the assets using trended original cost values less accumulated depreciation finally determined after closing.



14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

[X] All the customers will be charged the same rates as they were charged before the transaction.
[ ] Some [ ] All customers will be charged different rates than they were charged before the transaction.

*SEE ATTACHMENT 4, Proposed Aqua Texas, Inc. d/b/a Aqua Texas "Water Utility Tariff for Southwest Region – Brushy Bend Park Only," showing that base rates for Brushy Bend Park water customers will remain the same immediately following the transfer while certain miscellaneous fees and service policies are different as required to conform to Commission rules for investor owned utilities and Aqua's previously approved Southwest Region service policies. No miscellaneous fee included in the proposed tariff currently charged by Seller will be higher as a result of the transfer.

If rates are changing, please explain:

Not applicable.

Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

Not applicable.

Other. Please explain:

Not applicable.

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

Please see Attachment 5. Aqua respectfully requests that Commission staff specifically identify any additional entities for which notice is requested if the notice is otherwise approved.

16. Financial, Managerial, and Technical Information for the acquiring entity

Waiver of production requested except for documents included in Attachment 6.



## Part F – TCEQ Public Water or Sewer System Information

☞ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems. TCEQ Public Water System Identification Number: 2460050

Date of last inspection: February 10, 2016 See Attachment 7.

B. For Wastewater Systems: Not applicable.

-TCEQ Discharge Permit Number: W Q - -Name of Permitee: -Date of application to transfer Discharge Permit submitted: -Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? [ ] Yes [X] No. If yes, please explain:

B. Is there a moratorium on new connections? [ ] Yes [X] No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| Not applicable. | | |
| | | |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? [ ] Yes [X] No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☞ Attach copy of franchise agreement or consent letter from the city or district.

20. Do you currently purchase water or sewer treatment capacity from another source? [X] Yes [ ] No
[X] Water [ ] Sewer Purchased on a [X] Regular [ ] Seasonal [ ] Emergency Basis

- Source: % of total supply: 75.00%

BRA-Lake Sillhouse Hollow. Immediately following the transfer, Aqua will purchase 100% of its total supply for the system from Brushy Creek MUD. However, Aqua will reserve the right to acquire secondary sources at its discretion.

21.

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | -Non Metered | | -2"meter | -Residential Connection | |
| 204 | -5/8" or 3/4" meter | | -3" meter | -Commercial Connection | |
| 3 | -1" meter | | -4" meter | -Industrial Connection | |
| | -1 1/2" meter | | -Other | -Other | |
| | Total Water Connections: | | 207 | Total Sewer Connections | |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? [ ] Yes [X] No
If yes, please explain what steps are being taken to address the capacity issues:

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| See Attachment 8. | | |
| | | |
| | | |
| | | |
| | | |

24. Attach the following maps with each copy of the application:
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
2. A map showing only the proposed area by:
i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
iii. following verifiable natural and man-made landmarks, or
iv. a copy of recorded plat map with metes and bounds.
3. A written description of the proposed service area.

See Attachment 9.



ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

| | |
|---|---|
| PETITION OF AQUA INDIANA, INC. ("AQUA INDIANA") FOR (1) APPROVAL OF THE SALE AND TRANSFER TO AQUA INDIANA OF WASTEWATER UTILITY ASSETS IN CRAWFORD COUNTY, INDIANA USED BY JUSTIN LEWIS AND/OR WHITE OAK SEWAGE TREATMENT, LLC PURSUANT TO AN ASSET PURCHASE AGREEMENT; (2) APPROVAL OF CERTAIN ACCOUNTING AND OTHER RELIEF RELATED TO THE ACQUISITION OF THOSE ASSETS; (3) ISSUANCE TO AQUA INDIANA OF A CERTIFICATE OF TERRITORIAL AUTHORITY ENCOMPASSING RURAL AREAS IN LIBERTY TOWNSHIP IN CRAWFORD COUNTY; AND (4) CONSENTING TO CRAWFORD COUNTY GRANTING AQUA INDIANA LICENSES, PERMITS OR FRANSCHISES FOR THE USE OF COUNTY-OWNED PROPERTY. | ) CAUSE NO. 44811<br>) APPROVED: JAN 04 2017 |

**ORDER OF THE COMMISSION**

**Presiding Officers:**
**James F. Huston, Commissioner**
**Loraine L. Seyfried, Chief Administrative Law Judge**

On July 1, 2016, Aqua Indiana, Inc. ("Aqua Indiana") filed its Verified Petition requesting the Indiana Utility Regulatory Commission ("Commission") approve, along with other associated relief, an Asset Purchase Agreement providing for the sale and transfer of certain plant, property, and assets currently used by Mr. Justin Lewis and/or White Oak Sewage Treatment, LLC (collectively, "White Oak") to provide wastewater utility service in Crawford County, Indiana and issue to Aqua Indiana a certificate of territorial authority ("CTA") to provide wastewater utility service within a certain area of Crawford County, Indiana.

On August 23, 2016, Aqua Indiana filed its case-in-chief. On November 1, 2016, a Stipulation and Settlement Agreement entered into by both Aqua Indiana and the Indiana Office of Utility Consumer Counselor ("OUCC") was filed with the Commission. Aqua Indiana and the OUCC filed testimony in support of the Stipulation and Settlement Agreement on November 10, 2016 and November 14, 2016, respectively.

On November 18, 2016, the Presiding Officers issued a docket entry requesting information relating to Ind. Code § 8-1-2-84(c). Aqua Indiana filed its response to the docket entry on November 21, 2016.

The Commission conducted an evidentiary hearing at 9:30 a.m. on November 28, 2016, in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. Aqua Indiana and the OUCC participated at the hearing and both parties' evidence was admitted into the record without objection. No members of the general public appeared or sought to testify at the hearing.

Based upon the applicable law and the evidence presented, the Commission finds:

**1. Notice and Jurisdiction.** Due, legal, and timely notice of the hearings held in this Cause was published by the Commission. Aqua Indiana and White Oak are each a "public utility" as defined in Ind. Code § 8-1-2-1. The Commission has jurisdiction over the sale and purchase of utility assets and associated ratemaking treatment in accordance with Ind. Code §§ 8-1-2-42, 83-84 and the provision of wastewater service in rural areas under Ind. Code § 8-1-2-89. Therefore, the Commission has jurisdiction over Aqua Indiana and White Oak as well as the subject matter of this proceeding.

**2. Background on Aqua Indiana and White Oak.** Aqua Indiana is an Indiana for-profit corporation providing water utility service to approximately 881 customers and wastewater utility services to approximately 20,772 customers in Indiana. Aqua Indiana also supports the regulated wastewater utility operations of South Haven Sewer Works, Inc. and will continue to do so until it is merged into Aqua Indiana as permitted by the Commission's April 29, 2015 Order in Cause No. 44533. Upon implementing that merger, Aqua Indiana will directly provide wastewater utility service to approximately 4,049 additional wastewater utility customers.

White Oak is an Indiana limited liability company. Mr. Justin Lewis is the President and sole member of White Oak. White Oak provides wastewater utility service to approximately 48 residential and four commercial customers in Liberty Township of Crawford County, Indiana. The area served by White Oak generally is located along State Road 66 approximately four miles south of the Town of Marengo, Indiana.

**3. Relief Requested.** In its Verified Petition, Aqua Indiana seeks Commission approval of the sale and transfer to Aqua Indiana of the plant and property currently used by White Oak to provide wastewater utility service ("White Oak System"). The sale and transfer would be made pursuant to an Asset Purchase Agreement entered into by and between White Oak and Aqua Indiana ("Purchase Agreement").

In connection with the sale and transfer of the White Oak System, Aqua Indiana also requests that the Commission approve: (i) the manner in which Aqua Indiana will record the plant, property, and other assets acquired from White Oak on its books and records; (ii) approve the rates and charges, as well as the rules and regulations, that Aqua Indiana will apply to customers, subject to such changes as the Commission may approve in the future; and (iii) approve the consolidated depreciation rate to be used by Aqua Indiana for the plant, property, and assets that it may use to serve present and future customers.

Aqua Indiana also requests that the Commission grant it a CTA to provide wastewater utility service within the area that White Oak historically has served and certain areas contiguous to that area ("Proposed CTA Area"), which consists of approximately 800 acres.



Finally, Aqua Indiana requests the Commission determine, in accordance with Ind. Code § 36-2-2-23, that public convenience and necessity require Aqua Indiana to provide wastewater utility service within the Proposed CTA Area and consent to Crawford County, Indiana granting Aqua Indiana licenses, permits, or franchises for the use of county-owned property to provide wastewater utility service.

The relief sought in this Cause has been approved by Aqua Indiana's Board of Directors as reflected in resolutions appearing as Attachment D to Petitioner's Exhibit 1.

**4. Aqua Indiana's Direct Evidence.**

**A. Acquisition of White Oak System.** Mr. Bruns described the origin and contents of the Purchase Agreement. He stated that Mr. Justin Lewis approached Aqua Indiana in early 2015 and inquired into whether it was interested in acquiring the White Oak System on a non-competitive basis. He noted Mr. Lewis' approach was prompted by recommendations from the Indiana Department of Environmental Management ("IDEM") and the Commission. Consequently, after completing some preliminary due diligence, Aqua Indiana entered into negotiations with Mr. Lewis that led to the execution of the Purchase Agreement.

Mr. Bruns stated that the assets to be purchased are described in Section 1 and Schedule 1.1 of the Purchase Agreement. The consideration for the purchase is $10,000. Section 2 of the Purchase Agreement provides that the closing of the transaction will occur on or before 45 days after receipt of all final regulatory approvals. The closing is subject to certain conditions described in the Purchase Agreement, which include: (i) White Oak providing Aqua Indiana with certain information; (ii) Aqua Indiana's satisfactory completion of its due diligence; (iii) the performance of a satisfactory environmental assessment and surveys; (iv) verification of White Oak's title to the assets being transferred; (v) the transfer of certain permits; (vi) receipt of certain consents and approvals, including without limitation the approval of the Commission; and (vii) the lack of any prohibitions to consummation of the matters covered by the Purchase Agreement.

Mr. Bruns testified that, like the rest of the Purchase Agreement, the $10,000 purchase price resulted from arms-length negotiation between White Oak and Aqua Indiana. He expressed his view that the proposed purchase price is significantly less than the value of the White Oak System.

Mr. Bruns testified Aqua Indiana will operate the White Oak System as part of its Floyd County Division where Aqua Indiana presently provides wastewater utility services to approximately 696 customers. He explained Aqua Indiana has a total work force of five individuals available to directly support its operations in Floyd County: two are administrative personnel who handle accounting, personnel, payroll, and management functions; two are on the wastewater staff responsible for the direct operation and maintenance of treatment plants, lift stations, and collection systems; and the other individual provides customer service. He also noted that Aqua Indiana has access to other Aqua America business units to support its operations and uses outside contractors in connection with its operations. In addition, like all

facilities in Indiana operated by Aqua Indiana, funding for improvements to its system in Floyd County would come from Aqua Indiana's corporate parent, Aqua America, and the same would be true in connection with its operation of the White Oak System. Mr. Bruns sponsored Aqua America's 2015 Annual Report with financial statements in Attachment E to Petitioner's Exhibit 1.

Mr. Bruns explained that the White Oak System will be operated by Aqua Indiana with the same resources and in essentially the same way as Aqua Indiana's existing systems in Floyd County are operated. He noted that this will deviate in some respects from the way the White Oak System is currently operated by White Oak. However, Mr. Bruns expressed his opinion that the operational and customer service differences will be beneficial to White Oak's customers.

Mr. Bruns testified the treatment plant that is part of the White Oak System is in need of painting and an overhaul of its mechanical and treatment equipment. Further, the driveway leading up to the treatment plant is in need of a culvert, along with some added stone. In addition to making these improvements, Mr. Bruns testified that subsequent to closing on the acquisition, the White Oak System's collection piping will be thoroughly inspected and cleaned with corrective repairs made where needed to both sewer mains and manholes.

With respect to rates, Mr. Bruns testified Aqua Indiana intends to apply to present and future customers within the Proposed CTA Area the same rates and charges as are currently charged and collected by White Oak, which currently are flat monthly rates of $45.00 and $50.00 for residential and commercial customers, respectively. Mr. Bruns also stated that the rules and regulations for service that Aqua Indiana would apply to customers of the White Oak System will be the same as are currently applied to customers of Aqua Indiana's Floyd County Division, unless and until the Commission has approved other rules and regulations to be applied.

Mr. Bruns testified that Aqua Indiana is not aware of any rate or rates that White Oak has used to depreciate the plant, property, and assets comprising the White Oak System. Aqua Indiana proposes to apply a consolidated depreciation rate of 2.5% to depreciable plant and property that it acquires as part of the transaction and that it may add in the future.

Mr. Bruns also testified that Aqua Indiana understands that White Oak has not maintained books and records that comply with the Commission's requirements or that would allow Aqua Indiana to record the White Oak System on its books and records at values reflecting historical or original costs. In light of this, Mr. Bruns explained that Aqua Indiana proposes to record the acquisition of the White Oak System at an original cost reflecting the purchase price and associated costs allocated among appropriate utility plant in service accounts. In addition, if Aqua Indiana determines after it acquires and commences operation of the White Oak System that there exists a more appropriate basis to record the White Oak System than as described above, Aqua Indiana will submit such for Commission review and approval in the first general rate case it initiates, which it anticipates will not occur for more than three years. Mr. Bruns also explained the accounting entries Aqua Indiana anticipates making to record the acquisition of the White Oak System.



Mr. Bruns expressed his belief that if the Commission approves the transfer, Aqua Indiana will have the lawful authority to operate the White Oak System. In addition, he stated Aqua Indiana has the managerial, technical, and financial resources necessary to properly operate the White Oak System and provide adequate and reliable service to present and future customers. He noted Aqua Indiana has a record of handling successful utility operations in Floyd County and elsewhere in Indiana. Mr. Bruns testified that the Purchase Agreement and the acquisition provided for by it will serve public convenience and necessity and are in the public interest.

**B. Proposed CTA.** Mr. Bruns testified that Aqua Indiana understands that, even though White Oak did not apply for or receive a CTA to provide service within Crawford County, Indiana law requires Aqua Indiana to do so if it acquires the White Oak System. He stated that Aqua Indiana considered it appropriate to proactively define the area where it was in the best position to provide wastewater utility service for the foreseeable future. Accordingly, Mr. Bruns explained that in addition to the area historically served by White Oak, the Proposed CTA Area also encompasses a nearby church and a subdivision of 20 residences that currently utilize septic systems, as well as a nearby high school and the Crawford County Fairgrounds that have expressed interest in receiving service.

Mr. Bruns testified that defining the Proposed CTA Area to also include those additional areas would allow Aqua Indiana to plan for growth and make sure that its service elsewhere is not compromised when growth actually occurs. It should also provide potential customers with a known source of service and provide assurance to Crawford County's officials concerning the availability and source of needed services. Mr. Bruns stated that Aqua Indiana thought it prudent to generally square off the boundaries and/or utilize existing roadways and section lines to configure the Proposed CTA Area to eliminate uncertainty and confusion about the extent of Aqua Indiana's authority and obligation to provide service.

Mr. Bruns stated that the collection facilities needed to serve within the area that historically has been served by White Oak are in place. For areas outside of that which White Oak has historically provided service, Mr. Bruns stated the extension of collection facilities to new customers would most likely involve developers or customers installing the new collection facilities and contributing them to Aqua Indiana, or Aqua Indiana itself extending its collection system pursuant to its main extension rules. Mr. Bruns observed that wastewater generated within the Proposed CTA Area will be handled by the Class I, 0.025 MGD extended aeration facility that is part of the White Oak System. Mr. Bruns testified that White Oak presently has an effective National Pollutant Discharge Elimination System ("NPDES") permit for its treatment plant, but will need to obtain IDEM approval to expand its treatment facilities if more than 40 equivalent dwelling units of additional flow were to be received. Mr. Bruns stated that Aqua Indiana is committed to making the necessary expansion.

Mr. Bruns also testified that he inquired at the Indiana Department of Natural Resources ("DNR") about needed approvals in connection with past requests for new or expanded CTAs and was directed to DNR's regulations concerning permits needed for construction in and crossing of flood zones and streams. He testified there are no such projects currently planned within the Proposed CTA Area, but if any arise, the needed permits or approvals will be obtained.



Mr. Bruns stated that, to his knowledge, no other utility or entity has plans to provide wastewater utility service within the Proposed CTA Area, nor do any utilities or other entities have facilities in the vicinity capable of providing service.

Mr. Bruns expressed his opinion that Aqua Indiana's Floyd County Division will be able to handle service within the Proposed CTA Area for the foreseeable future. He stated that as growth occurs in the Proposed CTA Area, Aqua Indiana will make the capital additions to the facilities and secure the additional staff resources that may be needed to continue to provide adequate and reliable service. In addition, Aqua Indiana will be able to rely on the significant financial and other resources of Aqua America to support its expansion and provision of service within the Proposed CTA Area.

Mr. Bruns expressed the view that appropriate development of the Proposed CTA Area depends on having adequate sanitary facilities available and a central wastewater utility service will support the future growth and development of the Proposed CTA Area. He stated a central wastewater utility service will also provide relief for any existing residents with failing septic systems, which pose a health risk to residents and the general public.

**C. Commission's Consent.** Mr. Bruns testified that Aqua Indiana intends to use county-owned property, including without limitation highway rights-of-way, in connection with operating a wastewater utility system within the Proposed CTA Area. Because public convenience and necessity require such service, Aqua Indiana is requesting the Commission to make such a determination and consent to Crawford County granting Aqua Indiana licenses, permits, or franchises for the use of county-owned property. Mr. Bruns indicated his testimony provides adequate support for such a determination and consent.

**5. Settlement Agreement.** The Stipulation and Settlement Agreement ("Settlement Agreement") entered into by Aqua Indiana and the OUCC provides that the parties agree, subject to the certain conditions, approval of the proposed sale and transfer of the White Oak System and the other relief requested by Aqua Indiana will serve the public interest and public convenience and necessity. Specifically, the parties request the Commission to issue an Order:

(i) Finding the relief requested by Aqua Indiana in this Cause will serve the public interest and public convenience and necessity;

(ii) Approving the sale and transfer of the White Oak System to Aqua Indiana pursuant to the Purchase Agreement;

(iii) Approving the Purchase Agreement and the terms and conditions set forth therein to the extent necessary to authorize the transfer;

(iv) Granting Aqua Indiana a certificate of territorial authority to provide wastewater utility service within the Proposed CTA Area described in Attachment D to Petitioner's Exhibit 1;



(v) Approving Aqua Indiana's application to customers within the Proposed CTA Area of the same rates and charges as are currently applied by White Oak to its customers within Crawford County, Indiana, subject to such changes as the Commission may approve in the future;

(vi) Approving Aqua Indiana's application to customers within the Proposed CTA Area of the rules and regulations as are currently applied by Aqua Indiana to customers within its Floyd County Division, subject to such changes as the Commission may approve in the future;

(vii) Approving Aqua Indiana's recording the acquisition of the White Oak System at an original cost reflecting the purchase price and incidental expenses it paid, as well as other acquisition costs it incurred, as part of the transaction, with such costs and expenses being allocated among appropriate utility plant in service accounts and with such adjustments as may be necessary to reflect their acquisition by Aqua Indiana;

(viii) Approving Aqua Indiana's use of a depreciation rate of 2.5% for plant, property and assets acquired from White Oak and as may be used to serve present and future customers within the Proposed CTA Area; and

(ix) Consenting to Crawford County, Indiana granting Aqua Indiana licenses, permits or franchises for the use of county-owned property to provide wastewater utility service.

As noted above, Aqua Indiana and the OUCC agree that granting the above-described relief should be subject to the following conditions:

(i) The actual incidental expenses and other acquisition costs reflected in the amounts recorded by Aqua Indiana shall not exceed $35,000.

(ii) Petitioner shall amortize contributions in aid of construction ("CIAC") as an offset to its depreciation expense and shall use for such purpose a composite rate of 2.5% or such other rate or rates as the Commission shall direct.

(iii) Aqua Indiana should notify the customers previously served by White Oak regarding electronic access to the new rules and regulations that will be applicable to their wastewater utility service.

(iv) Prior to the closing on the acquisition, Aqua Indiana should confirm that White Oak does not possess any deposits made by its customers. If any such deposits are identified, Aqua Indiana shall cause White Oak to return them to the customers involved or deliver them to Aqua Indiana to be handled and returned as appropriate.

(v) In the event Aqua Indiana determines after it acquires and commences operation of the White Oak System that there exists a more appropriate basis to record on its books and records the acquired plant, property, and assets than as described above, subject to any defenses, Aqua Indiana shall submit such for Commission review and approval in the

first general rate case it initiates, which Aqua anticipates will not occur more than three years from the date it closes on the acquisition and commences operation of the acquired plant, property, and assets.

(vi) Within 12 months of closing, Aqua Indiana will provide to the OUCC a complete list by the National Association of Regulatory Utility Commissioners ("NARUC") account of utility plant being acquired. At that time, Aqua Indiana will also provide to the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Aqua Indiana deems it is appropriate to record. Aqua Indiana shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category (legal fees, etc.).

The Settlement Agreement entered into by Aqua Indiana and the OUCC also contains typical provisions governing its scope and approval.

**6. Evidence in Support of Settlement Agreement.**

**A. Aqua Indiana's Evidence.** Mr. Bruns testified the Settlement Agreement was the product of negotiations with the OUCC after Aqua Indiana filed its case-in-chief. Mr. Bruns then summarized the Settlement Agreement. He stated the parties agreed the Commission should essentially grant the relief sought by Aqua Indiana in its Verified Petition.

Mr. Bruns also testified regarding the conditions that Aqua Indiana and the OUCC agreed to that were not included in Aqua Indiana's Verified Petition. The first condition he described relates to Aqua Indiana's recording on its books and records of the acquisition of the White Oak System, in that Paragraph 2(A) of the Settlement Agreement caps the amount of actual incidental expenses and other acquisition costs reflected in the amounts recorded by Aqua Indiana at $35,000. Mr. Bruns also described the Settlement Agreement's provisions regarding Aqua Indiana's recordation on its books and records of the plant, property, and assets to be acquired as part of the transaction.

Mr. Bruns also testified that the parties agreed Aqua Indiana should use a depreciation rate of 2.5% for plant, property, and assets acquired from White Oak and as may be used to serve present and future customers within the Proposed CTA Area. He said that Aqua Indiana would also amortize CIAC as an offset to its depreciation expense and use for such purpose a composite rate of 2.5% or such other rate or rates as the Commission shall direct.

The next provision of the Settlement Agreement Mr. Bruns addressed was the requirement that Aqua Indiana notify the customers previously served by White Oak regarding electronic access to the new rules and regulations that will be applicable to their wastewater utility service. He also explained that, prior to the closing on the acquisition, Aqua Indiana will confirm that White Oak does not possess any deposits made by its customers, and that if any such deposits are identified, Aqua Indiana shall cause White Oak to return them to the customers involved or deliver them to Aqua Indiana to be handled and returned as appropriate.

Mr. Bruns concluded by expressing his opinion that the Settlement Agreement represents



a reasonable resolution of the issues in this proceeding and should be approved by the Commission as consistent with the public interest. He testified the Settlement Agreement results in benefits to the parties and customers as a result of the conditions reflected in Paragraph 2.

Finally, in response to a November 18, 2016 docket entry, Mr. Bruns confirmed that the amount Aqua Indiana will pay for the acquisition of the White Oak System is not in excess of 5% of the book cost to Aqua Indiana of all property, plant, or business owned by it at the time of filing its Verified Petition.

**B. OUCC's Evidence.** Margaret A. Stull, Senior Utility Analyst in the OUCC's Water/Wastewater Division, testified in support of the Settlement Agreement. Ms. Stull described the review and analysis she performed of Aqua Indiana's requested relief and the terms of the Settlement Agreement. She explained that the parties agreed Aqua Indiana should be authorized to consummate the acquisition of certain White Oak wastewater utility assets, and that the relief otherwise requested by Aqua Indiana should be granted, subject to the conditions set forth in the Settlement Agreement.

Ms. Stull testified that the OUCC agreed that Aqua Indiana should be permitted to book an amount equal to the purchase price ($10,000) plus the actual incidental expenses and other acquisition costs not to exceed $35,000.

Next, Ms. Stull explained how certain agreed terms in the Settlement Agreement are in the public interest. First, Aqua Indiana agreed to notify the customers previously served by White Oak as to where they may access the rules and regulations that will now apply to Aqua Indiana's service. She testified it is important that customers understand new rules will apply and how to access those rules. Additionally, to promote maintenance of a positive rate base and encourage continued prudent investment, Aqua Indiana agreed that it will amortize CIAC as an offset to its depreciation expense and shall use for such purpose a composite rate of 2.5% or such other rate or rates as the Commission shall direct.

Ms. Stull also testified that, in order to avoid misunderstanding and promote appropriate accounting of deposits, Aqua Indiana will confirm that White Oak does not possess any deposits made by its customers. If such deposits are identified, Aqua Indiana will cause White Oak to return the deposits to the customers or deliver them to Aqua Indiana for appropriate handling and return.

The parties also agreed that if Aqua Indiana later determines that there is a more appropriate basis to record the acquired plant, property, and assets than that set forth in the Settlement Agreement, Aqua Indiana may submit such basis for Commission review and approval in the first general rate case affecting the assets. Ms. Stull explained that because such application would be subject to any defenses, the appropriateness of such proposed method will be ensured.

Ms. Stull also testified that Aqua Indiana agreed that within 12 months of closing, Aqua Indiana will provide to the OUCC, by NARUC account, a complete list of utility plant and accumulated depreciation being acquired as of the date of the purchase. Additionally, Ms. Stull



explained that, to promote transparency and more efficient regulatory proceedings, Aqua Indiana will provide an opening balance sheet for the division and the total amount of transactions costs incurred by cost category.

Finally, Ms. Stull testified the Settlement Agreement, which is supported by the evidence, represents a fair, reasonable, and just resolution of the issues in this Cause. She stated that the OUCC believes the settlement is in the public interest.

**7. Commission Discussion and Findings.** Settlements presented to the Commission are not ordinary contracts between private parties. *United States Gypsum, Inc. v. Indiana Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). When the Commission approves a settlement, that settlement "loses its status as a strictly private contract and takes on a public interest gloss." *Id.* (quoting *Citizens Action Coalition of Ind., Inc. v. PSI Energy, Inc.*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the Commission "may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement." *Citizens Action Coalition*, 664 N.E.2d at 406.

Further, any Commission decision, ruling, or order, including the approval of a settlement, must be supported by specific findings of fact and sufficient evidence. *United States Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition of Ind., Inc. v. Public Service Co. of Ind., Inc.*, 582 N.E.2d 330, 331 (Ind. 1991)). The Commission's own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before the Commission can approve the Settlement Agreement, we must determine whether the evidence in this Cause sufficiently supports the conclusions that the Settlement Agreement is reasonable, just, and consistent with the purpose of Indiana Code ch. 8-1-2, and that such agreement serves the public interest.

**A. Proposed Acquisition.** The evidence demonstrates that the Purchase Agreement, including the agreed purchase price, was the result of arms-length negotiations. Moreover, undisputed testimony indicates that the purchase price is less than the actual value of the White Oak System. The evidence also shows that the amount the parties agreed Aqua Indiana would pay for the acquisition of the White Oak property, plant, or business ($10,000) is not an amount in excess of 5% of the book cost to Aqua Indiana of all property, plant, or business owned by it at the time of filing its petition in this Cause (in excess of $100,000,000). Therefore, the shareholder approval provision of Ind. Code § 8-1-2-84(c) is not applicable to this Cause.

The evidence shows that Aqua Indiana is an experienced utility operator and possesses the facilities, personnel, and other resources needed to provide adequate and reliable wastewater utility service to its current customers and those served by the White Oak System. Aqua Indiana also will be able to rely on Aqua America to support its provision of service to the current customers of the White Oak System.

Based on the evidence presented, we find Aqua Indiana's proposal to apply to present and future customers within the Proposed CTA Area the same rates and charges as are applied by White Oak, which are lower than those currently charged by Aqua Indiana in the Floyd County Division, is reasonable and should be approved. Similarly, we find Aqua Indiana's proposal to



apply to customers of the White Oak System the same rules and regulations for service as are currently applied to Aqua Indiana's customers is reasonable and should be approved. However, as agreed to in the Settlement Agreement, Aqua Indiana shall notify the customers previously served by White Oak regarding electronic access to the new rules and regulations that will be applicable to their wastewater utility service.

We also find it reasonable that Aqua Indiana record the acquisition of the White Oak System at an original cost reflecting the purchase price and the actual incidental expenses and other acquisition costs, with such costs and expenses limited to $35,000 and allocated among appropriate utility plant in service accounts. White Oak apparently has not maintained books and records in a manner that would allow any other course of action. Nevertheless, we also find it reasonable that, in the event Aqua Indiana determines after it acquires and commences operation of the White Oak System that there exists a more appropriate basis to record on its books and records the White Oak System, Aqua Indiana will submit such for Commission review and approval in the first general rate case it initiates. In this regard, the parties have agreed that, within 12 months of closing, Aqua Indiana will provide to the OUCC a complete list by NARUC account of utility plant being acquired. At that time, Aqua Indiana will also provide to the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Aqua Indiana deems it is appropriate to record. Aqua Indiana shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category. We find this is a reasonable matter for the parties to have agreed to and should promote transparency and more efficient regulatory proceedings.

As we noted above, Aqua Indiana will assume ownership of and operate the White Oak System without any increase in rates and charges to White Oak's customers. Consequently, residential and commercial customers in the Proposed CTA Area will pay a flat rate of $45 and $50, respectively. Although this provides an immediate benefit to White Oak's customers, Aqua Indiana's existing customers should also eventually benefit from Aqua Indiana's ability to spread its fixed costs over a larger customer base and otherwise take advantage of economies of scale in connection with providing service to them. We find, therefore, that the acquisition and operation of the White Oak System by Aqua Indiana on the terms described in the Purchase Agreement is supported by public convenience and necessity, is in the public interest, and should be approved. Prior to the closing on its sale of the White Oak System, Aqua Indiana shall confirm that White Oak does not possess any deposits made by its customers. If any such deposits are identified, Aqua Indiana shall cause White Oak to return them to the customers involved or deliver them to Aqua Indiana to be handled and returned as appropriate. Upon closing the acquisition transaction with White Oak, Aqua Indiana will notify the Commission and the OUCC within 14 days.

**B. Proposed CTA.** Pursuant to Ind. Code § 8-1-2-89(e), the Commission must review the evidence and determine whether Aqua Indiana has established the following:

(i) Lawful power and authority to apply for said certificate and to operate said proposed service;
(ii) Financial ability to install, commence, and maintain said proposed service; and
(iii) Public convenience and necessity require the rendering of this proposed service by it in the Proposed CTA Area.

As indicated above in our discussion of the proposed acquisition, the evidence presented demonstrates that Aqua Indiana has the managerial, technical, and financial ability to provide wastewater service to the White Oak customers. Moreover, the evidence presented supports the conclusion that those abilities extend to Aqua Indiana's proposed service within the Proposed CTA Area. Consequently, we find Aqua Indiana possesses the technical, managerial and financial ability to provide service to the Proposed CTA Area.

Additionally, and with respect to Aqua Indiana's lawful authority to operate the White Oak System, 170 IAC 8.5-3-1 requires an existing wastewater utility seeking an additional or expanded CTA to submit certain exhibits in support of its request. Based on our review, we find that Aqua Indiana has provided the necessary exhibits relevant to its request and demonstrated that it has the lawful authority to apply for the CTA and render wastewater service in the Proposed CTA Area. Specifically, Aqua Indiana provided a legal description for the Proposed CTA Area as well as a detailed map utilizing U.S. Geological Survey facets showing its location and other required data. White Oak presently has an effective NPDES permit issued by IDEM and no other approvals from either IDEM or DNR are required at this time in connection with the provision of service to the Proposed CTA Area. However, Aqua Indiana expressed its willingness to obtain any IDEM or DNR permits and approvals that may be required in the future for specific projects necessary to provide service to the Proposed CTA Area.

In addition, Aqua Indiana intends to serve the Proposed CTA Area, at least initially, with existing infrastructure and provided basic information concerning those facilities. Although the evidence indicates the White Oak System treatment plant is in need of painting and other repairs, Aqua Indiana intends to make the improvements, including inspection and cleaning of collection piping after closing on the acquisition.

Attachment I to Petitioner's Exhibit 1 contains copies of letters that Aqua Indiana sent by certified mail to several utilities and municipalities in the vicinity of the Proposed CTA Area notifying them of the initiation of this proceeding and its request for authority to serve the Proposed CTA Area. Petitioner's exhibit also included the acknowledgments it received to those notice letters. There is no dispute that most of the Proposed CTA Area is presently served by White Oak and outside of White Oak's current service area there does not appear to be the any other supplier interested in serving the area. Further, Aqua Indiana has presented evidence showing that its service will benefit the Proposed CTA Area by making it more attractive for development and as a source of service in the event of failing septic systems.

We also note that Aqua Indiana's request for approval to provide service in the Proposed CTA Area meets our preference that utilities bordering upon previously developed areas extend CTAs in a symmetric way that allows for the option of service and avoids isolated unserved areas. Aqua Indiana has demonstrated that its interest in serving the Proposed CTA Area is not focused solely on the area currently served by White Oak. The Proposed CTA Area encompasses territory adjacent to the White Oak service area and does not create isolated unserved areas. Consequently, granting Aqua Indiana's request that it be authorized to serve areas contiguous to the area currently served by White Oak is reasonable, and thus, will serve public convenience and necessity and the public interest.



**C. Commission Consent.** Ind. Code § 36-2-2-23 requires the consent of the Commission prior to the grant by a board of county commissioners of a permit to a utility to use county property (generally roads, easements, right-of-ways, and the like) in rendering utility service. Accordingly, the finding by the Commission herein that the public convenience and necessity require the issuance of the requested CTA to Aqua Indiana should be deemed the consent of the Commission to the Board of Commissioners of Crawford County issuing to Aqua Indiana a license, permit, or franchise for the use of county property in rendering wastewater utility service within the Proposed CTA Area in accordance with applicable Indiana law.

**8. Conclusions Regarding Settlement Agreement.** Based on our discussion above and our review of the evidence presented, we find that the Settlement Agreement is reasonable, supported by the evidence, and in the public interest. Therefore, we approve the Settlement Agreement consistent with our findings above. Further, the parties agree that the Settlement Agreement should not be used as precedent in any other proceeding or for any other purpose, except to the extent necessary to implement or enforce its terms. Consequently, with regard to future citation of the Settlement Agreement, we find that our approval herein should be construed in a manner consistent with our finding in *Richmond Power & Light*, Cause No. 40434, 1997 WL 34880849, at *7-8 (IURC March 19, 1997).

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:**

1. The Settlement Agreement, a copy of which is attached and incorporated by reference into this Order, is approved.

2. The sale and transfer of the White Oak System to Aqua Indiana and the Purchase Agreement are in the public interest, serve the public convenience and necessity, and are approved.

3. Aqua Indiana is granted a certificate of territorial authority to provide wastewater utility service within the Proposed CTA Area described in Attachment D to Petitioner's Exhibit 1.

4. Aqua Indiana is authorized to apply to customers within the Proposed CTA Area the same rates and charges as are currently applied by White Oak.

5. Upon closing the transaction with White Oak, Aqua Indiana shall file an updated tariff with the Commission's Water/Wastewater Division a new schedule of rates and charges for its White Oak operation. Upon its approval, the tariff will be effective as of its filing date.

6. Aqua Indiana is authorized to apply to customers within the Proposed CTA Area the rules and regulations as are currently applied by Aqua Indiana to customers within its Floyd County Division.



7. Aqua Indiana is authorized to record the acquisition of the White Oak System at an original cost reflecting the purchase price and incidental expenses it paid, as well as other acquisition costs it incurred, as part of the transaction, with such costs and expenses being allocated among appropriate utility plant in service accounts and with such adjustments as may be necessary to reflect their acquisition by Aqua Indiana, but which amount shall not exceed $35,000.

8. Aqua Indiana is authorized to use of a depreciation rate of 2.5% for plant, property, and assets acquired from White Oak and as may be used to serve present and future customers within the Proposed CTA Area.

9. Consent to Crawford County, Indiana granting Aqua Indiana licenses, permits, or franchises for the use of county-owned property is granted.

10. This Order shall be effective on and after the date of its approval.

**HUSTON, FREEMAN, WEBER, AND ZIEGNER CONCUR:**

**APPROVED:** JAN 04 2017

**I hereby certify that the above is a true and correct copy of the Order as approved.**

Mary M. Becerra
**Mary M. Becerra**
**Secretary of the Commission**



FILED
NOVEMBER 1, 2016
INDIANA UTILITY
REGULATORY COMMISSION

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

| | |
|---|---|
| **PETITION OF AQUA INDIANA, INC. ("AQUA INDIANA") FOR (1) APPROVAL OF THE SALE AND TRANSFER TO AQUA INDIANA OF WASTEWATER UTILITY ASSETS IN CRAWFORD COUNTY, INDIANA USED BY JUSTIN LEWIS AND/OR WHITE OAK SEWAGE TREATMENT, LLC PURSUANT TO AN ASSET PURCHASE AGREEMENT; (2) APPROVAL OF CERTAIN ACCOUNTING AND OTHER RELIEF RELATED TO THE ACQUISITION OF THOSE ASSETS; (3) ISSUANCE TO AQUA INDIANA OF A CERTIFICATE OF TERRITORIAL AUTHORITY ENCOMPASSING RURAL AREAS IN LIBERTY TOWNSHIP IN CRAWFORD COUNTY; AND (4) CONSENTING TO CRAWFORD COUNTY GRANTING AQUA INDIANA LICENSES, PERMITS OR FRANCHISES FOR THE USE OF COUNTY-OWNED PROPERTY.** | **CAUSE NO. 44811** |

OFFICIAL
EXHIBITS

IURC
JOINT
EXHIBIT No. 1
11-28-16
DATE
REPORTER

**STIPULATION AND SETTLEMENT AGREEMENT**

On July 1, 2016, Aqua Indiana, Inc. ("Aqua Indiana" or "Petitioner") filed its Verified Petition seeking to have the Commission approve the sale and transfer to Aqua Indiana of the plant and property currently used by Mr. Justin Lewis and/or White Oak Sewage Treatment, LLC (collectively, "White Oak") in Crawford County, Indiana to provide wastewater utility service. The sale and transfer of the plant and property currently used by White Oak (the "White Oak System") would be made pursuant to an Asset Purchase Agreement between White Oak and Aqua Indiana that appears as Attachment C to Petitioner's Exhibit 1 (the "Purchase Agreement"). In connection with the sale and transfer of the White Oak System, Aqua Indiana also requests that the Commission (i) approve the manner in which Aqua Indiana will record the plant, property and other assets acquired from White Oak on its books and records; (ii) approve the rates and charges, as well as the rules

**Joint Exhibit 1**

and regulations, that Aqua Indiana will apply to customers, subject to such changes as the Commission may approve in the future; and (iii) approve the depreciation rate to be used by Aqua Indiana for the plant, property and assets that it may use to serve present and future customers.

Aqua Indiana also requests that the Commission grant it a CTA to provide wastewater utility service within the area which White Oak historically has served and certain areas contiguous to that area (the "Proposed CTA Area"). A legal description and map of the Proposed CTA Area appears as part of Attachment F to Petitioner's Exhibit 1. Finally, Aqua Indiana is seeking to have the Commission determine, in accordance with Ind. Code § 36-2-2-23, that public convenience and necessity require Aqua Indiana to provide wastewater utility service within the Proposed CTA Area and consent to Crawford County, Indiana granting Aqua Indiana licenses, permits or franchises for the use of county-owned property to provide wastewater utility service.

The Indiana Office of Utility Consumer Counselor ("OUCC") reviewed the Petitioner's filed testimony and exhibits, met with representatives of Petitioner and requested additional information from Petitioner through both formal and informal discovery. Petitioner and the OUCC (individually, a "Settling Party" and collectively, the "Settling Parties") engaged in settlement negotiations. As a result of those negotiations, the Settling Parties reached an agreement with respect to all the issues between them before the Commission, including without limitation as follows:

1. **Granting Requested Relief**. The Settling Parties agree that, subject to the provisions of Paragraph 2 below, approval of the relief requested by Aqua Indiana in this



Cause will serve the public interest and public convenience and necessity and, accordingly, the Commission should issue a Final Order in this Cause:

A. Finding that the relief requested by Aqua Indiana in this Cause will serve the public interest and public convenience and necessity;

B. Approving the sale and transfer of the White Oak System to Aqua Indiana pursuant to the Purchase Agreement;

C. Approving the Purchase Agreement and the terms and conditions set forth therein to the extent necessary to authorize the transfer;

D. Granting Aqua Indiana a certificate of territorial authority to provide wastewater utility service within the Proposed CTA Area described in Attachment D to Petitioner's Exhibit 1;

E. Approving Aqua Indiana's application to customers within the Proposed CTA Area of the same rates and charges as are currently applied by White Oak to its customers within Crawford County, Indiana, subject to such changes as the Commission may approve in the future;

F. Approving Aqua Indiana's application to customers within the Proposed CTA Area of the rules and regulations as are currently applied by Aqua Indiana to customers within its Floyd County Division, subject to such changes as the Commission may approve in the future;

G. Approving Aqua Indiana's recording the acquisition of the White Oak System at an original cost reflecting the purchase price and incidental expenses it paid, as well as other acquisition costs it incurred, as part of the transaction, with such costs and expenses



being allocated among appropriate utility plant in service accounts and with such adjustments as may be necessary to reflect their acquisition by Aqua Indiana;

H. Approving Aqua Indiana's use of a depreciation rate of 2.5% for plant, property and assets acquired from White Oak and as may be used to serve present and future customers within the Proposed CTA Area; and

I. Consenting to Crawford County, Indiana granting Aqua Indiana licenses, permits or franchises for the use of county-owned property to provide wastewater utility service.

2. **Other Agreements**.

A. For purposes of Paragraph 1F above, the actual incidental expenses and other acquisition costs reflected in the amounts recorded by Aqua Indiana shall not exceed $35,000.

B. Petitioner shall amortize contributions in aid of construction ("CIAC") as an offset to its depreciation expense and shall use for such purpose a composite rate of 2.5% or such other rate or rates as the Commission shall direct.

C. Aqua Indiana should notify the customers previously served by White Oak regarding electronic access to the new rules and regulations that will be applicable to their wastewater utility service.

D. Prior to the closing on the acquisition, Aqua Indiana should confirm that White Oak does not possess any deposits made by its customers. If any such deposits are identified, Aqua Indiana shall cause White Oak to return them to the customers involved or deliver them to Aqua Indiana to be handled and returned as appropriate.



E. In the event Aqua Indiana determines after it acquires and commences operation of the White Oak System that there exists a more appropriate basis to record on its books and records the acquired plant, property and assets than as described in Paragraph 1F above, subject to any defenses, Aqua Indiana shall submit such for Commission review and approval in the first general rate case it initiates, which Aqua anticipates will not occur more than three years from the date it closes on the acquisition and commences operation of the acquired plant, property and assets.

F. Within 12 months of closing, Aqua Indiana will provide to the OUCC a complete list by NARUC account of utility plant being acquired. At that time, Aqua Indiana will also provide to the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Aqua Indiana deems it is appropriate to record. Aqua Indiana shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category (legal fees, etc.).

3. **Scope and Approval**

A. Neither the making of this Settlement Agreement nor any of its provisions, including without limitation any provisions contained in exhibits to this Settlement Agreement, shall constitute in any respect an admission by any Settling Party in this or any other litigation or proceeding. This Settlement Agreement is solely the result of compromise in the settlement process and, except as provided herein, is without prejudice to and shall not constitute a waiver of any position that any of the Settling Parties may take with respect to any or all of the issues resolved herein in any future regulatory or other proceedings.

B. Neither the making of this Settlement Agreement, nor the provisions thereof, nor the entry by the Commission of a Final Order approving this Settlement Agreement, shall establish any principles or legal precedent applicable to Commission proceedings other than those resolved herein. This Settlement Agreement shall not constitute nor be cited as precedent by any person or deemed an admission by any Settling Party in any other proceeding except as necessary to enforce its terms before the Commission, or any tribunal of competent jurisdiction.

C. The undersigned have represented and agreed that they are fully authorized to execute this Settlement Agreement on behalf of their designated clients, and their successors and assigns, who will be bound thereby, subject to the agreement of the Settling Parties on the provisions contained herein and in the attached exhibits.

D. The communications and discussions during the negotiations and conferences have been conducted based on the explicit understanding that said communications and discussions are or relate to offers of settlement and therefore are privileged. All prior drafts of this Settlement Agreement and any settlement proposals and counterproposals also are or relate to offers of settlement and are privileged.

E. The Settling Parties shall offer supplemental testimony supporting the Commission's approval of this Settlement Agreement and will request that the Commission issue a Final Order incorporating the agreed proposed language of the Settling Parties and accepting and approving the same in accordance with its terms without any modification. Such supportive testimony will be agreed-upon by the Settling Parties and offered into evidence without objection by any Settling Party and the Settling Parties hereby waive cross-examination of each other's witnesses.



F. This Settlement Agreement is conditioned upon and subject to Commission acceptance and approval of its terms in their entirety, without any change or condition that is unacceptable to any Settling Party. The Settling Parties will support this Settlement Agreement before the Commission and request that the Commission accept and approve the Settlement Agreement. This Settlement Agreement is a complete, interrelated package and is not severable, and shall be accepted or rejected in its entirety without modification or further condition(s) that may be unacceptable to any Settling Party. The Settling Parties propose to submit this Settlement Agreement and evidence conditionally, and if the Commission fails to approve this Settlement Agreement in its entirety without any change or imposes condition(s) unacceptable to any adversely affected Settling Party, the Settlement Agreement and supporting evidence may be withdrawn and the Commission will continue to proceed to a decision in the affected proceeding, without regard to the filing of this Settlement Agreement.

G. The Settling Parties will work together to prepare an agreed upon proposed order to be submitted in this Cause. The Settling Parties will request Commission acceptance and approval of this Settlement Agreement in its entirety, without any change or condition that is unacceptable to any party to this Settlement Agreement. The Settling Parties will request that the Commission issue a Final Order promptly accepting and approving this Settlement Agreement in accordance with its terms.

H. The Settling Parties shall not appeal or seek rehearing, reconsideration or a stay of any Final Order entered by the Commission approving the Settlement Agreement in its entirety without changes or condition(s) unacceptable to any Settling Party (or related orders to the extent such orders are specifically and exclusively implementing the provisions



hereof) and shall not oppose this Settlement Agreement in the event of any appeal or a request for rehearing, reconsideration or a stay by any person not a party hereto.

**AGREED** and **ACCEPTED** this 3rd day of October, 2016.

**AQUA INDIANA, INC.**

By: Philip B. McKiernan
Its: Attorney

**INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR**

By: Daniel M. Le Vay
Its: Deputy Consumer Counselor



Control Number: 46127

Item Number: 1

Addendum StartPage: 0

46127

Westwood

Utility

Corp.

CCN-12126

STM

RECEIVED
2016 JUL -5 AM 11:57
PUBLIC UTILITY COMMISSION
FILING CLERK

**Application for Sale, Transfer, or Merger of a Retail Public Utility**
Pursuant to Chapter 13.251 of the Texas Water Code

RECEIVED
2016 JUL -5 AM 11:59
PUBLIC UTILITY COMMISSION
FILING CLERK

**Docket Number: 46127**

(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

**TABLE OF CONTENTS**

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 9
**Part E – Projected Information** ..... 12
**Part F – Public Water System Information** ..... 16
**Part G – Oaths and Notices** ..... 18



## Part A – General Information

*RN# 102684248 *CN# 600642045 * (PRIOR TCEQ ID numbers)

1. Proposed action of application (check all the boxes that apply):
[X] Sale of [X] All [ ] Portion of the [X] Water system(s) under CCN No.: 12126
[ ] Acquisition [ ] Sewer system(s) under CCN No.: N/A
[ ] Lease/Rental

[X] Transfer of [X] All [ ] Portion of the [X] Certificated water service area – CCN No.: 12126
[ ] Certificated sewer service area – CCN No.: N/A

If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

N/A

and to:
[ ] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
[X] Amend the transferee's CCN No.:
[ ] Merge or consolidate public utilities
[X] Cancel CCN of the transferor (seller)

2. Proposed effective date of this transaction: 11/21/2016
(Must be at least 120 days after proper notice is provided)

## Part B – Current Service Provider or Seller Information

☞ **Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
A. Name: Westwood Utility Corporation.
(Individual, Corporation or Other Legal Entity)
who is a(n):of [ ] Individual [X] Corporation [ ] WSC [ ] HOA or POA [ ] Other

B. Utility Name (if different than above):
Address: P. O. Box 671, Fairfield, TX 76850 Telephone: (AC) (903) 389-2105

C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
Name: Mark Zeppa- 4833 Spicewood Springs Rd. Title: Attorney
Address: Suite 202, Austin,TX 78759 Telephone: (AC) (512) 346-4011



Fax: (512) 346-6847 Email: jj@zeppalaw.com

4. About the last rate increase for the system or facilities being transferred:
A. What was the effective date of the last rate increase? 11/27/2008

B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
[ ] No [X] Yes- Application/Docket Number: 36158-R Date 9/9/08

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| List will be attached to back of document | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
Applicant: City of Fairfield
(Individual, Corporation, or Other Legal Entity)
Utility Name: City of Fairfield
(If different than above)
Utility Address: 222 South Mount St., Fairfield, TX 75840

Fax: (903) 389-8327 Email: jeff.looney@fairfieldtexas.net Telephone (AC): (903) 389-2633

CCN Numbers held prior to the filing of this application: 11183 – (CN#600671242)(PWS 0810001)

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
[ ] Individual
[ ] Home or Property Owners Association
[ ] Partnership; attach copy of partnership agreement
[ ] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas:
[ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:

| | |
|---|---|
| [X] | Municipally-owned utility |
| [ ] | District (MUD, SUD, WCID, etc.) |
| [ ] | County |
| [ ] | Other (please explain): |

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| | | | |
|---|---|---|---|
| Name: | | Email | |
| Address | | | |
| Telephone (AC): | | Fax (AC): | |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers or partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | Mayor Roy W. Hill | Telephone (AC): | (903) 389-2633 |
| Address: | 222 South Mount St. | | |
| Position: | Mayor | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | City Administrator: Jeff Looney | Telephone (AC): | (903) 389-2633 |
| Address: | 222 South Mount St. | | |
| Position: | City Administrator | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

– Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from:



Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | Jeff Looney | Title: | City Administrator |
| Address: | 222 South Mount Street, Fairfield, TX 75840 | Telephone (AC): | (903) 389-2633 |
| Fax # | (903) 389-6327 | Email | jeff.looney@fairfieldtexas.net |
| Relationship to the applicant: | Employee: Administrator of the City of Fairfield | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.

A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

The applicant (The City of Fairfield) has a fully licensed staff managing the Municipal Water Department, which operates under the rules and regulations of TCEQ.

B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [ ] Yes [X] No

If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.



D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

No changes, however: (3) City water dept. staff live on this system. Any problems should be realized and addressed quickly. Service should be maintained at the same high level to which customers are accustomed.

E. How will the transaction serve the public interest?

The greatest benefit to the public is the assurance of faithful, continuous, quality water and exceptional service into the future being provided by a financially stable Municipality.

12. Please describe the nature of the proposed transaction:

The Alford's would like to sell to the most responsible buyer. They have concluded the entity which could guarantee long term stability and quality, for their customers would be the City of Fairfield. They have agreed to owner finance the debt to make the transaction more convenient for the City.

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

A.
- Total Purchase Price: $ 3,000,000.00
- Total Original Cost (as recorded on books of seller or merging entity):
- Accumulated Depreciation as of the proposed effective date of the transaction:
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC: $ 0.00
  - Revenues from explicit customer agreements: $ 0.00
  - Developer Contributions (please explain):
  - Other Contributions (please explain):

Total Contributions in Aid of Construction

- Net Book Value:



☞ If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

Application/Docket Number: Date:

☞ If the applicant is not under the rate jurisdiction of the TCEQ, only the purchase price and information related to Contributions in Aid of Construction is required.

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application. [attach additional sheet(s) if necessary]:

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | |
| Plant Acquisition Adjustment: | |
| Extraordinary Loss on Purchase: | |
| Accumulated Depreciation of Plant: | |
| Cash: | |
| Notes Payable: | |
| Mortgage Payable: | |
| Others (please list): | |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: Mayor Date: 6/20/2016

14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

[X] All the customers will be charged the same rates as they were charged before the transaction.
[ ] Some All customers will be charged different rates than they were charged before the transaction.

If rates are changing, please explain:

N/A

☐ Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

N/A

☐ Other. Please explain:

N/A

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

Pleasant Grove WSC
Thompson Water
Clay Hill WSC
Kirvin WSC

16. Financial, Managerial and Technical information for the acquiring entity.

[redacted]

**Purchaser's financial information attached to the back of the application:**
**City of Fairfield-Annual Financial Reports-2012-2015**



## Part F – TCEQ Public Water or Sewer System Information

☞ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems. TCEQ Public Water System Identification Number: 0 8 1 0 0 2 4

Date of last inspection: 12/08/2015

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q ☐☐☐☐☐-☐☐☐
-Name of Permitee:
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? ☒ Yes ☐ No. If yes, please explain:

"Hayter Engineering" (Mike Tibbets) has been hired to provide the engineering plans for submission and approval of two previously installed booster pumps.

B. Is there a moratorium on new connections? ☐ Yes ☒ No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| Engineering plans for previously installed booster pumps submitted for approval | 7/30/2016 | $ 3,000.00 |
| | | |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? ☐ Yes ☒ No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☞ Attach copy of franchise agreement or consent letter from the city or district.



20. Do you currently purchase water or sewer treatment capacity from another source? ☐ Yes ☒ No
☐ Water ☐ Sewer Purchased on a ☐ Regular ☐ Seasonal ☐ Emergency Basis

- Source: % of total supply: 0.00%

21. List the number of existing connections to be effected by this transaction.

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | -Non Metered | | -2"meter | -Residential Connection | |
| 420 | -5/8" or 3/4" meter | | -3" meter | -Commercial Connection | |
| | -1" meter | | -4" meter | -Industrial Connection | |
| | -1 1/2" meter | | -Other | -Other | |
| | Total Water Connections: | | | Total Sewer Connections | |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? ☐ Yes ☒ No
If yes, please explain what steps are being taken to address the capacity issues:

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| Clyde E Woods | A | WO0028141 |
| Albert Gallegos | C | WG0010675 |
| Rebecca Boyd | C | WG0012295 |
| Shane A Reves | C | WG0014478 |
| | | |

24. Attach the following maps with each copy of the application:
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
   1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
   2. A map showing only the proposed area by:
      i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
      ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
      iii. following verifiable natural and man-made landmarks, or
      iv. a copy of recorded plat map with metes and bounds.
   3. A written description of the proposed service area.

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

| | | |
|---|---|---|
| PETITION OF AQUA INDIANA, INC. ("AQUA INDIANA") FOR (1) APPROVAL OF THE SALE AND TRANSFER TO AQUA INDIANA OF WATER UTILITY ASSETS IN ST. JOSEPH COUNTY, INDIANA USED BY WEDGEWOOD PARK WATER COMPANY, INC. PURSUANT TO AN ASSET PURCHASE AGREEMENT; (2) APPROVAL OF CERTAIN ACCOUNTING AND OTHER RELIEF RELATED TO THE ACQUISITION OF THOSE ASSETS; AND (3) CONSENTING TO ST. JOSEPH COUNTY GRANTING AQUA INDIANA LICENSES, PERMITS OR FRANCHISES FOR THE USE OF COUNTY-OWNED PROPERTY. | ) | CAUSE NO. 44814 |
| | ) | APPROVED: DEC 28 2016 |

ORDER OF THE COMMISSION

**Presiding Officers:**
**James D. Huston, Commissioner**
**David E. Veleta, Senior Administrative Law Judge**

On July 11, 2016, Aqua Indiana, Inc. ("Petitioner") filed its petition with the Indiana Utility Regulatory Commission ("Commission") in this matter. On August 23, 2016, Petitioner filed the direct testimony and exhibits of Thomas M. Bruns, President of Aqua Indiana.

On October 28, 2016, the Indiana Office of Utility Consumer Counselor ("OUCC") filed a notice of intent not to file testimony in this proceeding. On November 1, 2016, the Parties filed a settlement agreement with the Commission. Petitioner and the OUCC filed testimony in support of the Stipulation and Settlement Agreement on November 10, 2016 and November 14, 2016, respectively. On November 17, 2016, the Presiding Officers issued a docket entry requesting information relating to Petitioner's capacity to provide fire protection services. Petitioner filed its response to the docket entry on November 18, 2016. An additional docket entry was issued by the Presiding Officers on November 18, 2016 requesting information relating to Ind. Code § 8-1-2-84(c). Petitioner filed its response to the docket entry on November 21, 2016.

The Commission held an evidentiary hearing in this Cause at 1:30 p.m. on November 28, 2016 in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. Petitioner and the OUCC appeared and participated at the hearing.

Based on the applicable law and the evidence presented, the Commission finds:

1. **Notice and Jurisdiction.** Notice of the hearing in this Cause was given and published by the Commission as required by law. Petitioner is a public utility as defined by Ind. Code § 8-1-2-1(a). Under Ind. Code § 8-1-2-84, the Commission has jurisdiction over the transfer of utility property. Therefore, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. **Background.** Petitioner is an Indiana for-profit corporation providing water utility service to approximately 881 customers and wastewater utility services to approximately 20,772 customers in Indiana. Petitioner also supports the regulated wastewater utility operations of South Haven Sewer Works, Inc. ("South Haven") and will continue to do so until South Haven is merged into Petitioner as permitted by the Commission's April 29, 2015 Order in Cause No. 44533. Upon implementing that merger, Petitioner will directly provide water utility service to approximately 4,049 additional wastewater utility customers.

Wedgewood Park Water Company, Inc. ("Wedgewood Park") is an Indiana for-profit corporation providing water utility service to approximately 211 residential customers and five commercial customers in a subdivision near the Indiana-Michigan state line in St. Joseph County, Indiana. Wedgewood Park's distribution system consists of approximately two miles of four-inch and six-inch cast iron mains, with 15 hydrants. Wedgewood Park's system is interconnected with the water system operated by Niles, Michigan Charter Township, which supplies under a long term supply contract the water distributed by Wedgewood Park. The circumstances that led up to Wedgewood Park contracting for its water supply are described in the Commission's November 6, 2013 Order in Cause No. 44369.

3. **Relief Requested.** Petitioner seeks to have the Commission approve the sale and transfer to Petitioner of the water utility plant, property, and assets currently used by Wedgewood Park to provide water utility service. The water utility plant, property, and assets that Petitioner will acquire (the "Wedgewood Park System") are described in an Asset Purchase Agreement entered by and between Wedgewood Park and Petitioner (the "Purchase Agreement").

In connection with the sale and transfer of the Wedgewood Park System, Petitioner also requests that the Commission (i) approve of Petitioner charging and collecting from present and future customers of the Wedgewood Park System the same rates and charges as Wedgewood Park currently charges customers, subject to such changes as the Commission may approve in the future; (ii) approve of Petitioner applying to present and future customers of the Wedgewood Park System those rules and regulations as Petitioner currently applies to customers, unless and until the Commission has approved other rules and regulations to be applied to such customers, (iii) approve of Petitioner recording the acquisition of the Wedgewood Park System on its books and records in the same way it is shown at closing on Wedgewood Park's books and records, with such adjustments as may be necessary to reflect their acquisition by Petitioner; and (iv) approve of Petitioner utilizing Wedgewood Park's depreciation rates for plant, property, and assets comprising the Wedgewood Park System and used to serve present and future customers.

Petitioner also is seeking to have the Commission determine, in accordance with Ind. Code § 36-2-2-23, that public convenience and necessity requires Petitioner to provide water utility service within the county and consent to St. Joseph County granting Petitioner licenses, permits, or franchises for the use of county-owned property to provide water utility service.

4. **Petitioner's Evidence.** Mr. Bruns described the origin and contents of the Purchase Agreement. According to Mr. Bruns, Mr. Dennis Jusko, Wedgewood Park's President, approached Petitioner in July 2015 to inquire if it had interest in acquiring the Wedgewood Park System. After



completing some preliminary due diligence, Petitioner entered into negotiations with Mr. Jusko that led to the execution of the Purchase Agreement.

Mr. Bruns stated that the Purchase Agreement provides for Petitioner's purchase of the Wedgewood Park System, which is described in Section 1 and Schedule 1.1 of the Purchase Agreement. Under Section 1.3 of the Purchase Agreement, the consideration for the purchase is $210,000. Section 2 of the Purchase Agreement provides that the closing of the transaction will occur within 45 days after receipt of all final regulatory approvals. The closing is subject to certain conditions that are described in the Purchase Agreement and include Wedgewood Park providing Petitioner with certain information; Petitioner's satisfactory completion of its due diligence; verification of Wedgewood Park's title to the assets being transferred; the transfer of certain permits; receipt of certain consents and approvals, including without limitation the approval of the Commission; and the lack of any prohibitions to consummation of the matters covered by the Purchase Agreement. Mr. Bruns testified that, like the rest of the Purchase Agreement, the purchase price resulted from arms-length negotiation between Wedgewood Park and Petitioner.

Mr. Bruns explained that the Wedgewood Park System will be operated by Petitioner with the assistance of a qualified and experienced contract operator with oversight provided by personnel at Petitioner's affiliate, South Haven. Mr. Bruns noted that this will deviate in some respects from the way the Wedgewood Park System is currently operated by Wedgewood Park. However, Mr. Bruns was of the opinion that the operational and customer service differences will be beneficial to Wedgewood Park's customers. Mr. Bruns also testified that, after the acquisition of the Wedgewood Park System, it will be thoroughly inspected with corrective repairs made where needed and that Petitioner presently intends to replace all manual read residential meters with Radio Read meters. According to Mr. Bruns, like all facilities in Indiana operated by Petitioner, funding for improvements to the Wedgewood Park System would come from Petitioner's corporate parent, Aqua America.

As testified to by Mr. Bruns, Petitioner intends to apply to present and future customers the same rates and charges as are currently charged and collected by Wedgewood Park. Mr. Bruns also stated that the customers of the Wedgewood Park System will be subject to the same rules and regulations as Petitioner currently applies to its other water utility customers in Indiana, unless and until the Commission has approved other rules and regulations to be applied.

Mr. Bruns testified that Petitioner intends to record the plant, property, and assets acquired from Wedgewood Park on its books and records in the same way they are shown at closing on Wedgewood Park's books and records, with such adjustments as may be necessary to reflect their acquisition by Petitioner. Petitioner anticipates that based on information currently available it will make the following accounting entries to record the acquisition of the Wedgewood Park System:



| | Debit | Credit |
|---|---|---|
| Utility Plant in Service (Utility Assets $236,815 + Organization Costs estimated at $20,000) | $256,815 | |
| Accumulated Depreciation | | ($74,408) |
| CIAC | | ($4,437) |
| Utility Plant Acquisition Adjustment (Purchase Price $210,000 less Net Book Value of Utility Assets $157,970) | $52,030 | |
| Cash (Purchase Price $210,000 + Organization Cost $20,000) | | ($230,000) |

The actual entries Petitioner will make should reflect information as of the date of the closing of the acquisition. Further, Mr. Bruns testified that Petitioner is not seeking to recover all or any portion of an acquisition adjustment in this Cause. He stated that any such relief would be reflected in a future rate case, if at all. Additionally, Mr. Bruns testified that Petitioner proposes to utilize Wedgewood Park's depreciation rate or rates for plant, property, and assets comprising the Wedgewood Park System and used to serve present and future customers.

Mr. Bruns explained that, assuming the Commission approves the transfer of the Wedgewood Park System, he believed Petitioner will have the authority needed to lawfully own and operate the Wedgewood Park System. He also testified that Petitioner has the managerial, technical, and financial resources necessary to properly operate the Wedgewood Park System and provide adequate and reliable service to present and future customers. According to Mr. Bruns, Petitioner has a record of handling successful utility operations in Indiana. In his view, implementation of the Purchase Agreement will benefit the customers served by the Wedgewood Park System through, among other ways, access to the technical, financial, and customer service capabilities of Petitioner. Mr. Bruns testified that the Purchase Agreement and the acquisition provided for by it will serve public convenience and necessity and are in the public interest.

Finally, Mr. Bruns testified that Petitioner intends to use county-owned property, including without limitation highway rights-of-way, in connection with operating the Wedgewood Park System. According to Mr. Bruns, public convenience and necessity require such service and Petitioner is requesting the Commission to make such a determination and consent to St. Joseph County granting Petitioner licenses, permits, or franchises for the use of county-owned property.

5. **Settlement Agreement.** The Stipulation and Settlement Agreement ("Settlement Agreement") entered into by Petitioner and the OUCC is attached hereto and incorporated herein by reference. The Settlement Agreement provides that Petitioner and the OUCC agree that, subject to

certain conditions described in the Settlement Agreement, approval of the proposed sale and transfer of the Wedgewood Park System and the other relief requested by Petitioner will serve the public interest and public convenience and necessity. Specifically, the parties request the Commission to issue a Final Order in this Cause: (i) Finding that the relief requested by Petitioner in this Cause will serve the public interest and public convenience and necessity; (ii) Approving the sale and transfer of the Wedgewood Park System to Petitioner pursuant to the Purchase Agreement; (iii) Approving the Purchase Agreement and the terms and conditions set forth therein to the extent necessary to authorize the transfer; (iv) Approving Petitioner's application to present and future customers within the Wedgewood Park System of the same rates and charges as are currently applied by Wedgewood Park to its customers within St. Joseph County, Indiana, subject to such changes as the Commission may approve in the future; (v) Approving Petitioner's application to customers within the Wedgewood Park System of the rules and regulations as are currently applied by Petitioner to its customers, subject to such changes as the Commission may approve in the future; (vi) Approving of Petitioner recording the acquisition of the Wedgewood Park System on its books and records in the same way it is shown at closing on Wedgewood Park's books and records, with such adjustments as may be necessary to reflect their acquisition by Petitioner; (vii) Approving Petitioner use of Wedgewood Park's current depreciation rate(s) for plant, property, and assets comprising the Wedgewood Park System and such other property as may be used to serve present and future customers, subject to such changes as the Commission may approve in the future; and (viii) Consenting to St. Joseph County, Indiana granting Petitioner licenses, permits or franchises for the use of county-owned property to provide water utility service.

As noted above, Petitioner and the OUCC agree that granting the above-described relief should be subject to certain conditions set forth in the Settlement Agreement; namely: (i) incidental expenses and other acquisition costs reflected in the amounts recorded by Petitioner as part of the acquisition of the Wedgewood Park System shall not exceed $20,000; (ii) Petitioner shall amortize contributions in aid of construction ("CIAC") as an offset to its depreciation expense (i.e. for ratemaking purposes) and shall use for such purpose Wedgewood Park's current depreciation rate(s) or such other rate or rates as the Commission shall direct; (iii) Petitioner should notify the customers previously served by Wedgewood Park regarding electronic access to the new rules and regulations that will be applicable to their water utility service; (iv) Prior to the closing on the acquisition, Petitioner should confirm that Wedgewood Park does not possess any deposits made by its customers. If any such deposits are identified, Petitioner shall cause Wedgewood Park to return them to the customers involved or deliver them to Petitioner to be handled and returned as appropriate; (v) Within 12 months of closing, Petitioner will provide to the OUCC a complete list by NARUC account of utility plant being acquired. At that time, Petitioner will also provide to the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Petitioner deems it is appropriate to record. Petitioner shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category (legal fees, etc.); (vi) Within 12 months of closing, Petitioner will replace all customer meters with new radio frequency ("RF") meters. Thereafter, relying on one year of data Aqua will reassess water loss calculations and formulate a plan, if appropriate, to mitigate any continuing excessive water loss.

6. **Evidence in Support of Settlement Agreement.** Mr. Bruns provided testimony in



support of the Settlement Agreement. Mr. Bruns described the events that led to the execution of the Settlement Agreement, including the proposals, discovery, and negotiations. Mr. Bruns then summarized the Settlement Agreement. Mr. Bruns testified that, in the Settlement Agreement, the parties agreed that the Commission should essentially grant the relief sought by Petitioner in its Verified Petition, including, among other things, approval of the sale and transfer of the Wedgewood Park System to Petitioner pursuant to the Purchase Agreement, and consenting to St. Joseph County, Indiana granting Petitioner the licenses, permits, or franchises for the use of county-owned property to provide wastewater utility service.

Mr. Bruns also testified regarding the conditions that Petitioner and the OUCC agreed to that were not included in Petitioner's Verified Petition. The first condition that Mr. Bruns described relates to Petitioner's recording on its books and records of the acquisition of the Wedgewood Park System, in that Paragraph 2(A) of the Settlement Agreement caps the amount of actual incidental expenses and other acquisition costs reflected as transaction costs in the amounts recorded by Petitioner at $20,000.

Mr. Bruns next testified that Petitioner has agreed to provide the OUCC a complete list of utility plant being acquired and set forth by NARUC account any accumulated depreciation it determines appropriate to record as of the date of the purchase, within 12 months of closing. Mr. Bruns noted that Petitioner also agreed to provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category (such as legal fees).

Mr. Bruns then testified about the parties' agreement that Petitioner should use Wedgewood Park's current depreciation rate(s) for plant, property, and assets comprising the Wedgewood Park System and such other property as may be used to serve present and future customers. However, Petitioner also agreed to amortize contributions in aid of construction as an offset to its depreciation expense and shall use for such purpose Wedgewood Park's current depreciation rate(s) or such other rate or rates as the Commission shall direct.

The next provision of the Settlement Agreement that Mr. Bruns addressed was its provision that requires Petitioner to notify the customers previously served by Wedgewood Park regarding electronic access to the new rules and regulations that will be applicable to their wastewater utility service. Additionally, prior to the closing on the acquisition, Mr. Bruns explained that Petitioner agreed to confirm that Wedgewood Park does not possess any deposits made by its customers, and that if any such deposits are identified, Petitioner shall cause Wedgewood Park to return them to the customers involved or deliver them to Petitioner to be handled and returned as appropriate.

Mr. Bruns completed his testimony with his observation that, in his opinion, the Settlement Agreement should be approved by the Commission because it is consistent with the public interest, each party will receive benefits, and the customers will receive additional benefits as set forth in the Settlement Agreement.

Margaret A. Stull, Senior Utility Analyst in the OUCC's Water/Wastewater Division, testified in support of the Settlement Agreement. After reviewing the relief Petitioner requested in this Cause,



Ms. Stull described the key terms of the Settlement Agreement. Ms. Stull explained that the Settlement Agreement authorizes Petitioner to consummate the acquisition of certain Wedgewood Park water utility assets, and that the relief otherwise requested by Petitioner should be granted, subject to the conditions set forth in the Settlement Agreement.

Ms. Stull testified that the OUCC agreed that Petitioner should be permitted to book an amount equal to the purchase price ($210,000) plus actually incurred transaction costs not to exceed $20,000.

Next, Ms. Stull explained that the Settlement Agreement contained various terms that are in the public interest. First, the Settlement Agreement provided that Petitioner should notify the customers previously served by Wedgewood Park as to where they may access the rules and regulations that will now apply to Petitioner's service. Additionally, to promote maintenance of a positive rate base and encourage continued prudent investment, Petitioner agreed that it will amortize CIAC as an offset to its depreciation expense and shall use for such purpose Wedgewood Park's current depreciation rate of 1.7% or such other rate or rates as the Commission shall direct.

Ms. Stull also testified that, in order to avoid misunderstanding and promote appropriate accounting of deposits, Petitioner will confirm that Wedgewood Park does not possess any deposits made by its customers. If such deposits are identified, Petitioner will cause Wedgewood Park to return the deposits to the customers or deliver them to Petitioner for appropriate handling and return.

Ms. Stull also testified that Petitioner agreed to provide the OUCC a complete list by NARUC account of utility plant and accumulated depreciation, being acquired as of the date of the purchase within 12 months of closing. Additionally, Ms. Stull explained that, to promote transparency and more efficient regulatory proceedings, the Settlement Agreement provides that Petitioner shall provide an opening balance sheet for the division and the total amount of transactions costs incurred by cost category.

Ms. Stull completed her testimony by asking that the Commission approve the Settlement Agreement, which is supported by the evidence, contains fair and reasonable terms and conditions, and is a just resolution of the issues in this Cause. The OUCC believes the settlement is in the public interest.

7. **Discussion and Findings.** Settlements presented to the Commission are not ordinary contracts between private parties. *United States Gypsum, Inc. v. Indiana Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). When the Commission approves a settlement, that settlement "loses its status as a strictly private contract and takes on a public interest gloss." *Id.* (quoting *Citizens Action Coalition of Ind., Inc. v. PSI Energy, Inc.*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the Commission "may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement." *Citizens Action Coalition*, 664 N.E.2d at 406.

Further, any Commission decision, ruling, or order, including the approval of a settlement, must be supported by specific findings of fact and sufficient evidence. *United States Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition of Ind., Inc. v. Public Service Co. of Ind., Inc.*, 582



N.E.2d 330, 331 (Ind. 1991)). The Commission's own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before the Commission can approve the Settlement Agreement, we must determine whether the evidence in this Cause sufficiently supports the conclusions that the Settlement Agreement is reasonable, just, and consistent with the purpose of Indiana Code ch. 8-1-2, and that such agreement serves the public interest.

The Purchase Agreement is part of the record of this Cause and the evidence contains additional testimony describing its approval, terms and the acquisition contemplated by it. The evidence also shows that the Purchase Agreement and the purchase price provided for in it was the result of arms-length negotiations. The evidence indicated that the amount the parties agreed Petitioner would pay for the acquisition of the Wedgewood Park property, plant, or business ($210,000) is not an amount in excess of 5% of the book cost to Petitioner of all property, plant, or business owned by it at the time of filing its petition in this Cause (in excess of $100,000,000). Therefore, the shareholder approval provision of Ind. Code § 8-1-2-84(c) is not applicable to this Cause.

Further, the evidence shows that Petitioner has the legal, managerial, technical, and financial ability to provide water service. Petitioner is an experienced utility operator committed to providing adequate and reliable service and has a reasonable plan to operate the Wedgewood Park System with a qualified operator under its direct supervision. Also, upon acquiring the Wedgewood Park System, Petitioner intends to inspect the system and make such improvements as may be necessary. Further, Petitioner has agreed to replace all customer meters with new RF meters within 12 months of closing on the acquisition and, thereafter, reassess water loss calculations relying on one year of data and formulate a plan, if appropriate, to mitigate any continuing excessive water loss. In this regard, Petitioner also will be able to rely on Aqua America to support its provision of service to the current customers of the Wedgewood Park System.

Petitioner's proposal to apply to present and future customers the same rates and charges as are applied by Wedgewood Park is reasonable and should be approved. Similarly, Petitioner's proposal to apply to customers of the Wedgewood Park System the same rules and regulations for service as are currently applied to Petitioner's customers is reasonable and should be approved. However, Petitioner should notify the customers previously served by Wedgewood Park regarding electronic access to the new rules and regulations that will be applicable to their water utility service.

There is no dispute concerning Petitioner's proposal to utilize the same depreciation rate as currently used by Wedgewood Park, which as Ms. Stull testified is 1.7%. However, the parties have further agreed that Petitioner will amortize CIAC as an offset to depreciation expense using Wedgewood Park's current depreciation rate(s) or such other rate or rates as the Commission shall direct. Since it is agreed to by the parties, this is a reasonable agreement that might contribute toward Petitioner's rates for services to customers remaining reasonable.

Further, Petitioner's proposal to record the acquisition of the Wedgewood Park System in the same manner as shown on Wedgewood Park's books and records is reasonable. In this regard, the parties have agreed that, within 12 months of closing, Petitioner shall provide to the OUCC a complete list by NARUC account of utility plant being acquired. At that time, Petitioner shall also provide to

the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Petitioner deems it is appropriate to record. Petitioner shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category with the amount of any incidental expenses and other acquisition-related costs limited to $20,000. Again, this is a reasonable matter for the parties to have agreed to and, as Ms. Stull testified, should promote transparency and more efficient regulatory proceedings.

The evidence shows that Petitioner's acquisition and operation of the Wedgewood Park System by Petitioner is supported by public convenience and necessity, is in the public interest, and should be approved. As reflected in the Stipulation and Settlement Agreement, however, Petitioner should notify the Commission and the OUCC within 14 days of Wedgewood Park's assets being transferred to it. Also, prior to the closing on its sale of the Wedgewood Park System, Petitioner should confirm that Wedgewood Park does not possess any deposits made by its customers. If any such deposits are identified, Petitioner shall cause Wedgewood Park to return them to the customers involved or deliver them to Petitioner to be handled and returned as appropriate.

Finally, Ind. Code § 36-2-2-23 requires the consent of the Commission prior to the grant by a board of county commissioners of a permit to a utility to use county property (generally roads, easements, right-of-ways, and the like) in rendering utility service. In this regard, since the Commission found above that public convenience and necessity require Petitioner's service to the customers of the Wedgewood Park System, it should grant its consent to the Board of Commissioners of St. Joseph County issuing to Petitioner a license, permit, or franchise for the use of county property in rendering water utility service in accordance with applicable Indiana law.

Based on the review of the evidence presented and above discussion, we find that the Settlement Agreement is reasonable, supported by the evidence and in the public interest. Therefore, we approve the Settlement Agreement consistent with our findings above. Further, the Parties agree that the Settlement Agreement should not be used as precedent in any other proceeding or for any other purpose, except to the extent necessary to implement or enforce its terms. Consequently, with regard to future citation of the Settlement Agreement, we find that our approval herein should be construed in a manner consistent with our finding in *Richmond Power & Light*, Cause No. 40434, 1997 Ind. PUC LEXIS 459, at *19-22 (IURC March 19, 1997).

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:**

1. The sale and transfer to Petitioner of the Wedgewood Park System pursuant to the Purchase Agreement is approved.

2. The Purchase Agreement and the terms and conditions set forth therein to the extent necessary to authorize the transfer are approved.

3. Petitioner shall charge and collect from present and future customers of the Wedgewood Park System the same rates and charges as Wedgewood Park currently charges water utility customers, subject to such changes as the Commission may approve in the future. Petitioner



shall file a tariff by the date the transactions closes.

4. Petitioner shall apply to present and future customers of the Wedgewood Park System those rules and regulations as Petitioner currently applies to water utility customers, unless and until the Commission has approved other rules and regulations to be applied to such customers.

5. Petitioner shall record the acquisition of the Wedgewood Park System on its books and records in the same way it is shown at closing on Wedgewood Park's books and records, with such adjustments as may be necessary to reflect their acquisition by Petitioner and the requirements of this Order.

6. Petitioner shall utilize in the manner described in this Order Wedgewood Park's depreciation rate of 1.7% for plant, property, and assets comprising the Wedgewood Park System and used to serve present and future customers.

7. Petitioner shall comply fully with the conditions identified in Paragraph 2 of the Stipulation and Settlement Agreement and discussed in Finding No. 7 above.

8. The Commission hereby consents to St. Joseph County, Indiana granting Petitioner licenses, permits, or franchises for the use of county-owned property.

9. This Order shall be effective on and after the date of its approval.

**STEPHAN, FREEMAN, HUSTON, AND WEBER CONCUR; ZIEGNER ABSENT:**

**APPROVED:** DEC 28 2016

**I hereby certify that the above is a true and correct copy of the Order as approved.**

Mary M. Becerra

**Mary M. Becerra**
**Secretary of the Commission**



FILED
NOVEMBER 1, 2016
INDIANA UTILITY
REGULATORY COMMISSION

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

| | | |
|---|---|---|
| **PETITION OF AQUA INDIANA, INC. ("AQUA INDIANA") FOR (1) APPROVAL OF THE SALE AND TRANSFER TO AQUA INDIANA OF WATER UTILITY ASSETS IN ST. JOSEPH COUNTY, INDIANA USED BY WEDGEWOOD PARK WATER COMPANY, INC. PURSUANT TO AN ASSET PURCHASE AGREEMENT; (2) APPROVAL OF CERTAIN ACCOUNTING AND OTHER RELIEF RELATED TO THE ACQUISITION OF THOSE ASSETS; AND (3) CONSENTING TO ST. JOSEPH COUNTY GRANTING AQUA INDIANA LICENSES, PERMITS OR FRANCHISES FOR THE USE OF COUNTY-OWNED PROPERTY.** | ) | **CAUSE NO. 44814** |

**STIPULATION AND SETTLEMENT AGREEMENT**

On July 11, 2016, Aqua Indiana, Inc. ("Aqua Indiana" or "Petitioner") filed its Verified Petition seeking to have the Commission approve the sale and transfer to Aqua Indiana of the plant and property currently used by Wedgewood Park Water Company, Inc. ("Wedgewood Park") in St. Joseph County, Indiana to provide water utility service. The sale and transfer of the plant and property currently used by Wedgewood Park (the "Wedgewood Park System") would be made pursuant to an Asset Purchase Agreement between Wedgewood Park and Aqua Indiana that appears as Attachment C to Petitioner's Exhibit 1 (the "Purchase Agreement"). In connection with the sale and transfer of the Wedgewood Park System, Aqua Indiana also requests that the Commission (i) approve the manner in which Aqua Indiana will record the plant, property and other assets acquired from Wedgewood Park on its books and records; (ii) approve the rates and charges, as well as the rules and regulations, that Aqua Indiana will apply to customers, subject to such changes as the Commission may approve in the future; and (iii) approve the depreciation rate to be used by Aqua Indiana for the plant, property and assets that it may use to serve present and future customers. Finally, Aqua Indiana is seeking to have the Commission determine, in accordance with Ind. Code § 36-2-2-23, that public convenience and necessity require Aqua Indiana to provide water utility service to present and future customers of the Wedgewood Park System and consent to St. Joseph County, Indiana granting Aqua Indiana licenses, permits or franchises for the use of county-owned property to provide water utility service.

The Indiana Office of Utility Consumer Counselor ("OUCC") reviewed the Petitioner's filed testimony and exhibits, met with representatives of Petitioner and requested additional information from Petitioner through both formal and informal discovery. Petitioner and the OUCC (individually, a "Settling Party" and collectively, the "Settling Parties") engaged in settlement negotiations. As a result of those negotiations, the Settling Parties reached an agreement with respect to all the issues between them before the Commission, including without limitation as follows:

1. **Granting Requested Relief**. The Settling Parties agree that, subject to the provisions of Paragraph 2 below, approval of the relief requested by Aqua Indiana in this Cause will serve the public interest and public convenience and necessity and, accordingly, the Commission should issue a Final Order in this Cause:

A. Finding that the relief requested by Aqua Indiana in this Cause will serve the public interest and public convenience and necessity;

B. Approving the sale and transfer of the Wedgewood Park System to Aqua Indiana pursuant to the Purchase Agreement;

C. Approving the Purchase Agreement and the terms and conditions set forth therein to the extent to authorize the sale and transfer of the system;

D. Approving Aqua Indiana's application to present and future customers within the Wedgewood Park System of the same rates and charges as are currently applied by Wedgewood Park to its customers within St. Joseph County, Indiana, subject to such changes as the Commission may approve in the future;

E. Approving Aqua Indiana's application to customers within the Wedgewood Park System of the rules and regulations as are currently applied by Aqua Indiana to its customers, subject to such changes as the Commission may approve in the future;

F. Approving of Aqua Indiana recording the acquisition of the Wedgewood Park System on its books and records in the same way it is shown at closing on Wedgewood Park's books and records, with such adjustments as may be necessary to reflect their acquisition by Aqua Indiana;

G. Approving Aqua Indiana use of Wedgewood Park's current depreciation rate(s) for plant, property and assets comprising the Wedgewood Park System and such other property as may be used to serve present and future customers, subject to such changes as the Commission may approve in the future; and

H. Consenting to St. Joseph County, Indiana granting Aqua Indiana licenses, permits or franchises for the use of county-owned property to provide water utility service.

2. **Other Agreements**.

A. For purposes of Paragraph 1F above, incidental expenses and other acquisition costs reflected in the amounts recorded by Aqua Indiana as part of the acquisition of the Wedgewood Park System shall not exceed $20,000.



B. Petitioner shall amortize contributions in aid of construction ("CIAC") as an offset to its depreciation expense (i.e. for ratemaking purposes) and shall use for such purpose Wedgewood Park's current depreciation rate(s) or such other rate or rates as the Commission shall direct.

C. Aqua Indiana should notify the customers previously served by Wedgewood Park regarding electronic access to the new rules and regulations that will be applicable to their water utility service.

D. Prior to the closing on the acquisition, Aqua Indiana should confirm that Wedgewood Park does not possess any deposits made by its customers. If any such deposits are identified, Aqua Indiana shall cause Wedgewood Park to return them to the customers involved or deliver them to Aqua Indiana to be handled and returned as appropriate.

E. Within 12 months of closing, Aqua Indiana will provide to the OUCC a complete list by NARUC account of utility plant being acquired. At that time, Aqua Indiana will also provide to the OUCC the value of accumulated depreciation, if any, by NARUC account as of the date of closing, which amount Aqua Indiana deems it is appropriate to record. Aqua Indiana shall also provide to the OUCC an unaudited opening balance sheet for this division and the total amount of transaction costs incurred by cost category (legal fees, etc.).

F. Within 12 months of closing, Aqua Indiana will replace all customer meters with new radio frequency ("RF") meters. Thereafter, relying on one year of data Aqua will reassess water loss calculations and formulate a plan, if appropriate, to mitigate any continuing, excessive water loss.



3. **Scope and Approval**

A. Neither the making of this Settlement Agreement nor any of its provisions, including without limitation any provisions contained in exhibits to this Settlement Agreement, shall constitute in any respect an admission by any Settling Party in this or any other litigation or proceeding. This Settlement Agreement is solely the result of compromise in the settlement process and, except as provided herein, is without prejudice to and shall not constitute a waiver of any position that any of the Settling Parties may take with respect to any or all of the issues resolved herein in any future regulatory or other proceedings.

B. Neither the making of this Settlement Agreement, nor the provisions thereof, nor the entry by the Commission of a Final Order approving this Settlement Agreement, shall establish any principles or legal precedent applicable to Commission proceedings other than those resolved herein. This Settlement Agreement shall not constitute nor be cited as precedent by any person or deemed an admission by any Settling Party in any other proceeding except as necessary to enforce its terms before the Commission, or any tribunal of competent jurisdiction.

C. The undersigned have represented and agreed that they are fully authorized to execute this Settlement Agreement on behalf of their designated clients, and their successors and assigns, who will be bound thereby, subject to the agreement of the Settling Parties on the provisions contained herein and in the attached exhibits.

D. The communications and discussions during the negotiations and conferences have been conducted based on the explicit understanding that said communications and discussions are or relate to offers of settlement and therefore are privileged. All prior drafts



of this Settlement Agreement and any settlement proposals and counterproposals also are or relate to offers of settlement and are privileged.

E. The Settling Parties shall offer supplemental testimony supporting the Commission's approval of this Settlement Agreement and will request that the Commission issue a Final Order incorporating the agreed proposed language of the Settling Parties and accepting and approving the same in accordance with its terms without any modification. Such supportive testimony will be agreed-upon by the Settling Parties and offered into evidence without objection by any Settling Party and the Settling Parties hereby waive cross-examination of each other's witnesses.

F. This Settlement Agreement is conditioned upon and subject to Commission acceptance and approval of its terms in their entirety, without any change or condition that is unacceptable to any Settling Party. The Settling Parties will support this Settlement Agreement before the Commission and request that the Commission accept and approve the Settlement Agreement. This Settlement Agreement is a complete, interrelated package and is not severable, and shall be accepted or rejected in its entirety without modification or further condition(s) that may be unacceptable to any Settling Party. The Settling Parties propose to submit this Settlement Agreement and evidence conditionally, and if the Commission fails to approve this Settlement Agreement in its entirety without any change or imposes condition(s) unacceptable to any adversely affected Settling Party, the Settlement Agreement and supporting evidence may be withdrawn and the Commission will continue to proceed to a decision in the affected proceeding, without regard to the filing of this Settlement Agreement.

G. The Settling Parties will work together to prepare an agreed upon proposed

order to be submitted in this Cause. The Settling Parties will request Commission acceptance and approval of this Settlement Agreement in its entirety, without any change or condition that is unacceptable to any party to this Settlement Agreement. The Settling Parties will request that the Commission issue a Final Order promptly accepting and approving this Settlement Agreement in accordance with its terms.

H. The Settling Parties shall not appeal or seek rehearing, reconsideration or a stay of any Final Order entered by the Commission approving the Settlement Agreement in its entirety without changes or condition(s) unacceptable to any Settling Party (or related orders to the extent such orders are specifically and exclusively implementing the provisions hereof) and shall not oppose this Settlement Agreement in the event of any appeal or a request for rehearing, reconsideration or a stay by any person not a party hereto.



**AGREED** and **ACCEPTED** this 31st day of October, 2016.

**AQUA INDIANA, INC.**

By: Philip B. McKenzie
Its: Attorney

**INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR**

By: Daniel M. Le Vay
Its: Deputy Consumer Counselor

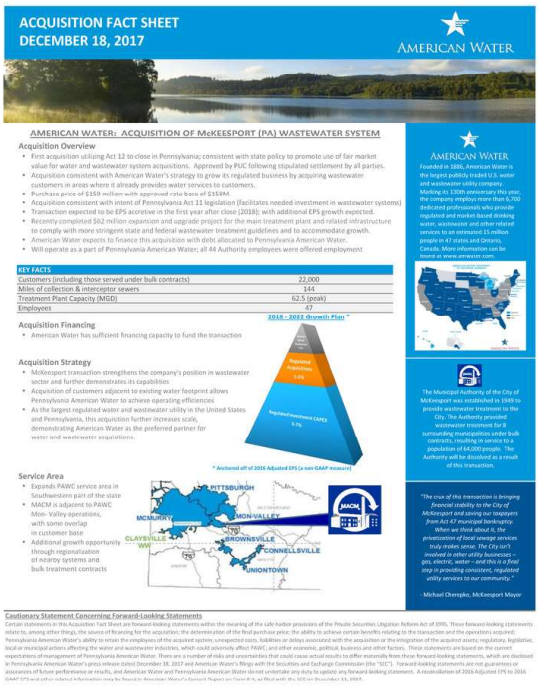




1/9/2020 Exhibit

EX-99.2 3 exhibit992.htm EXHIBIT 99.2 - ACQUISITION FACT SHEET

**Exhibit 99.2**






https://www.sec.gov/Archives/edgar/data/1410636/000141063617000029/exhibit992.htm 2/2

PRESS RELEASE

PENNSYLVANIA AMERICAN WATER

FOR IMMEDIATE RELEASE

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# PENNSYLVANIA AMERICAN WATER CLOSES ACQUISITION OF SCRANTON WASTEWATER SYSTEM

*Transaction ranks among largest wastewater acquisition in company history*

**SCRANTON, Pa. (December 29, 2016) –** Pennsylvania American Water, a wholly owned subsidiary of American Water, announced today that it has completed the acquisition of the wastewater system assets of the Scranton Sewer Authority (SSA). The purchase price is approximately $195 million.

The newly acquired system provides wastewater service to approximately 31,000 customers in Scranton and Dunmore. Pennsylvania American Water already provides water service to residents and businesses in both communities. The transaction represents one of American Water's largest wastewater acquisitions in the parent company's history.

"This acquisition marks a significant milestone for our company and our employees, based on the size and scope of this wastewater operation and the environmental challenges facing the system," said Pennsylvania American Water President Kathy L. Pape. "We bring both the technical expertise and financial resources to meet these challenges and provide a long-term wastewater solution, while establishing a plan to maintain reasonable rates for the customers."

The transaction's closing follows a lengthy regulatory approval process by the U.S. Environmental Protection Agency (EPA), Pennsylvania Department of Environmental Protection (DEP), the U.S. Department of Justice, and the Pennsylvania Public Utility Commission (PUC). The wastewater system is under an EPA Consent Decree that mandates significant upgrades, totaling an estimated $140 million, to bring the system into environmental compliance. As the system's owner, Pennsylvania American Water will continue the projects started by the SSA and assume the SSA's obligations under the Consent Decree.

As part of the PUC's approval of the purchase, Pennsylvania American Water agreed to adopt the existing wastewater rates for customers served by the SSA system, although such rates will now be billed on a monthly rather than bi-monthly basis. The PUC regulates the company's rates, rules and regulations of service, so any future rate change will need to be reviewed and approved by the PUC.

"Our employees have been providing water service for a long time for the Scranton and Dunmore communities, and we are very pleased to now be the wastewater provider as well," said Pape. "We are also excited to welcome the SSA employees to the Pennsylvania American Water team."

All of the approximately 80 SSA workers who operate the wastewater system have been offered employment. The employees are represented by the Teamsters Union, Local 229, who voted on Dec. 2, to ratify a new contract offered by Pennsylvania American Water. The employees gain immediate access to the training,





development and career opportunities in any of the operations of Pennsylvania American Water or its parent company.

Pennsylvania American Water's purchase of the sewer system enables SSA to pay off its existing debt.

Under the purchase agreement, Pennsylvania American Water also committed to bring 100 new jobs to Scranton by 2020. "As we continue to invest in the region and expand our operations, these will be important jobs to support not only Pennsylvania but the growth of our national footprint," said American Water Chief Operating Officer Walter Lynch. "We expect the new jobs to generate a very positive economic impact for the Greater Scranton Area."

This acquisition adds to the company's series of large municipal wastewater transactions. In December 2015, Pennsylvania American Water acquired the wastewater assets of Fairview Township, York County. On October 31, 2016, the company purchased the wastewater assets of the Borough of New Cumberland in Cumberland County. In September 2016, Pennsylvania American Water executed an agreement to acquire the wastewater system assets of the Municipal Authority of the City of McKeesport, Allegheny County, which is currently pending regulatory approvals. Pennsylvania American Water now operates wastewater systems in Adams, Beaver, Butler, Chester, Clarion, Cumberland, Lackawanna, Monroe, Northumberland, Pike, Washington and York counties.

Pennsylvania American Water, a wholly owned subsidiary of American Water (NYSE: AWK), is the largest water utility in Pennsylvania, providing high-quality and reliable water and/or wastewater services to approximately 2.3 million people. Founded in 1886, American Water is the largest publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, the company employs more than 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found at www.amwater.com.

**Cautionary Statement Concerning Forward-Looking Statements**
Certain statements in this press release are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements relate to, among other things, anticipated capital investments, the ability of Pennsylvania American Water to comply with the Consent Decree, and the ability to achieve certain benefits, synergies and goals relating to the transaction and the acquired operations. These statements are based on the current expectations of management of Pennsylvania American Water. There are a number of risks and uncertainties that could cause actual results to differ materially from these forward-looking statements, including with respect to (1) the occurrence of the benefits and synergies expected or predicted to occur as a result of the acquisition; (2) unexpected costs, liabilities or delays associated with the integration of the acquired business; (3) regulatory, legislative, local or municipal actions affecting the water and wastewater industries, which could adversely affect Pennsylvania American Water; (4) Pennsylvania American Water's ongoing compliance with the Consent Decree; and (5) other economic, business and other factors. Forward-looking statements are not guarantees or assurances of future performance or results, and Pennsylvania American Water and its affiliates do not undertake any duty to update any forward-looking statement.

# # #





02/27/2017

CLINTON, CONNECTICUT, Feb. 27, 2017 (GLOBE NEWSWIRE) -- Connecticut Water Service, Inc. (NASDAQ: CTWS) (CTWS) announced today that it has completed the acquisition of the Heritage Village Water Company (HVWC). Shareholders of HVWC exchanged their stock for CTWS stock in a transaction with an enterprise value of $20.7 million. HVWC serves approximately 4,700 water customers in the Connecticut communities of Middlebury, Oxford and Southbury and approximately 3,000 wastewater customers in the Town of Southbury, Connecticut. HVWC owns and operates the only wastewater system regulated by the Connecticut Public Utilities Regulatory Authority (PURA).

According to Eric W. Thornburg, CTWS's Chairman, President and Chief Executive Officer, HVWC will operate as a subsidiary of CTWS, which is among the nation's fastest growing water utility companies. He states, "Customers will benefit by being part of larger, regional company, which has a size and presence that provides for operational efficiencies, purchasing power and other economies of scale." Mr. Thornburg further states, "CTWS subsidiaries, including The Connecticut Water (Connecticut Water) and The Maine Water Company (Maine Water) have long histories of delivering world-class satisfaction to customers and being good stewards of the natural resources entrusted to us and we are eager to demonstrate our commitment to HVWC customers."

Mr. Thornburg thanked Keith Sorensen, the former president of HVWC, for his efforts that contributed to a smooth transition for customers and employees with the completion of this transaction. PURA approved the acquisition on December 5, 2016, and the closing was completed on February 27, 2017.

HVWC retains its current name, a local office, and its employees were invited to continue their employment under CTWS ownership. HVWC is a sister company to Connecticut Water and Maine Water. The merger will not affect the rates or service for any of those water company customers. As part of CTWS, HVWC will now be able to offer its customers a website, online bill payment, and timely emergency notification via phone and e-mail. Customers will receive information in the mail on these and other enhancements.

As called for under the previously announced agreement, the acquisition was executed through a stock-for-stock merger transaction valued at approximately $16.1 million. Holders of HVWC common stock received shares of CTWS common stock in a tax-free exchange. In addition, Connecticut Water will assume approximately $4.6 million in debt of HVWC. The transaction reflected a total enterprise value of approximately $20.7 million.

Since January 2012, CTWS has grown its customer base by more than 43%, or more than 39,000 customers, primarily through large acquisitions in Maine in 2012 and HVWC in 2017. In addition, CTWS previously announced on October 12, 2016, an agreement to acquire the Avon Water Company that serves 4,800 customers in the Connecticut towns of Avon, Farmington, and Simsbury. A PURA decision on the acquisition is expected this April with a closing to follow within the second quarter.

CTWS is one of the ten largest U.S.-based publicly-traded water utilities, and is listed on the NASDAQ Global Select Market under the ticker symbol CTWS. Including the HVWC acquisition, CTWS, through its regulated utility subsidiaries in Connecticut and Maine, serves more than 129,000 water customers, or nearly 440,000 people in 79 communities across Connecticut and Maine, and more than 3,000 wastewater customers in Southbury, Connecticut.

News Media Contact:

Daniel J. Meaney, APR
Director of Corporate Communications
(860) 664-6016
dmeaney@ctwater.com





Source: Connecticut Water Service, Inc.

## Section 1: 10-K (AWK - 12.31.2017 10-K)

Table of Contents

**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

**FORM 10-K**

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the fiscal year ended December 31, 2017**
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the transition period from _____ to _____**
**Commission file: number 001-34028**

# AMERICAN WATER WORKS COMPANY, INC.

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **51-0063696** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |
| **1025 Laurel Oak Road, Voorhees, NJ** | **08043** |
| **(Address of principal executive offices)** | **(Zip Code)** |

**(856) 346-8200**
**(Registrant's telephone number, including area code)**
**Securities registered pursuant to Section 12(b) of the Act:**

| **Title of each class** | **Name of each exchange on which registered** |
|---|---|
| **Common stock, par value $0.01 per share** | **New York Stock Exchange, Inc.** |

**Securities registered pursuant to Section 12(g) of the Act: None.**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

| | | | |
|---|---|---|---|
| Large accelerated filer | ☒ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ (do not check if a smaller reporting company) | Smaller reporting company | ☐ |
| | | Emerging growth company | ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

provides water service to approximately 11,000 customers in Monmouth County, New Jersey; and the





- aim for top quartile targets for drinking water quality and being an industry leader in system resiliency and environmental stewardship. We intend to continue to make needed infrastructure investments while implementing operational efficiency improvements to help keep customer rates affordable.

- Safety—Safety is both a strategy and a value at American Water. We put safety first in everything that we do.
  - In 2017, we:
    - finished the year with fewer employee injuries than the prior year and exceeded our targeted results for our Occupational Safety and Health Administration recordable incident rate and our Days Away Restricted or Transferred rate; and
    - strengthened our safety culture as measured by employee responses to safety-related questions in the Company's culture survey, and scored 13 points above "High Performing Companies" in the category of safety, as measured by CEB, Inc. Our safety council, consisting of management and labor employees from across the Company, continued its mission of developing and implementing recommendations to reinforce the Company's commitment to safety.
  - Looking forward, we will:
    - strive toward zero workplace injuries;
    - focus on requiring that the contractors that perform work for the Company are approved in accordance with the Contractor Safety Qualification Practice and are held to the same standards as our employees; and
    - continue our focus on "near miss reporting," to promote continuous learning and corrective action regarding potential safety hazards.

- People—We are building a diverse, fully-engaged, high performance workforce and culture and creating an environment where our people feel valued, included and accountable.
  - In 2017, we continued to demonstrate our commitment to employees by expanding training and development across the Company, with the vast majority of our employees completing at least 20 hours of training during 2017. We also added new Respect and Diversity training to strengthen our values-based culture.
  - Looking forward, we will continue to:
    - improve the diversity of our overall employee population, reflective of our customers and communities;
    - implement a strategic workforce plan which will address the changing requirements of our business and our jobs, and how we will fill those critical positions throughout the Company to promote continuity and help us to meet future operational needs; and
    - dedicate ourselves to personal development through effective training and development plans.

- Growth—We expect to continue to grow our businesses, with the significant majority of our growth to be achieved in our Regulated Businesses through: (i) continued investment in infrastructure to provide safe, clean, reliable and affordable water and wastewater services to our customers; and (ii) regulated acquisitions to expand our services to new customers. We also expect to continue to grow our Market-Based Businesses, which leverage our core water and wastewater competencies.
  - In 2017, we invested $1.7 billion, a record level of annual investment since the Company went public in 2008, and $200 million more than 2016, which had previously been a record year for investment. Our 2017 investment included:
    - $1.4 billion, of which the majority was in our Regulated Businesses for infrastructure replacements and improvements; and
    - $210 million to fund acquisitions in our Regulated Businesses, which added approximately 40,000 water and wastewater customers, including bulk customers, highlighted by the:
      - April acquisition of $
      in the form of shares

**WATERENGINEERS, INC.**
*WATER & WASTEWATER TREATMENT CONSULTANTS*
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

**47086**

April 19, 2017

Public Utility Commission of Texas
Central Records
1701 N. Congress, Suite 8-100
Austin, TX 78701

RECEIVED
2017 APR 20 AM 11:52
PUBLIC UTILITY COMMISSION
FILING CLERK

Re: Application for a Sale, Transfer or Merger of a Retail Public Utility
Water Certificate of Convenience and Necessity No. 12154
Seller – Oak Hollow Utility Company, Inc.
Buyer – Utilities Investment Company, Inc.
in Grimes County, Texas

Dear Public Utility Commission of Texas:

Please find enclosed an original and seven (7) copies of an Application for a Sale, Transfer or Merger of a Retail Public Utility to address the sale of the Oak Hollow Water System by Oak Hollow Utility Company, Inc. to Utilities Investment Company, Inc., as well as two copies of CONFIDENTIAL material. Also enclosed are two (2) CD's containing digital map data and one (1) CD containing an electronic copy of the application in .pdf format.

We appreciate your earliest review and issuance of a letter indicating administrative completeness. Please feel free to email me at syoung@waterengineers.com or call at 281-373-0500 if you have any questions regarding the information contained in this submittal.

Thank you for your assistance in this review process.

Sincerely,
WATERENGINEERS, INC.

Shelley Young

Shelley Young, P.E.
Project Engineer

Encl. – 1 original and 7 copies of STM application
2 envelopes containing CONFIDENTIAL information
2 CD's containing digital map data
1 CD containing an electronic copy of the STM Application

D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

No changes in the quality of service are anticipated.

E. How will the transaction serve the public interest?

The current utility owner wishes to exit this segment of the utility business. The applicant is well qualified to own and operate the system affording the current customers a seamless transition.

12. Please describe the nature of the proposed transaction:

Applicant proposes to purchase the water system for $897,000. Applicant will pay $200,000 down from cash reserves and the seller will owner finance the remaining $697,000 at 6% over 10 years. See Attachment C for purchase agreement.

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

A.
- Total Purchase Price: $ 897,000.00
- Total Original Cost (as recorded on books of seller or merging entity): $1821,837.00
- Accumulated Depreciation as of the proposed effective date of the transaction:
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC: $ 0.00
  - Revenues from explicit customer agreements: $ 0.00
  - Developer Contributions (please explain):

0

  - Other Contributions (please explain):

0

Total Contributions in Aid of Construction $ 0.00

- Net Book Value: $ 191,081.00

PUCT Sale Merger Transfer (Previous TCEQ Form 10516)
Page 6 of 23 9/1/2014

9

Docket No._____

NOTICE TO CURRENT CUSTOMERS, NEIGHBORING SYSTEMS AND CITIES

**OAK HOLLOW UTILITY COMPANY, INC.'S**
**NOTICE OF INTENT TO SEE FACILITIES AND TRANSFER CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN) NO. 12154**
**TO**
**UTILITIES INVESTMENT COMPANY, INC.**
**IN WALLER COUNTY, TEXAS**

To:_____ Date Notice Mailed:_____

Oak Hollow Utiity Co., Inc., 1330 Blue Bell, Houston, Texas 77038, has submitted an application with the Public Utility Commission of Texas to sell facilities and transfer water CCN No. 12154 in Waller County to Utilities Investment Company, Inc., P.O. Box 279, New Waverly, Texas 77358-0279.

The sale is scheduled to take place as approved by the Commission (V.T.C.A., Water Code §13.301). The transaction and the transfer of the CCN include the following subdivision:

Oak Hollow Subdivision

The area subject to this transaction is located approximately 4 miles southwest of downtown Magnolia, Texas in Waller County and is **generally** bounded on the north by FM 1488; on the east by the Waller County/Montgomery County line; on the south by Pine Valley Drive; and on the west by Rice Road.

The total area being requested includes approximately 1050.5 acres and 690 current customers.

This transaction will have the following effect on the current customer's rates and services: There will be no change in rates or services.

Affected persons may file written protests and/or request within 30 days of this notice. To request a hearing, you must

(1) state your name, mailing address, and daytime telephone number;

(2) state the applicant's name, application number or another recognizable reference to this application;

(3) include the statement, "I/we request a public hearing";

(4) write a brief description of how you, the persons you represent, or the public interest would be adversely affected by the proposed transaction and transfer of the CCN; and

(5) state your proposed adjustment to the application or CCN which would satisfy your concerns and cause you to withdraw your request for a hearing.

61

BusinessWire
A Berkshire Hathaway Company

MISSOURI AMERICAN WATER

## Missouri American Water Announces Acquisition of Village of Wardsville Water and Wastewater Systems

May 23, 2017 10:28 AM Eastern Daylight Time

WARDSVILLE, Mo.--(BUSINESS WIRE)--Missouri American Water completed its acquisition of the Wardsville water and wastewater systems today, adding approximately 475 water and approximately 406 wastewater customers to its more than 460,000 statewide customers. The purchase price for both the water and wastewater system is $2.75 million.

Customers in Wardsville, located just south of Jefferson City, will have their meters changed beginning today and should receive their first invoice from Missouri American Water the week of June 26. Water and wastewater rates in the city are set by the Missouri Public Service Commission and will not change upon completion of the deal.

"This is an exciting day, both for the residents of Wardsville as well as Missouri American Water," said Brent Haas, operations manager for Missouri American Water's Jefferson City district, which Wardsville will be joining. "Wardsville residents can look forward to clean, safe drinking water, effective wastewater treatment and efficient system operation. Missouri American Water brings expertise to the water and wastewater industries that is unparalleled, and by joining our large customer base, we will be able to manage costs in Wardsville on an ongoing basis to help keep rates low."

**Missouri American Water**

Missouri American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.5 million people.

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly-traded water and wastewater utility company. The company employs more than 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

Contacts
Missouri American Water
Brian Russell
Communications Manager
T - 314-996-2239
C - 314-825-3578
Brian.Russell@amwater.com

## Aqua Pennsylvania to Welcome New Garden Township as First Municipal Acquisition Using Fair Market Valuation Legislation

June 14, 2017 01:21 PM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America, Inc. (NYSE: WTR) today announced its largest subsidiary, Aqua Pennsylvania, received approval from the Pennsylvania Public Utility Commission to purchase the wastewater assets of New Garden Township, serving approximately 2,100 customer connections in southeast Pennsylvania's Chester County.

Aqua's application was the first that the PUC has considered since the state enacted Act 12, commonly referred to as fair market valuation legislation.

"We're proud that Aqua is the first to have an acquisition approved by the PUC under this new legislation," said Aqua America CEO Christopher Franklin.

The new law allows companies like Aqua to pay a fair market amount for municipal water and wastewater systems, benefitting local governments, customers, and the environment. Prior to FMV legislation, utilities were often limited to including only the original depreciated cost into their rate base, which became a regulatory barrier to a sale. Now, Aqua and other regulated utilities can leverage compliance expertise, purchasing power and operational efficiencies to benefit local systems' infrastructure and service.

"This purchase is all part of Aqua's efforts to do our part to strengthen wastewater infrastructure for communities in the states we serve, which means improved service and environmental stewardship for generations to come," Franklin said.

With the new legislation, Aqua is focused on balancing fair price for systems, making important infrastructure improvements and ensuring reasonable rates for its service. Aqua paid $29.5 million for the New Garden system.

"We're thrilled to welcome New Garden Township residential and business customers to the Aqua family, and look forward to providing them the highest level of service and value," Franklin said. "We hope more communities take advantage of the benefits this new legislation can bring."

According to Franklin, Aqua expects to grow its customer base 1.5 to 2 percent in 2017.

**About Aqua America**

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information, or follow Aqua on Facebook at facebook.com/MyAquaAmerica and on Twitter at @MyAquaAmerica.

**Forward-Looking Statements**

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: the company's ability to grow its customer base 1.5 to 2.0 percent in 2017, and the ability of the company to acquire additional wastewater systems. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, the successful integration of the customers and the facility, the ability to improve customer service and environmental stewardship, the success of the company's growth efforts including its ability to utilize Act 12, and other factors discussed in our Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Aqua America's business, please refer to Aqua America's annual, quarterly and other SEC filings. Aqua America is not under any obligation — and expressly disclaims any such obligation — to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

WTRF

Contacts
Aqua America, Inc.
Brian Dingerdissen, Investor Relations
610-645-1191
BJDingerdissen@AquaAmerica.com
or
Stacey Hajdak, Communications
610-520-6309
M: 267-294-1866
SMHajdak@AquaAmerica.com



8-K 1 ctwsform8-k2017x07x06.htm CTWS FORM 8-K 07-06-2017

**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**WASHINGTON, DC 20549**

**FORM 8-K**

**CURRENT REPORT PURSUANT**
**TO SECTION 13 OR 15(d) OF THE**
**SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): July 6, 2017 (July 1, 2017)

Commission File Number 0-8084

**Connecticut Water Service, Inc.**
(Exact name of registrant as specified in its charter)

| Connecticut | 06-0739839 |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| 93 West Main Street, Clinton, CT | 06413 |
| (Address of principal executive office) | (Zip Code) |

(860) 669-8636
(Registrant's telephone number, including area code)

Not Applicable
(Former name, address and former fiscal year, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))



1/18/2020 Document

Item 8.01 Other Events

Completion of Acquisition of The Avon Water Company

As previously reported, on October 12, 2016, Connecticut Water Service, Inc. ("CTWS" or "Connecticut Water") announced that it had reached an agreement to acquire The Avon Water Company ("AWC"), pending a vote of AWC shareholders, approval by the Connecticut Public Utilities Regulatory Authority ("PURA") and the Maine Public Utilities Commission ("MPUC") and the satisfaction of other various closing conditions, pursuant to the terms of that certain Agreement and Plan of Merger dated October 11, 2016 as amended on March 29, 2017 between and among AWC, the Company, and WC-A I, Inc., the Company's wholly-owned Connecticut subsidiary (the "Merger Agreement"). AWC serves approximately 4,800 customers in the Farmington Valley communities of Avon, Farmington, and Simsbury, Connecticut.

On February 10, 2017, Connecticut Water received regulatory approval from MPUC and on April 12, 2017, Connecticut Water received regulatory approval from the PURA to proceed with the transaction, The shareholders of AWC voted to approve the acquisition at a special meeting of AWC's shareholders held on June 16, 2017.

Effective July 1, 2017, Connecticut Water completed the acquisition of AWC by completing the merger of Connecticut Water's wholly-owned subsidiary WC-A I, Inc. with and into AWC, with AWC as the surviving corporation, pursuant to the terms of the Merger Agreement and Connecticut corporate law. Upon the effective time of the Merger, the holders of AWC's 122,289 issued and outstanding shares of common stock became entitled to receive the following merger consideration for each share of AWC common stock held: (i) a cash payment of $50.11; and (ii) a stock consideration component, consisting of 3.97 shares of the common stock of Connecticut Water, without par value. The exchange will be commenced promptly by the issuance of a letter of transmittal and related materials by Connecticut Water's exchange agent to the former shareholders of AWC.

The transaction was completed through a stock-for-stock exchange where AWC shareholders received Connecticut Water stock valued at approximately $27.9 million, in a tax-free exchange, and a cash payment of $6.1 million for a total payment to shareholders of $34.0 million. The transaction reflects a total enterprise value of approximately $40.1 million, with the $34.0 million paid to shareholders and the assumption by CTWS of approximately $6.1 million of debt of AWC.

News Release

On July 5, 2017, Connecticut Water issued a press release describing the completion of its acquisition of AWC. A copy of the press release dated July 5, 2017 is filed herewith as Exhibit 99.1 and is hereby incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

The following document is filed herewith as an exhibit hereto:

(d) Exhibits

99.1 Connecticut Water press release regarding the completion of Connecticut Water's acquisition of The Avon Water Company, dated July 5, 2017, is filed herewith.







SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned hereunto duly authorized.

Connecticut Water Service, Inc.
(Registrant)

Date: July 6, 2017

By: /s/ David C. Benoit

David C. Benoit
Senior Vice President – Finance and
Chief Financial Officer







EXHIBIT INDEX

| Exhibit No. | Description |
|---|---|
| 99.1 | Connecticut Water press release regarding the completion of Connecticut Water's acquisition of The Avon Water Company, dated July 5, 2017, is filed herewith. |





WaterWorld

# ILLINOIS AMERICAN WATER ANNOUNCES ACQUISITION; CELEBRATES SAFETY MILESTONES

*September 19, 2017*

**ILLINOIS, SEPT 19, 2017 --** Illinois American Water President Bruce Hauk recently announced the company's acquisition of the Piasa Township Sanitary District. The purchase of the system adds approximately 120 customers to the company's customer base in the Alton District.

In a public referendum on April 4, 2017, residents of Piasa Township Sanitary District voted in favor of dissolving the sewer district, and supported a sale of the wastewater system to Illinois American Water. The Illinois Commerce Commission (ICC) approved the sale for $60,000 on Aug. 25, 2017.

"We are excited to serve these customers and to help decrease one of their household bills. Through this acquisition, we will expand our existing footprint and ensure local residents have access to a long-term, reliable and affordable wastewater service for years to come," said Karen Cooper, senior manager of field operations and production.

Additionally, the utility's Cairo and Pekin Districts celebrated multiple years of safety.

According to Michael Brown, Operations Superintendent, the Cairo District has gone 18 years without experiencing any lost-time accidents. The Pekin District has gone over 7 years without experiencing any lost-time accidents.

He said, "The work we do is complex. This is why our safety program is a top priority. We want our employees to go home in the same condition they arrived at work, if not better. We are proud of our continued years of excellence in safety."

The Cairo District conducts both classroom and hands-on training on a regular basis. Cairo District employees also participate in facility and job site audits at every job site to ensure

compliance with established workplace safety practices.

Brown said, "Safety is a daily focus. We continuously evaluate and remove hazards to prevent injury."

Cord Crisler, Operations Superintendent with the Pekin district, said, "Safety is on our minds every minute of every day. There is nothing more important than ensuring our employees go home in the same condition they arrived at work, if not better. We owe that to our coworkers and their families. There is no room for shortcuts when it comes to safety."

Illinois American Water conducts both classroom and hands-on training on a regular basis. Employees also participate in facility and job site audits to ensure compliance with established workplace safety practices.

**About Illinois American Water**

Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. More information can be found by visiting www.amwater.com.

About Us | Site Map | Privacy Policy | Terms and Conditions

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# Indiana American Water Acquires Georgetown Water System in Southern Indiana

Dateline City:
GREENWOOD, Ind.

Sale will result in lower rates for Georgetown residents

GREENWOOD, Ind.--(BUSINESS WIRE (http://www.businesswire.com))--Indiana American Water President Deborah Dewey today announced the company's acquisition of Georgetown Water, a municipal water utility located in southern Indiana. The purchase of the system adds approximately 1,300 customers to the company's customer base, which represents a population of approximately 3,500 residents.

"The acquisition of this system will provide Georgetown customers with lower rates and access to operations and capital management water professionals and a number of customer service options and payment methods," said Dewey. "Indiana American Water already provides water to several nearby communities and to the Town of Georgetown through a wholesale contract, so this is a good fit for us and a continuation of our efforts to expand our presence across Indiana."

"In a time when communities are looking for new and innovative ways to deal with challenges they're facing and hold the bottom-line on expenses, this acquisition is a great solution for the utility and its customers," Dewey continued.

Georgetown Town Council President Everett Pullen is also enthusiastic in his support of the acquisition. "Our community was struggling to address pressing local infrastructure needs," said Pullen. "This acquisition will help us to address these concerns while also lowering customers' water rates. We appreciate the experience, knowledge and resources that Indiana American Water brings to the table and look forward to working with them."

The acquisition of the Georgetown system for approximately $6.4 million was approved by the Indiana Utility Regulatory Commission in October and closed by Indiana American Water and the Town of Georgetown on Wednesday, Nov. 15, 2017. The Georgetown system will be incorporated into the company's Southern Indiana district, which currently serves approximately 100,000 residents.

**About Indiana American Water**

Indiana American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor owned water utility in the state, providing high-quality and reliable water and/or wastewater services to more than 1.3 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly-traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com (http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.amwater.com&esheet=51718349&newsitemid=20171117005701&lan=en-US&anchor=www.amwater.com&index=1&md5=94d2572c502f12d0f12dd7c12bbbf7e7).

Language:
English
Contact:
Indiana American Water
Joe Loughmiller, 317-885-2434
Cell: 317-903-7431
joe.loughmiller@amwater.com (mailto:joe.loughmiller@amwater.com)
Ticker Slug:
Ticker:
AWK
Exchange:
NYSE
@inamwater

Indiana American Water today announced it has acquired Georgetown Water in southern Indiana.

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Log in to MyWater to pay your bill online, set up emergency notifications, and manage your account

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- Turn your service on/off
- Sign up for alerts
- View your water usage
- Set up paperless billing





Log In to MyWater (/myaccount)
(/inaw/contact-us)
**Contact Us (/inaw/contact-us)**

**Phone: 1.800.492.8373**

Call 24/7 for any emergency. Water emergencies don't keep business hours. For non-emergencies, call M-F 7am-7pm.

(https://amwater.com/corp/careers)
**Careers (https://amwater.com/corp/careers)**

At American Water, our employees have more than a job. They have a calling.

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EVERSOURCE ENERGY

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**
**WASHINGTON, D.C. 20549**

# FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the Fiscal Year Ended December 31, 2017**

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

| Commission File Number | Registrant; State of Incorporation; Address; and Telephone Number | I.R.S. Employer Identification No. |
|---|---|---|
| 1-5324 | **EVERSOURCE ENERGY**<br>(a Massachusetts voluntary association)<br>300 Cadwell Drive<br>Springfield, Massachusetts 01104<br>Telephone: (800) 286-5000 | 04-2147929 |
| 0-00404 | **THE CONNECTICUT LIGHT AND POWER COMPANY**<br>(a Connecticut corporation)<br>107 Selden Street<br>Berlin, Connecticut 06037-1616<br>Telephone: (800) 286-5000 | 06-0303850 |
| 1-02301 | **NSTAR ELECTRIC COMPANY**<br>(a Massachusetts corporation)<br>800 Boylston Street<br>Boston, Massachusetts 02199<br>Telephone: (800) 286-5000 | 04-1278810 |
| 1-6392 | **PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**<br>(a New Hampshire corporation)<br>Energy Park<br>780 North Commercial Street<br>Manchester, New Hampshire 03101-1134<br>Telephone: (800) 286-5000 | 02-0181050 |

Securities registered pursuant to Section 12(b) of the Act:

| Registrant | Title of Each Class | Name of Each Exchange on Which Registered |
|---|---|---|
| **Eversource Energy** | Common Shares, $5.00 par value | New York Stock Exchange, Inc. |

Securities registered pursuant to Section 12(g) of the Act:

| Registrant | Title of Each Class |
|---|---|

The PURA requires that Yankee Gas meet the needs of its firm customers under all weather conditions. Specifically, Yankee Gas must structure its supply portfolio to meet firm customer needs under a design day scenario (defined as the coldest day in 30 years) and under a design year scenario (defined as the average of the four coldest years in the last 30 years). Yankee Gas' on-system stored LNG and underground storage supplies help to meet consumption needs during the coldest days of winter. Yankee Gas obtains its interstate capacity from the three interstate pipelines that directly serve Connecticut: the Algonquin, Tennessee and Iroquois Pipelines, which connect to other upstream pipelines that transport gas from major gas producing regions, including the Gulf Coast, Mid-continent, Canadian regions and Appalachian Shale supplies.

Based on information currently available regarding projected growth in demand and estimates of availability of future supplies of pipeline natural gas, NSTAR Gas and Yankee Gas each believes that participation in planned and anticipated pipeline and storage expansion projects will be required in order for it to meet current and future sales growth opportunities.

**WATER BUSINESS**

Eversource Water Ventures, Inc., a Connecticut corporation, through its wholly-owned subsidiary, Eversource Aquarion Holdings, Inc. (Aquarion), operates regulated water utilities in Connecticut (Aquarion Water Company of Connecticut, or "AWC-CT"), Massachusetts (Aquarion Water Company of Massachusetts, or "AWC -MA") and New Hampshire (Aquarion Water Company of New Hampshire, or "AWC-NH"). These regulated companies provide water services to approximately 226,000 residential, commercial, industrial, municipal and fire protection and other customers, in 59 towns and cities in Connecticut, Massachusetts and New Hampshire. As of December 31, 2017, approximately 87 percent of Aquarion's customers were based in Connecticut.

For the period from December 4, 2017, the date Aquarion was acquired by Eversource, through December 31, 2017, water franchise retail revenues based on categories of customers for residential, commercial, municipal and fire protection, industrial and other totaled $9.9 million, $2.3 million, $2.5 million, $0.2 million and $1.0 million, respectively.

**Rates**

Aquarion's water utilities are subject to regulation by the PURA, the DPU and the NHPUC in Connecticut, Massachusetts and New Hampshire, respectively. These regulatory agencies, have jurisdiction over, among other things, rates, certain dispositions of property and plant, mergers and consolidations, issuances of long-term securities, standards of service and construction and operation of facilities.

Aquarion's general rate structure consists of various rate and service classifications covering residential, commercial, industrial, and municipal and fire protection services.

The rates established by the PURA, DPU and NHPUC are comprised of the following:

- A base rate, which is comprised of fixed charges based on meter/fire connection sizes, as well as volumetric charges based on the amount of water sold. Together these charges are designed to recover the full cost of service resulting from a general rate proceeding.
- A revenue adjustment mechanism ("RAM") that reconciles earned revenues, with certain allowed adjustments, on an annual basis, to the revenue requirement approved by the PURA in AWC-CT's last rate case (2013), which is an annual amount of $178.0 million.
- The water infrastructure conservation adjustment ("WICA") charge, which is applied between rate case proceedings and seeks recovery of allowed costs associated with WICA-eligible capital projects placed in-service. The WICA is updated semiannually in Connecticut and annually in New Hampshire.
- Treatment plant surcharges, which are a series of three surcharges in Massachusetts (one fixed and two volumetric in nature) that are designed to recover certain operating costs and the costs of the lease of the treatment plant located in Hingham. These surcharges are applicable only to customers in Hingham, Hull and Cohasset.

**Sources and Availability of Water Supply**

Our water utilities obtain their water supplies from owned surface water sources (reservoirs) and groundwater supplies (wells) with a total supply yield of approximately 131 million gallons per day, as well as water purchased from other water suppliers. Approximately 98 percent of our annual production is self-supplied and processed at 10 surface water treatment plants and numerous well stations, which are all located in Connecticut, Massachusetts, and New Hampshire.

The capacities of Aquarion's sources of supply, and water treatment, pumping and distribution facilities, are considered sufficient to meet the present requirements of Aquarion's customers under normal conditions. On occasion, drought declarations are issued for portions of Aquarion's service territories in response to extended periods of dry weather conditions.

**OFFSHORE WIND PROJECT**

Bay State Wind is a proposed offshore wind project being jointly developed by Eversource and Denmark-based Orsted. Bay State Wind will be located in a 300-square-mile area approximately 25 miles off the coast of Massachusetts that has the ultimate potential to generate more than 2,000 MW of clean, renewable energy. Eversource and Orsted each hold a 50 percent ownership interest in Bay State Wind.

For more information regarding the clean energy legislation, see "Regulatory Developments and Rate Matters – Massachusetts – Massachusetts RFPs" in the accompanying Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*.



- In 2017, we paid cash dividends on common shares of $602.1 million, compared with $564.5 million in 2016. On February 7, 2018, our Board of Trustees approved a common share dividend of $0.505 per share, payable on March 30, 2018 to shareholders of record as of March 6, 2018. The 2018 dividend represents an increase of 6.3 percent over the dividend paid in December 2017, and is the equivalent to dividends on common shares of approximately $640 million on an annual basis.
- We project to make capital expenditures of $10.8 billion from 2018 through 2021, of which we expect $5.7 billion to be in our electric and natural gas distribution segments, $4.1 billion to be in our electric transmission segment and $0.4 billion to be in our water utility business. We also project to invest $0.5 billion in information technology and facilities upgrades and enhancements. These projections do not include any expected investments related to Bay State Wind.

*Strategic Items:*

- On January 25, 2018, Northern Pass was selected from the 46 proposals submitted as the winning bidder in the Massachusetts clean energy request for proposal ("RFP"), which successfully positioned Northern Pass to provide a firm delivery of hydropower to Massachusetts. Northern Pass is Eversource's planned 1,090 MW HVDC transmission line from the Québec-New Hampshire border to Franklin, New Hampshire and an associated alternating current radial transmission line between Franklin and Deerfield, New Hampshire. On February 1, 2018, the New Hampshire Site Evaluation Committee ("NHSEC") voted to deny Northern Pass' siting application. We intend to seek reconsideration of the NHSEC's decision and to review all options for moving this critical clean energy project forward. As of December 31, 2017, we have approximately $277 million in capitalized costs associated with Northern Pass.
- On December 20, 2017, Bay State Wind submitted two proposals, one for 400 MW and the other for 800 MW, in response to the Massachusetts clean energy RFP.
- On December 4, 2017, Eversource completed the acquisition of Aquarion (formerly Macquarie Utilities Inc.) from Macquarie Infrastructure Partners for $1.675 billion, consisting of approximately $880 million in cash and $795 million of assumed debt. As a result, Aquarion became a wholly-owned subsidiary of Eversource.

*Legislative, Regulatory, Policy and Other Items:*

- On November 30, 2017, the DPU issued its decision in the NSTAR Electric distribution rate case, which approved an annual distribution rate increase of $37 million, with rates effective February 1, 2018. As a result of this decision, we recognized an aggregate $44.1 million pre-tax benefit to earnings in 2017. On January 3, 2018, NSTAR Electric filed a motion to reflect a revenue requirement reduction of $56 million due to the decrease in the federal corporate income tax rate, as part of the "Tax Cuts and Jobs Act", resulting in an annual net decrease in rates of $19 million.
- On January 11, 2018, CL&P filed a distribution rate case settlement agreement for approval with PURA, which included, among other things, rate increases of $97.1 million, $32.7 million and $24.7 million, effective May 1, 2018, 2019, and 2020, respectively, an authorized regulatory ROE of 9.25 percent, and 53 percent common equity in CL&P's capital structure. The rate increases associated with the settlement agreement will be reduced by the impact of the decrease in the federal corporate income tax rate, as part of the "Tax Cuts and Jobs Act", which we currently estimate to average approximately $45 million to $50 million per year.
- On December 22, 2017, the "Tax Cuts and Jobs Act" (the "Act") became law, which amended existing federal tax rules and included numerous provisions that impacted corporations. In particular, the Act reduced the federal corporate income tax rate from 35 percent to 21 percent effective January 1, 2018. As of December 31, 2017, we estimated approximately $2.9 billion of provisional regulated excess ADIT liabilities that we expect to benefit our customers in future periods. The ultimate amount and timing of when certain income tax benefits resulting from the Act benefit our customers will vary by jurisdiction.
- On January 10, 2018, PSNH completed the sale of its thermal generation facilities. In accordance with the Purchase and Sale Agreement, the original purchase price of $175 million was adjusted to reflect working capital adjustments, closing date adjustments and proration of taxes and fees prior to closing, totaling $40.9 million, resulting in net proceeds of $134.1 million. We are targeting for PSNH to complete the sale of its hydroelectric generation facilities by the end of the first quarter of 2018.

Overview

*Consolidated:* Below is a summary of our earnings by business, which also reconciles the non-GAAP financial measure of EPS by business to the most directly comparable GAAP measure of diluted EPS, for the years ended December 31, 2017, 2016 and 2015. Also included in the summary for the year ended December 31, 2015, is a reconciliation of the non-GAAP financial measure of consolidated non-GAAP earnings to the most directly comparable GAAP measure of consolidated Net Income Attributable to Common Shareholders.



47888

THE JONES LAW FIRM
1703 WEST AVENUE
AUSTIN, TEXAS 78701
(512) 391-9292
TELECOPIER: (866) 511-5961

RECEIVED
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PUBLIC UTILITY COMMISSION
FILING CLERK

December 20, 2017

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

Re: Application for Sale, Transfer, or Merger of a Retail Public Utility

**Seller**: Deer Creek Ranch Water Co., LLC (CCN # 11241)
**Purchaser/Applicant**: SJWTX, Inc., d/b/a Canyon Lake Water Service Company (CCN #10692)

Dear Ladies and Gentlemen:

Please find enclosed seven copies (including the original) of the following application:

**SJWTX Inc.'s Application for Sale, Transfer, or Merger of a Retail Public Utility (Selling Utility: Deer Creek Ranch Water Co., LLC)**

**CD with projectable digital data of service area ATTACHED to Original Application*

Upon your receipt and initial review of the Application, if additional information is requested please contact Gregory Klipp at The Jones Law Firm (contact information provided herein).

Sincerely,

Gregory Michael Klipp
The Jones Law Firm,
Attorney at Law
gklipp@txcounselor.com
Direct: 512-651-5401

**Application for Sale, Transfer, or Merger of a Retail Public Utility**
Pursuant to Chapter 13.251 of the Texas Water Code

**Docket Number: 47888**
(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

**TABLE OF CONTENTS**

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 8
**Part F – Public Water System Information** ..... 9
**Part G – Oaths and Notices** ..... 11
Exhibit A - Customer Deposits ..... 17
Exhibit B - Applicant's Certificate of Account Status ..... 33
Exhibit C - PART C Questions Nos. 11(A), 11(C), 11(D), 11(E) ..... 34
Exhibit D - PART C Question No. 12 ..... 36
Exhibit D-2 - Asset Purchase Agreement between Seller and Purchaser/Applicant ..... 37
Exhibit E - PART F Questions Nos. 18(A) and 18(C) ..... 95
Exhibit F - PART F - Operator Information ..... 96
Exhibit G - MAPS ..... 97

## Part A – General Information

*RN# 100822527, 105394894, 109254888 *CN# 600703797 * (PRIOR TCEQ ID numbers)

1. Proposed action of application (check all the boxes that apply):
   - [X] Sale of [X] All [ ] Portion of the [X] Water system(s) under CCN No.: 11241
   - [X] Acquisition [ ] Sewer system(s) under CCN No.:
   - [ ] Lease/Rental
   - [X] Transfer of [X] All [ ] Portion of the [X] Certificated water service area – CCN No.: 11241
   - [ ] Certificated sewer service area – CCN No.:

   If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

   N/A

   and to:
   - [ ] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
   - [X] Amend the transferee's CCN No.: 10692
   - [ ] Merge or consolidate public utilities
   - [X] Cancel CCN of the transferor (seller) 11241

2. Proposed effective date of this transaction: Between 120 and 220 days after proper notice.
   (Must be at least 120 days after proper notice is provided)

## Part B – Current Service Provider or Seller Information

☞ **Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
   A. Name: Deer Creek Ranch Water Co , LLC
   (Individual, Corporation or Other Legal Entity)
   who is a(n):of [ ] Individual [ ] Corporation [ ] WSC [ ] HOA or POA [X] Other LLC

   B. Utility Name (if different than above): same as above
   Address: P.O. Box 436, Dripping Springs, Texas 78620 Telephone: (AC) (512) 535-1661

   C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
   Name: Randall B Wilburn Title: Attorney for Seller
   Address: 7000 N MoPac Expwy, Suite 200 Telephone: (AC) (512) 535-1661
   Austin, Texas 78731





4. About the last rate increase for the system or facilities being transferred:
   A. What was the effective date of the last rate increase? 10/1/2016

   B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
   [ ] No [X] Yes- Application/Docket Number: 46497 Date 10/31/2016

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| SEE EXHIBIT A | | | |
| NOTE: All deposits, including interest, shall be returned to customers by Seller concurrently with the Closing of this transaction. | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
   Applicant: SJWTX, Inc., a Texas corporation d/b/a Canyon Lake Water Service Company
   (Individual, Corporation, or Other Legal Entity)
   Utility Name: Canyon Lake Water Service Company
   (If different than above)
   Utility Address: 1399 Sattler Road, New Braunfels, Texas 78132

   Fax: (830) 964-2779 Email: tom hodge@clwsc com Telephone (AC): (830) 964-2166

   CCN Numbers held prior to the filing of this application: 10692

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
   - [ ] Individual
   - [ ] Home or Property Owners Association
   - [ ] Partnership; attach copy of partnership agreement
   - [X] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas: Charter # 0800542934
   - [ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:



- [ ] Municipally-owned utility
- [ ] District (MUD, SUD, WCID, etc.)
- [ ] County
- [ ] Other (please explain):

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| | | | |
|---|---|---|---|
| Name: | N/A | Email | |
| Address | | | |
| Telephone (AC): | | Fax (AC): | |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers of partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | Eric W Thornburg | Telephone (AC): | (830) 964-2166 |
| Address: | 110 W Taylor St., San Jose, CA 95110 | | |
| Position: | Chief Executive Officer | Ownership % (if applicable): | 0.00% |
| •Name: | Thomas Hodge | Telephone (AC): | (830) 964-2166 |
| Address: | 1399 Sattler Rd., New Braunfels, Texas 78132 | | |
| Position: | President | Ownership % (if applicable): | 0.00% |
| •Name: | James P Lynch | Telephone (AC): | (830) 964-2166 |
| Address: | 110 W Taylor St , San Jose, CA 95110 | | |
| Position: | Chief Financial Officer and Treasurer | Ownership % (if applicable): | 0 00% |
| •Name: | Suzy Papazian | Telephone (AC): | (830) 964-2166 |
| Address: | 110 W. Taylor St., San Jose, CA 95110 | | |
| Position: | Corporate Secretary | Ownership % (if applicable): | 0 00% |
| •Name: | Palle L Jenson | Telephone (AC): | (830) 964-2166 |
| Address: | 110 W. Taylor St , San Jose, CA 95110 | | |
| Position: | Senior V P. of Regulatory Affairs | Ownership % (if applicable): | 0.00% |
| •Name: | Larry Bittle | Telephone (AC): | (830) 964-2166 |
| Address: | 1399 Sattler Rd , New Braunfels, Texas 78132 | | |
| Position: | General Manager | Ownership % (if applicable): | 0 00% |

- Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from:

SEE EXHIBIT B



Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | Gregory M. Klipp | Title: | Attorney at Law |
| Address: | 1703 West Ave , Austin, Texas 78701 | Telephone (AC): | (512) 651-5401 |
| Fax # | (866) 511-5961 | Email | gklipp@thejoneslawfirm.com |
| Relationship to the applicant: | Attorney for Applicant (Purchaser) | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.
   A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

   SEE EXHIBIT C

   B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [ ] Yes [X] No

   If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

   N/A

   C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.

   SEE EXHIBIT C

D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

SEE EXHIBIT C

E. How will the transaction serve the public interest?

SEE EXHIBIT C

12. Please describe the nature of the proposed transaction:

SEE EXHIBIT D

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

A.
- Total Purchase Price: $ 2,700,000.00
- Total Original Cost (as recorded on books of seller or merging entity): $ 2,626,473.00
- Accumulated Depreciation as of the proposed effective date of the transaction: $ 746,612.00
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC:
  - Revenues from explicit customer agreements:
  - Developer Contributions (please explain):

$480,411.00. Developer cost for Vistancia subdivision water system, net of accumulated amortization.

  - Other Contributions (please explain):

$264,000.00. Customer tap fees, net accumulated amortization.

Total Contributions in Aid of Construction $ 744,411.00

- Net Book Value: $ 1,135,450.00



If rates are changing, please explain:

N/A

☐ Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

N/A

☐ Other. Please explain:

N/A

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

Monarch Utilities I, LP (CCN 12983)
Belvedere Municipal Utility District
Travis County Municipal Utility District 16

16. Financial, Managerial and Technical information for the acquiring entity.

The PUCT is familiar with Applicant's financial, managerial and technical information as Applicant has recently submitted to the PUCT similar information for the following matters:
(1) PUCT Docket No. 46413 (Applicant's Waste Water CCN Amendment Application for the Vintage Oaks Subdivision);
(2) PUCT Docket No. 46899 (Applicant's Water CCN Amendment Application for the Meyer Ranch Subdivision);
(3) Applicant's 2015 Annual Report filed to the PUCT, filing number 45185-209;
(4) Applicant's 2016 Annual Report (filed on or about November 29-30th), no filing number assigned yet.



☞ If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

Application/Docket Number: N/A Date:

☞ If the applicant is not under the rate jurisdiction of the TCEQ, only the purchase price and information related to Contributions in Aid of Construction is required.

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application.
[attach additional sheet(s) if necessary]:

N/A; for additional information please see Asset Purchase Agreement attached hereto in Exhibit D-2.

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | $ 2,626,473.00 |
| Plant Acquisition Adjustment: | $ 1,564,550.00 |
| Extraordinary Loss on Purchase: | |
| Accumulated Depreciation of Plant: | $ 746,612.00 |
| Cash: | $ 2,700,000.00 |
| Notes Payable: | |
| Mortgage Payable: | |
| Others (please list): | CIAC, net of amortization $774,411.00 |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: [illegible] Date: Dec 15, 2017

14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

☒ All the customers will be charged the same rates as they were charged before the transaction.
☐ Some ☐ All customers will be charged different rates than they were charged before the transaction.



## Part F – TCEQ Public Water or Sewer System Information

☞ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems. TCEQ Public Water System Identification Number: 2 2 7 0 0 4 9

Date of last inspection: August 22, 2016

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q - -
-Name of Permitee:
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? ☒ Yes ☐ No. If yes, please explain:

SEE EXHIBIT E

B. Is there a moratorium on new connections? ☐ Yes ☒ No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| SEE EXHIBIT E | | |
| | | |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? ☐ Yes ☒ No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☞ Attach copy of franchise agreement or consent letter from the city or district.

20. Do you currently purchase water or sewer treatment capacity from another source? [X] Yes [ ] No
[X] Water [ ] Sewer Purchased on a [X] Regular [ ] Seasonal [ ] Emergency Basis

- Source: Lower Colorado River Authority % of total supply: 100.00%

Note, this statement only applies to the water system being purchased.

21. List the number of existing connections to be effected by this transaction.

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| 0 | -Non Metered | 0 | -2"meter | -Residential Connection | |
| 756 | -5/8" or 3/4" meter | 0 | -3" meter | -Commercial Connection | |
| 0 | -1" meter | 0 | -4" meter | -Industrial Connection | |
| 0 | -1 1/2" meter | 0 | -Other | -Other | |
| Total Water Connections: | | 756 | | Total Sewer Connections | |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? [ ] Yes [X] No
If yes, please explain what steps are being taken to address the capacity issues:

N/A

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| SEE EXHIBIT F | | |
| | | |
| | | |
| | | |
| | | |

24. Attach the following maps with each copy of the application:
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
2. A map showing only the proposed area by:
i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
iii. following verifiable natural and man-made landmarks, or
iv. a copy of recorded plat map with metes and bounds.
3. A written description of the proposed service area.



MAPS RESPONSIVE TO QUESTION 24 ARE ATTTACHED IN EXHIBIT G.



Control Number: 47922

Item Number: 1

Addendum StartPage: 0

ORIGINAL

# Application for Sale, Transfer, or Merger of a Retail Public Utility

Pursuant to Chapter 13.251 of the Texas Water Code

RECEIVED
2018 JAN -3 PM 3:42
PUBLIC UTILITY COMMISSION
FILING CLERK

**Docket Number:** 47922

(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

## TABLE OF CONTENTS

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 9
**Part E – Projected Information** ..... 12
**Part F – Public Water System Information** ..... 16
**Part G – Oaths and Notices** ..... 18



## Part A – General Information

*RN# *CN# 602740706 * (PRIOR TCEQ ID numbers)

1. Proposed action of application (check all the boxes that apply):
[ ] Sale of [X] All [ ] Portion of the [X] Water system(s) under CCN No.: 12830
[X] Acquisition [ ] Sewer system(s) under CCN No.:
[ ] Lease/Rental

[ ] Transfer of [ ] All [ ] Portion of the [ ] Certificated water service area – CCN No.:
[ ] Certificated sewer service area – CCN No.:

If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

and to:
[ ] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
[X] Amend the transferee's CCN No.: 12983
[ ] Merge or consolidate public utilities
[ ] Cancel CCN of the transferor (seller)

2. Proposed effective date of this transaction: 4/1/2018
(Must be at least 120 days after proper notice is provided)

## Part B – Current Service Provider or Seller Information

**Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
A. Name: Dal High Water LLC
(Individual, Corporation or Other Legal Entity)
who is a(n):of [ ] Individual [ ] Corporation [ ] WSC [ ] HOA or POA [X] Other LLC

B. Utility Name (if different than above):
Address: P.O. Box 1531 Athens, TX 75751 Telephone: (AC)

C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
Name: Pam Monroe Title: Owner/Manager
Address: P.O. Box 1531 Athens, TX 75751 Telephone: (AC) (903) 477-6270

Fax: Email:

4. About the last rate increase for the system or facilities being transferred:
   A. What was the effective date of the last rate increase? 9/1/1993
   B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
   [ ] No [X] Yes- Application/Docket Number: unknown Date 9/1/1993

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| see list in Appendix A | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
   Applicant: Monarch Utilities I, L.P.
   (Individual, Corporation, or Other Legal Entity)
   Utility Name:
   (if different than above)
   Utility Address: 12353 Reed Road, Sugar Land, TX 77478
   Fax: (281) 207-5040 Email: gfreitag@swwc.com Telephone (AC): (281) 207-5800
   CCN Numbers held prior to the filing of this application: 12983

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
   [ ] Individual
   [ ] Home or Property Owners Association
   [ ] Partnership; attach copy of partnership agreement
   [ ] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas:
   [ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:



[ ] Municipally-owned utility
[ ] District (MUD, SUD, WCID, etc.)
[ ] County
[x] Other (please explain): Limited Partnership: Monarch Utilities I, L.P. Texas SOS File Number 0800034797

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| | | | |
|---|---|---|---|
| Name: | | Email | |
| Address | | | |
| Telephone (AC): | | Fax (AC): | |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers or partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | Charles W. Profilet, Jr. | Telephone (AC): | (281) 207-5800 |
| Address: | 12535 Reed Road, Sugar Land, TX 77478 | | |
| Position: | President, Director | Ownership % (if applicable): | 0.00% |
| •Name: | Christopher Schilling | Telephone (AC): | (281) 207-5800 |
| Address: | 12535 Reed Road, Sugar Land, TX 77478 | | |
| Position: | Director | Ownership % (if applicable): | 0.00% |
| •Name: | Kirk Michael | Telephone (AC): | (281) 207-5800 |
| Address: | 12535 Reed Road, Sugar Land, TX 77478 | | |
| Position: | Chief Financial Officer, Treasurer | Ownership % (if applicable): | 0.00% |
| •Name: | William K. Dix | Telephone (AC): | (281) 207-5800 |
| Address: | 12535 Reed Road, Sugar Land, TX 77478 | | |
| Position: | Secretary, Director | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

- Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from: See Appendix B



Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | George Freitag, P.E. | Title: | Regulatory Manager |
| Address: | 1620 Grand Avenue Pkwy #140, Pflugerville, TX 78660 | Telephone (AC): | (512) 219-2288 |
| Fax # | (512) 252-8782 | Email | gfreitag@swwc.com |
| Relationship to the applicant: | Employee | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.
   A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

Monarch Utilities I, L.P. is the second largest IOU in Texas and has the financial resources and operating structure to continue to provide quality service to the customers of Dal-High. Monarch currently has other water and wastewater systems and a regional operations office near this system. In addition to experienced, licensed operators, Monarch's management staff includes engineers, accountants, environmental safety and health staff, and experienced customer service agents.

   B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [X] Yes [ ] No

   If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

There have been enforcement actions by TCEQ against Monarch in the past. The company typically achieves compliance with the various orders by working with TCEQ to execute compliance agreements that allow it make the necessary improvements over a realistic time frame. See Appendix C for a summary of current agreements.

   C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.

Monarch has adequate capitalization and will use a variety of sources for funding including investors' equity, line of credit, and internally generated funds.



   D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

This application is to acquire the assets and customers of a small, single owner water system. Customers will be charged at the same rates currently charged under the approved Dal High tariff. Operation and maintenance will be improved as the system will be a part of Monarch's area wide operations. Monarch's management staff includes engineers, accountants, environmental safety and health staff, and experienced customer service agents. Customers will now be able to access accounts on line and have new options to pay bills electronically or by phone.

   E. How will the transaction serve the public interest?

Dal-High is a small standalone system. Monarch is a full-scale utility that emphasizes providing public water service that meets or exceeds all regulatory requirements. Operation and maintenance of the facilities will be improved as daily operations will be assumed by the nearby regional operations office. Customer service will be provided by Monarch's central customer service center.

12. Please describe the nature of the proposed transaction:

This is an asset purchase. The assets will be combined with the assets of Monarch Utilities I, L.P. on the books. Customer service will be provided out of Monarch's central facilities.

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:

   A.
   - Total Purchase Price: $ 55,200.00
   - Total Original Cost (as recorded on books of seller or merging entity): $ 99,947.00
   - Accumulated Depreciation as of the proposed effective date of the transaction: $ 58,405.00
   - Contributions in Aid of Construction:
     - Specific surcharges approved by TCEQ or PUC: $ 0.00
     - Revenues from explicit customer agreements: $ 0.00
     - Developer Contributions (please explain):
     - Other Contributions (please explain):

   Total Contributions in Aid of Construction $ 0.00

   - Net Book Value: $ 44,862.00

☞ If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

Application/Docket Number: no records available Date: 9/1/1993

☞ If the applicant is not under the rate jurisdiction of the TCEQ, only the purchase price and information related to Contributions in Aid of Construction is required.

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application.
[attach additional sheet(s) if necessary]:

No change in the CCN area is requested. The service area boundaries will remain exactly as they are currently mapped. This application is to acquire the assets of a single, 46 customer system in Henderson County. All accounting data will be consolidated into Monarch's statewide operations. Daily operations will be assumed by the nearby regional operations office, and customer service will be provided by the central customer service center.

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | $ 99,947.00 |
| Plant Acquisition Adjustment: | |
| Extraordinary Loss on Purchase: | |
| Accumulated Depreciation of Plant: | $ 58,405.00 |
| Cash: | |
| Notes Payable: | |
| Mortgage Payable: | |
| Others (please list): | |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: GHF Date: 01/03/2018
for Monarch Utilities I, L.P.

14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

[X] All the customers will be charged the same rates as they were charged before the transaction.
[ ] Some [ ] All customers will be charged different rates than they were charged before the transaction.



If rates are changing, please explain:

[X] Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

Monarch intends to file a minor tariff change request to put the newly acquired customers under the customer service charges and fees on its standard tariff. At some point in the future Monarch will file a consolidated rate application.

[ ] Other. Please explain:

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

See Appendix D

16. Financial, Managerial and Technical information for the acquiring entity.

Monarch is the second largest IOU in Texas and has been successfully operating for many years. The addition of the 46 connections of the SWUC system to the approximately 24,000 current active water customers will not significantly change the overall financial structure. In lieu of Historical Financial Worksheets below, prepared financial statements for Monarch Utilities I, L.P. are submitted as Appendix F under CONFIDENTIALITY to demonstrate the adequacy of the company's financial, managerial, and technical capability to acquire the system and provide quality service to the customers.



## Part D – Historical Financial Information

| HISTORICAL BALANCE SHEETS | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **CURRENT ASSETS** | | | | | | |
| Cash | | | | | | |
| Accounts Receivable | | | | | | |
| Inventories | | See Appendix E | | | | |
| Income Tax Receivable | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **FIXED ASSETS** | | | | | | |
| Land | | | | | | |
| Collection/Distribution System | | | | | | |
| Buildings | | | | | | |
| Equipment | | | | | | |
| Other | | | | | | |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | | | | | | |
| **TOTAL ASSETS** | | | | | | |
| **CURRENT LIABILITIES** | | | | | | |
| Accounts Payable | | | | | | |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | | | | | | |
| **TOTAL** | | | | | | |
| **LONGTERM LIABILITIES** | | | | | | |
| Notes Payable, Long-term | | | | | | |
| Other | | | | | | |
| **TOTAL LIABILITIES** | | | | | | |
| **OWNER'S EQUITY** | | | | | | |
| Paid in Capital | | | | | | |
| Retained Equity | | | | | | |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | | | | | | |
| **TOTAL LIABILITIES AND EQUITY** | | | | | | |
| **WORKING CAPITAL** | | | | | | |
| **CURRENT RATIO** | | | | | | |
| **DEBT TO EQUITY RATIO EQUITY TO TOTAL ASSETS** | | | | | | |



| HISTORICAL INCOME STATEMENT | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **METER NUMBER** | | | | | | |
| Existing Number of Taps | | See Appendix E | | | | |
| New Taps Per Year | | | | | | |
| **Total Meters at Year End** | | | | | | |
| **METER REVENUE** | | | | | | |
| Fees Per Meter | | | | | | |
| Cost Per Meter | | | | | | |
| **Operating Revenue Per Meter** | | | | | | |
| **GROSS WATER REVENUE** | | | | | | |
| Fees | | | | | | |
| Other | | | | | | |
| **Gross Income** | | | | | | |
| **OPERATING EXPENSES** | | | | | | |
| General & Administrative | | | | | | |
| Interest | | | | | | |
| Other | | | | | | |
| **NET INCOME** | | | | | | |

| HISTORICAL EXPENSE DETAIL | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **GENERAL/ADMINISTRATIVE EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Office Expense | | | | | | |
| Computer Expense | | | See Appendix E | | | |
| Auto Expense | | | | | | |
| Insurance Expense | | | | | | |
| Telephone Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | | | | | | |
| **OPERATIONAL EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | | | | | | |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | | | | | | |
| **ASSUMPTIONS** | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |



**Part E – Projected Information**

**PROJECTED BALANCE SHEETS**

| | START UP | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|---|---|---|---|---|---|---|
| **CURRENT ASSETS** | | | | | | |
| Cash | | | | | | |
| Accounts Receivable | | | | | | |
| Inventories | | | | | | |
| Income Tax Receivable | | | | | | |
| Other | | | See Appendix E | | | |
| **Total** | | | | | | |
| **FIXED ASSETS** | | | | | | |
| Land | | | | | | |
| Collection/Distribution System | | | | | | |
| Buildings | | | | | | |
| Equipment | | | | | | |
| Other | | | | | | |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | | | | | | |
| **TOTAL ASSETS** | | | | | | |
| **CURRENT LIABILITIES** | | | | | | |
| Accounts Payable | | | | | | |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **LONGTERM LIABILITIES** | | | | | | |
| Notes Payable, Long-term | | | | | | |
| Other | | | | | | |
| **TOTAL LIABILITIES** | | | | | | |
| **OWNER'S EQUITY** | | | | | | |
| Paid in Capital | | | | | | |
| Retained Equity | | | | | | |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | | | | | | |
| **TOTAL LIABILITIES AND EQUITY** | | | | | | |
| **WORKING CAPITAL** | | | | | | |
| **CURRENT RATIO** | | | | | | |
| **DEBT TO EQUITY RATIO** | | | | | | |
| **EQUITY TO TOTAL ASSETS** | | | | | | |



**PROJECTED INCOME STATEMENT**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **METER NUMBER** | | | | | | |
| Existing Number of Taps | | | | | | |
| New Taps Per Year | | | | | | |
| **Total Meters at Year End** | | | | | | |
| **METER REVENUE** | | | | | | |
| Fees Per Meter | | | See Appendix E | | | |
| Cost Per Meter | | | | | | |
| **Operating Revenue Per Meter** | | | | | | |
| **GROSS WATER REVENUE** | | | | | | |
| Fees | | | | | | |
| Other | | | | | | |
| **Gross Income** | | | | | | |
| **OPERATING EXPENSES** | | | | | | |
| General & Administrative | | | | | | |
| Interest | | | | | | |
| Other | | | | | | |
| **NET INCOME** | | | | | | |



**PROJECTED EXPENSE DETAIL**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **GENERAL/ADMINISTRATIVE EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Office Expense | | | | | | |
| Computer Expense | | | | | | |
| Auto Expense | | See Appendix E | | | | |
| Insurance Expense | | | | | | |
| Telephone Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| **OPERATIONAL EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | | | | | | |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| **ASSUMPTIONS** | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |

**PROJECTED SOURCES AND USES OF CASH STATEMENTS**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **SOURCES OF CASH** | | | | | | |
| Net Income | | | | | | |
| Depreciation (If Funded) | | | | | | |
| Loan Proceeds | | See Appendix E | | | | |
| Other | | | | | | |
| **Total Sources** | | | | | | |
| **USES OF CASH** | | | | | | |
| Net Loss | | | | | | |
| Principle Portion of Pmts. | | | | | | |
| Fixed Asset Purchase | | | | | | |
| Reserve | | | | | | |
| Other | | | | | | |
| **Total Uses** | | | | | | |
| **NET CASH FLOW** | | | | | | |
| **DEBT SERVICE COVERAGE** | | | | | | |
| Cash Available for Debt | | | | | | |
| **SERVICE (CADS)** | | | | | | |
| Net Income (Loss) | | | | | | |
| Depreciation, or Reserve Interest | | | | | | |
| **Total** | | | | | | |
| **REQUIRED DEBT SERVICE (RDS)** | | | | | | |
| Principle Plus Interest | | | | | | |
| **DEBT SERVICE COVERAGE RATIO** | | | | | | |
| CADS Divided by RDS | | | | | | |



**Part F – TCEQ Public Water or Sewer System Information**

☛ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems. TCEQ Public Water System Identification Number: 1 0 7 0 1 5 9

Date of last inspection: 11/16/2016

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q - 
Name of Permitee: n/a
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? ☐ Yes ☒ No. If yes, please explain:

B. Is there a moratorium on new connections? ☐ Yes ☒ No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| | | |
| | | |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? ☐ Yes ☒ No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☛ Attach copy of franchise agreement or consent letter from the city or district.



20. Do you currently purchase water or sewer treatment capacity from another source? ☐ Yes ☒ No
☐ Water ☐ Sewer Purchased on a ☐ Regular ☐ Seasonal ☐ Emergency Basis

- Source: % of total supply: 0.00%

21. List the number of existing connections to be effected by this transaction.

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | -Non Metered | | -2"meter | -Residential Connection | |
| 46 | -5/8" or 3/4" meter | | -3" meter | -Commercial Connection | |
| | -1" meter | | -4" meter | -Industrial Connection | |
| | -1 1/2" meter | | -Other | -Other | |
| | Total Water Connections: | 46 | | Total Sewer Connections | |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? ☐ Yes ☒ No
If yes, please explain what steps are being taken to address the capacity issues:

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| Kirk Kebodeaux | A W, A WW, CSI, BFP | WO0001283 WW0015397, BP0014182 |
| Jesse Donelson | C GW, B SW, C WW | WG0008785, WS0008821, WW0032205 |
| Donald Herriage | A W, A WW, CSI | WO0017031, WW0027707, CI0002377 |
| John Salmans, Jr. | C GW, C WW, CSI | WG0007135, WW0031962, CI0010016 |
| | | |

24. Attach the following maps with each copy of the application: See Appendix F
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
   1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
   2. A map showing only the proposed area by:
      i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
      ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
      iii. following verifiable natural and man-made landmarks, or
      iv. a copy of recorded plat map with metes and bounds.
   3. A written description of the proposed service area.



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KENTUCKY AMERICAN WATER

## Kentucky American Water Acquires Water Assets of Eastern Rockcastle Water Association in Livingston

February 28, 2018 04:11 PM Eastern Standard Time

LEXINGTON, Ky.--(BUSINESS WIRE)--Kentucky American Water announced today that it has acquired the water assets of Eastern Rockcastle Water Association in Livingston, Ky., in Rockcastle County. The transaction, completed today, adds approximately 610 water customers in Rockcastle and Jackson counties to the Kentucky American Water system. The acquisition of the system expands the company's total service area to portions of 14 Kentucky counties.

"We are pleased to welcome Eastern Rockcastle Water Association customers to Kentucky American Water," said Nick Rowe, president of Kentucky American Water. "Our company will bring to the community 24-hour customer service for water service emergencies, unique water system expertise, and additional capital resources for water infrastructure investment. We look forward to providing excellent service to these new customers and being an active corporate citizen in the community."

"The Eastern Rockcastle Water Association board is pleased to announce the sale of the water system to Kentucky American Water," said Russell Barron, president of Eastern Rockcastle Water Association. "This was a decision we took seriously. We are confident that the system will be in great hands with Kentucky American Water, and that our customers will benefit by receiving great service."

**About Kentucky American Water**

Kentucky American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately half a million people.

**About American Water**

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,900 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Contacts

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859-268-6332
susan.lancho@amwater.com

Tweets by @kyamwater

**KY American Water**
@kyamwater

Heads up! There are several things we put down our pipes each day that can clog things up. Watch to learn what to think twice about.



47m

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@kyamwater

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Jan 27, 2020

**KY American Water**
@kyamwater

We love sponsoring this event and are looking forward to another year of awesome projects!
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# State approves sale of Eastern Rockcastle Water Association




*By WKYT News Staff* | Posted: Fri 10:03 AM, Jan 19, 2018

**LEXINGTON, Ky. (WKYT) -** Members of the Eastern Rockcastle Water Association will soon get their water through Kentucky American Water Company.

The Kentucky Public Service Commission approved the sale of the Eastern Rockcastle Water Association to the PSC on Friday. The PSC says it believes the sale will benefit Eastern Rockcastle's customers because KAWC has more resources to make system improvements.

KAWC will pay $770,000 as part of the deal. It will keep Eastern Rockcastle's water rates in place after the sale is complete. The Eastern Rockcastle Water Association will issue final bills that include credits for customer deposits. KAWC does not require customer deposits.

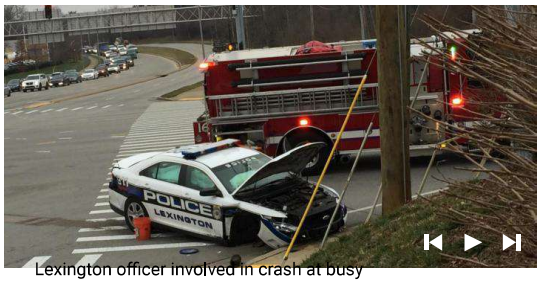
Two Eastern Rockcastle customers objected to the sale, saying it was not conducted according to state law. The PSC reviewed those arguments and says it found everything was done properly.

The Eastern Rockcastle Water Association is owned by and serves more than 600 customers. KAWC serves 131,000 customers in 11 Kentucky counties, including Fayette County.





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ORIGINAL

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

| | |
|---|---|
| **JOINT PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. ("INDIANA AMERICAN") AND THE TOWN OF SHERIDAN, INDIANA ("SHERIDAN") FOR APPROVAL AND AUTHORIZATION OF: (A) THE ACQUISITION BY INDIANA AMERICAN OF SHERIDAN'S WATER UTILITY PROPERTY (THE "SHERIDAN WATER SYSTEM") AND OF SHERIDAN'S SEWER UTILITY PROPERTY (THE "SHERIDAN SEWER SYSTEM") (COLLECTIVELY THE "SHERIDAN SYSTEMS") IN HAMILTON COUNTY, INDIANA IN ACCORDANCE WITH A PURCHASE AGREEMENT THEREFOR; (B) APPROVAL OF ACCOUNTING AND RATE BASE TREATMENT; (C) APPROVAL OF THE RATES AND CHARGES TO BE APPLIED TO THE SHERIDAN WATER AND SEWER SYSTEMS AFTER CLOSING; (D) APPROVAL OF APPLICATION OF INDIANA AMERICAN'S MUNCIE SEWER RULES AND REGULATIONS TO THE SHERIDAN WASTEWATER SYSTEM, WITH CHANGES TO ALLOW ENFORCEMENT OF AN INDUSTRIAL PRETREATMENT PROGRAM ("IPP") AMONG OTHERS; (E) APPLICATION OF INDIANA AMERICAN'S DEPRECIATION ACCRUAL RATES TO SUCH ACQUIRED PROPERTIES; AND (F) THE SUBJECTION OF THE ACQUIRED PROPERTIES TO THE LIEN OF INDIANA AMERICAN'S MORTGAGE INDENTURE.** | **CAUSE NO. 45050**<br>**APPROVED: SEP 12 2018** |

**Presiding Officers:**
**Sarah E. Freeman, Commissioner**
**Lora L. Manion, Administrative Law Judge**

On February 16, 2018, Joint Petitioners Indiana-American Water Company, Inc. ("Indiana American" or the "Company") and the Town of Sheridan, Indiana ("Sheridan") filed their *Joint Petition* with the Indiana Utility Regulatory Commission ("Commission") in this matter.

On April 5, 2018, the Commission issued a docket entry vacating the prehearing conference and requesting Joint Petitioners and the Office of Utility Consumer Counselor ("OUCC") to file an agreed procedural schedule. On April 6, 2018, the parties filed a *Stipulation as to Procedural Matters*, and on April 11, 2018, the Commission issued a docket entry establishing the procedural schedule in this Cause.

On April 13, 2018, Joint Petitioners filed the prepared testimony and exhibits of Mr. Matthew Prine, Director of Community and Government Affairs for Indiana American; Mr.

Gregory Roach, Senior Manager, Revenue Analytics for American Water Works Service Company; Mr. David Kinkead, President of the Sheridan Town Council; and Mr. Stacy Hoffman, Director of Engineering for Indiana American. The filings constitute Joint Petitioners' case-in-chief.

On June 29, 2018, the OUCC filed the prepared testimony and exhibits of Mr. Carl N. Seals, Utility Analyst, and Ms. Margaret A. Stull, Chief Technical Adviser, constituting the OUCC's case-in-chief.

On July 12, 2018, Joint Petitioners advised in a filing that Joint Petitioners reached an agreement in principle with the OUCC with respect to all issues in this Cause. Joint Petitioners requested a modification to the schedule in light of their preparation of a settlement, and the request was granted by the Presiding Officers in a docket entry on July 13, 2018. On July 20, 2018, Joint Petitioners and the OUCC (the "Settling Parties") jointly filed a Stipulation and Settlement Agreement ("Settlement") along with testimony in support thereof, which Settlement presented the Settling Parties' proposed resolution of all issues raised between them in this proceeding. The Settlement was supported by testimony from Mr. Roach, on behalf of Indiana American, and Mr. Scott Bell, Director of the Water and Wastewater Division of the OUCC.

On July 26, 2018, the Presiding Officers in a docket entry requested additional information from Indiana American, and on July 31, 2018, Indiana American filed a response.

A settlement hearing in this Cause was held commencing at 9:30 am on August 1, 2018, in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana. The Settling Parties' prefiled evidence, including the Settlement and the pre-settlement and settlement testimony in support thereof, was admitted into the record.



**TABLE OF CONTENTS**


| TOPIC | PAGE |
|---|---|
| 1. Notice and Jurisdiction | 4 |
| 2. Joint Petitioners' Characteristics | 4 |
| 3. Relief Requested by Joint Petitioners | 4 |
| 4. Pre-Settlement Testimony | 4 |
| A. Joint Petitioners' Pre-Settlement Case-in-Chief | 4 |
| i. Ind. Code ch. 8-1-30.3 and § 8-1.5-2-6.1 | 5 |
| ii. Proposed Acquisition and Asset Purchase Agreement | 7 |
| iii. Aging Infrastructure, Violations, and Indiana American's Plan for Improvements | 8 |
| iv. Accounting and Ratemaking Treatment | 11 |
| v. Impact of Acquisition on Customer Rates | 11 |
| B. OUCC's Pre-Settlement Case-in-Chief | 12 |
| i. Proposed Acquisition and Asset Purchase Agreement | 12 |
| ii. Aging Infrastructure, Violations, and Indiana American's Plan for Improvements | 12 |
| iii. Accounting and Ratemaking Treatment | 12 |
| iv. Impact of Acquisition on Customer Rates | 12 |
| 5. Settlement Testimony | 13 |
| A. Proposed Acquisition and Asset Purchase Agreement | 13 |
| B. Aging Infrastructure, Violations, and Indiana American's Plan for Improvements | 13 |
| C. Accounting and Ratemaking Treatment | 14 |
| D. Impact of Acquisition on Customer Rates | 14 |
| 6. Commission Discussion and Findings on Settlement | 14 |
| A. Ind. Code § 8-1-30.3-5(d) Requirements | 15 |
| B. Ind. Code § 8-1-30.3-5(c) Requirements | 17 |
| C. Ind. Code § 8-1.5-2-6.1(d) Purchase Price Presumption and Ind. Code § 8-1.5-2-4 | 19 |
| D. Ind. Code § 8-1.5-2-6.1(e)(3) Ability of Purchaser | 20 |
| E. Settlement | 21 |
| F. Accounting Treatment | 21 |
| G. Rates and Rules | 22 |
| H. Encumbrances | 23 |
| Ordering Paragraphs | 23 |




Based upon the applicable law and evidence, the Commission now finds:

**1. Notice and Jurisdiction.** Notice of the evidentiary hearing was given as required by law. Indiana American is a public utility as defined in Ind. Code § 8-1-2-1 and, as such, is subject to the Commission's jurisdiction. The Sheridan Water System and the Sheridan Wastewater System are municipally owned utilities as defined in Ind. Code § 8-1-2-1(h). Under Ind. Code ch. 8-1-30.3 and Ind. Code § 8-1.5-2-6.1 the Commission has jurisdiction over Indiana American's proposed purchase of a municipally owned utility; therefore, the Commission has jurisdiction over Joint Petitioners and the subject matter of this proceeding.

**2. Joint Petitioners' Characteristics.** Indiana American is an Indiana corporation engaged in the provision of water utility service to the public in and around numerous communities throughout Indiana for residential, commercial, industrial, public authority, sale for resale, and public and private fire protection purposes. Indiana American provides residential, commercial, industrial, and municipal water utility service, including sale for resale, and public and private fire service to approximately 302,000 customers in Indiana. Indiana American also provides wastewater utility service in Wabash and Delaware Counties.

Sheridan is a municipality located in Hamilton County, Indiana. Sheridan owns and operates a water distribution system ("Water System") serving approximately 1,261 individually metered customers and a wastewater treatment plant and collection system ("Wastewater System") serving approximately 1,233 customers (together, the "Sheridan Systems"). Sheridan's storm water system is excluded from the Sheridan Systems that Indiana American seeks to acquire. Sheridan withdrew from the jurisdiction of the Commission for purposes of its water rates, charges, and financing in December 1988. The Sheridan Systems are in the vicinity of Indiana American's existing Noblesville operation in Hamilton County.

**3. Relief Requested by Joint Petitioners.** Joint Petitioners filed their Joint Petition pursuant to Ind. Code §§ 8-1-30.3-5 ("Section 30.3-5") and 8-1.5-2-6.1 ("Section 6.1"). Joint Petitioners request approval and authorization of: (A) the acquisition by Indiana American of Sheridan's Water System and Wastewater System in Hamilton County, Indiana in accordance with their Asset Purchase Agreement ("APA"); (B) accounting and rate base treatment; (C) rates and charges to be applied to the Sheridan Systems after closing of Indiana American's acquisition; (D) application of Indiana American's Muncie wastewater rules and regulations to the Sheridan Sewer System, with modifications, including enforcement of an industrial pretreatment program ("IPP"); (E) application of Indiana American's depreciation accrual rates approved by the Commission in Cause No. 44992 on May 30, 2018; and (F) the subjection of the acquired properties to the lien of Indiana American's mortgage indenture.

**4. Pre-Settlement Testimony.**

**A. Joint Petitioners' Pre-Settlement Case-in-Chief.** Joint Petitioners presented direct testimony from Mr. Matthew Prine, Director of Community and Government Affairs for Indiana American; Mr. Gregory Roach, Senior Manager, Revenue Analytics for American Water Works Service Company; Mr. David Kinkead, President of the Sheridan Town



Council; and Mr. Stacy S. Hoffman, Director of Engineering for Indiana American. Mr. Prine provided the APA as Jt. Pet. Ex. 1, Attach. MP-2.

**(i). Ind. Code ch. 8-1-30.3 and § 8-1.5-2-6.1.** Mr. Prine testified that during the 2015 legislative session of the Indiana General Assembly, a new chapter was established (Ind. Code § 8-1-30.3, referred to herein as "Chapter 30.3") providing that a public water or wastewater utility that acquires the utility property of a "distressed utility" (as defined in Ind. Code § 8-1-30.3-2) may petition the Commission to include the "cost differential" (as defined in Ind. Code § 8-1-30.3-1) associated with the acquisition as part of its rate base. The new law established certain circumstances under which this ratemaking treatment is required. During the 2016 legislative session, a new section (Ind. Code § 8-1.5-2-6.1) of the law governing municipal utilities was adopted and Chapter 30.3 was amended, both with respect to the sale or disposition of non-surplus municipal utility property. Mr. Prine testified that the new laws encourage the consideration of regionalization as a strategy in addressing Indiana's ongoing infrastructure needs.

Mr. Prine testified that in November 2016, the Indiana Finance Authority ("IFA") issued its report on water utility infrastructure needs throughout Indiana. The IFA Report discussed the need for regionalization. Mr. Prine quoted from the IFA Report as follows:

> [L]arger systems improve the economic performance for customers. In spite of this, new small systems continue to be formed instead of combining assets with existing utilities where value could be added. With larger size and capacity, regional utilities add efficiencies while being more reliable and sustainable than individual community water systems.

Jt. Pet. Ex. 1, Attach. MP-3, at 8.

Mr. Prine also testified that the IFA Report emphasizes the need for (i) prioritization of replacement of aging or failing water mains; and (ii) development of a schedule of asset management that organizes the construction needed to maintain and extend the life of a utility system. *Id.* at 7. Mr. Prine further testified that Sheridan Systems face some of the same challenges discussed in the IFA Report.

Mr. Prine testified Ind. Code § 8-1-30.3-6 ("Section 30.3-6") enumerates a list of conditions that, if any one of these conditions is found by the Commission to exist, would satisfy the distressed requirement. Section 30.3-6 is as follows:

> For purposes of section 5(c)(2) of this chapter, a distressed utility is not furnishing or maintaining adequate, efficient, safe, and reasonable service and facilities if the commission finds one (1) or more of the following:
> (1) The distressed utility violated one (1) or more state or federal statutory or regulatory requirements in a manner that the commission determines affects the safety, adequacy, efficiency, or reasonableness of its services or facilities.
> (2) The distressed utility has inadequate financial, managerial, or technical ability or expertise.

(3) The distressed utility fails to provide water in sufficient amounts, that is palatable, or at adequate volume or pressure.
(4) The distressed utility, due to necessary improvements to its plant or distribution or collection system or operations, is unable to furnish and maintain adequate service to its customers at rates equal to or less than those of the acquiring utility company.
(5) The distressed utility:
(A) is municipally owned utility property of a municipally owned utility that serves fewer than five thousand (5,000) customers; and
(B) is being sold under IC 8-1.5-2-6.1.
(6) Any other facts that the commission determines demonstrate the distressed utility's inability to furnish or maintain adequate, efficient, safe, or reasonable service or facilities.

Ind. Code § 8-1-30.3-6.

Mr. Prine testified Sheridan Systems meet the requirements of Section 30.3-6(5). They are municipally owned, serve fewer than 5,000 customers, and are being sold pursuant to Section 6.1. Therefore, Sheridan Systems qualify as distressed. Mr. Prine testified while it is not necessary to satisfy a second condition, Sheridan Systems also satisfy Section 30.3-6(4). Due to necessary improvements to the plant or distribution or collection system or operations, Sheridan Systems are unable to furnish and maintain adequate service to customers at rates equal to or less than those of Indiana American. Mr. Prine also confirmed that Sheridan and Indiana American are not affiliated and share no common ownership interests.

Mr. Prine testified about the statutory process for a municipality to sell its water or wastewater utility. Mr. Prine explained a municipality must direct the appointment of three appraisers to appraise the value. The purchase price is deemed to be reasonable if it does not exceed the statutory appraised value. Upon return of the appraisal, the municipality must hold a public hearing on the proposed acquisition. If the municipality decides to sell, it must adopt an ordinance approving the proposed acquisition. For an ordinance adopted pursuant to this process after March 28, 2016, Commission approval is required under Section 6.1. The standard for approval is whether the sale according to the proposed terms and conditions is in the public interest. If the Commission makes the required findings set forth in Section 30.3-5(c), then Section 6.1 directs that the proposed sale according to the proposed terms and conditions is in the public interest.

Mr. Prine testified that the proposed purchase price for Sheridan Systems is $10,750,000, with $6,200,000 of that purchase price allocated to the Water System and $4,550,000 to the Wastewater System. While Sheridan's appointed appraisers determined the appraised value of Sheridan Systems to be $12,637,000, Mr. Prine testified to produce lower utility rates for customers, Sheridan Town Council determined to sell Sheridan Systems for less than the full appraised value set forth in the appraisal. Jt. Pet. Ex. 3, Attach. DK 2. Therefore, the purchase price does not exceed the appraised value of Sheridan System. Mr. Prine testified that the original cost rate base for Sheridan Systems would be $10,950,000, assuming $200,000 of



incidental expenses and other costs of acquisition. Mr. Prine further testified that Sheridan Systems are used and useful in providing water and wastewater service to customers.

**(ii). Proposed Acquisition and Asset Purchase Agreement.** David Kinkead, President of Sheridan Town Council, testified regarding the proposed acquisition of Sheridan Systems by Indiana American. Mr. Kinkead provided an overview of the Wastewater System and its history of environmental regulatory issues. Mr. Kinkead testified selling the Wastewater System would allow a company with greater expertise to take over investment, operation, and maintenance. The sale would also enable Sheridan to invest in elimination of the storm water source of the notices of violations ("NOVs"). Mr. Kinkead stated the Water System is aged and in need of certain infrastructure improvements. Sheridan commissioned a rate study from O.W. Krohn and Associates to assist with its decision process. The result of that study made it clear the costs to Sheridan's citizens would be much greater just to address the deferred maintenance and bring the Sheridan Systems up to standards, not including future improvements, than a transfer to a private entity subject to Commission review.

Mr. Kinkead testified regarding the chronology of events. In September 2016, Sheridan Town Council approved the issuance of a Request for Proposals ("RFP"). Indiana American was the successful bidder. Indiana American provided Sheridan with a proposed purchase agreement.

On February 27, 2017, Sheridan Town Council voted to appoint official appraisers of Sheridan Systems. The appraisers were: (1) Judith M. Cleland, P.E., an Indiana Registered Professional Engineer; (2) Thomas T. Nitza, P.E., an Indiana Registered Professional Engineer; and (3) Joseph C. Traynor, MRICS, GAA, an Indiana Certified General Appraiser. Jt. Pet. Ex. 3, Attach. DK-2, at 2. In early June 2017, Sheridan received the Return of Appraisement certifying the appraisal. Jt. Pet. Ex. 3, Attach. DK-2.

On July 26, 2017, the public hearing required by statute was held, as indicated in Sheridan's Ordinance No. 2017-8. Jt. Pet. 3, Attach. DK-3, at 2. On July 31, 2017, Sheridan enacted that Ordinance, and it recites the following: "Whereas, pursuant to Ind. Code § 8-1.5-2-6(e), the Town Council has determined that the sale price for the [Sheridan Systems] shall be less than full appraised value so as to result in lower utility rates to be charged to the customers of the [Sheridan Systems]." Jt. Pet. Ex. 3, Attach. DK-3, at 2-3.

Mr. Kinkead further testified that Sheridan followed the statutory process necessary to sell Sheridan Systems and conducted negotiations with Indiana American which resulted in the APA being finalized and signed on January 17, 2018. He testified that the negotiations leading up to the execution of the APA were conducted at arm's length.

Mr. Kinkead testified regarding communications with Sheridan's customers about the sale. He explained that Mr. Prine and other officials from Indiana American attended Sheridan's Town Council meetings to provide customers the opportunity to get answers directly from Indiana American. He further testified Sheridan held several additional meetings to determine public opinion and to receive input regarding the proposed sale. Mr. Kinkead testified the response was clear that citizens were overwhelmingly in favor of the proposed transaction. He further testified no Sheridan customers have expressed opposition to the proposed sale.



Mr. Prine testified regarding Indiana American's proposal to acquire the Sheridan Systems. Mr. Prine stated that consummation of the transaction is conditioned on obtaining certain approvals from the Commission as follows: (1) the contemplated transaction and the transfer of the Systems; (2) the proposed accounting and rate base treatment, including recognition of the full purchase price plus incidental expenses and other costs of acquisition in net original cost rate base; (3) the application of the Company's depreciation accrual rates to the Sheridan Systems; (4) the application of the rates and charges set forth in the APA; and (5) the inclusion of the acquired assets in the Company's mortgage indenture.

Mr. Prine also testified that Indiana American's acquisition of Sheridan Systems will benefit customers currently served by Sheridan Systems. Under Indiana American's ownership, the customers will see lower rates than would ultimately be implemented if Sheridan were to continue to own and operate the systems, due to the cost of necessary improvements. Mr. Prine testified any change in Indiana American's rates is subject to the jurisdiction of the Commission. Under Indiana American's ownership, Sheridan's customers will benefit from long-term asset management and investment. Sheridan customers will gain full-time management of Sheridan Systems, including a full-time operations staff, 24/7 customer service and emergency response, enhanced security measures, and full-time functional specialists in the areas of engineering and water quality. The Sheridan Systems will also be included in Indiana American's prioritization model, allowing planning and asset management needs like those identified by the 2016 IFA Report to be met. Most importantly, Indiana American is prepared to make the necessary improvements to Sheridan Systems as required by the Indiana Department of Environmental Management ("IDEM").

With respect to the notice requirements in Section 30.3-5(d), Mr. Prine testified that Indiana American provided notices to current customers of Sheridan and the existing customers of Indiana American. Mr. Prine testified that the acquisition will not increase Indiana American's rates by more than one percent of Indiana American's base annual revenues. Mr. Prine testified that all Sheridan customers were notified of the proposed transaction and the rates that would be charged by Indiana American after closing. Separately, Mr. Roach testified that Indiana American gave notice of the proposed transaction to the customers of Indiana American; however, he said that he thinks that this notice was not required. The calculation performed by Mr. Roach is included as Jt. Pet. Ex. 2, Attach. GPR-2. Mr. Roach testified that his calculation followed the methodology approved by the Commission's March 14, 2018 Order in Cause Nos. 44976 and 44964.

Mr. Prine summarized how Section 6.1 interacts with Chapter 30.3. He explained that if the purchase price of the proposed acquisition does not exceed the appraised value, and the elements of Sections 30.3-5(c) and 30.3-5(d) are met, Section 6.1(e) directs the issuance of a final order not later than 210 days after the filing of Joint Petitioners' case-in-chief that authorizes the acquiring utility company to record: (1) the full purchase price; (2) incidental expenses; and (3) other costs of acquisition. The net original cost of the utility plant in service assets being acquired should be allocated in a reasonable manner among appropriate utility plant in service accounts.

**(iii). Aging Infrastructure, Violations, and Indiana American's Plan for Improvements.** Mr. Prine and Mr. Hoffman testified regarding the improvements that are



needed to Sheridan Systems to address environmental concerns and aging or failing infrastructure issues.

Mr. Prine explained that under municipal ownership, Sheridan Systems face rising costs for necessary improvements to facilities and operations. He stated that in the last five years, the Wastewater System was issued NOVs for bypass and overflow events and IDEM cited Sheridan for an inadequate preventative maintenance program. Additionally, Mr. Prine explained the Wastewater System has suffered from inflow and infiltration ("I/I") from Sheridan's storm water system. Mr. Prine further testified that Sheridan does not have a plan for replacement of aging or failing water distribution infrastructure.

Mr. Prine testified that due to significant improvements needed to the Wastewater System to comply with IDEM requirements and to the Water System to address aging infrastructure concerns, continuation of current ownership by Sheridan could lead to a troubled future for Sheridan Systems. He echoed Mr. Kinkead's testimony that Indiana American is in a better position than Sheridan to address these issues.

Mr. Prine testified that Sheridan had a rate study performed by O.W. Krohn and Associates that predicted the necessary increases in rates if Sheridan were to continue to own and operate the Sheridan Systems [and fund the improvements]. Mr. Prine stated that the projected wastewater rates [if Sheridan continued to own the Wastewater System and fund the improvements] are higher than the wastewater rates Indiana American proposes to charge. He testified Sheridan has committed to adopt a 30% across-the-board rate increase for its wastewater customers as of closing, and Indiana American has committed to charging those same wastewater rates until 2021.

Mr. Hoffman further described the challenges facing the Wastewater System. As described in the Agreed Order with IDEM attached to the APA, IDEM issued NOVs with respect to Sheridan's National Pollutant Discharge Elimination System permit. IDEM identified 25 bypass events and 12 overflow events related to the Wastewater System during May 26, 2013, through May 26, 2016. Jt. Ex. 1, Attach. MP-2, at 71 of 86. IDEM found that excessive I/I continues to contribute to hydraulic overloading of Sheridan's wastewater treatment plant ("WWTP") and Sheridan did not have an ongoing preventative maintenance program for the Wastewater System.

Mr. Hoffman testified that Sheridan negotiated an Agreed Order with IDEM to address the NOVs. Mr. Hoffman testified under the Agreed Order, Sheridan is required to implement an IDEM-approved storm water compliance plan. That plan requires Sheridan to meet certain milestones related to its storm water improvement project to address cross connections and infiltration points, which are considered to be a significant source of the issues resulting in the NOVs. Mr. Hoffman testified the Agreed Order also contemplates that improvements to the Wastewater System will be needed to improve permit compliance.

Mr. Hoffman testified about Indiana American's plan for the Wastewater System. Mr. Hoffman said IDEM informally indicated the plan outlined in his testimony in this Cause was acceptable. Indiana American's plan for improvements to the Wastewater System follows: (1) gather direct operational experience and data from operating the Wastewater System; (2) conduct

engineering evaluation of improvement alternatives; (3) construct new influent equalization basin for wet weather storage; (4) construct new influent pump station and head works, and remove influent grinder; (5) replace aging unreliable equipment as necessary; (6) install Supervisory Control and Data Acquisition ("SCADA") and control improvements; (7) evaluate options for solids management improvements; (8) evaluate condition of manholes, sewers, and lift station equipment; (9) rehabilitate or replace manholes, sewers, and lift station equipment in poor condition in a systematic approach; (10) implement a wastewater treatment plant and the sanitary sewer collection system maintenance program; and (11) implement an asset management strategy and plan including prioritization models for prioritizing recommended improvements for the WWTP and the sanitary sewer collection system. Mr. Hoffman explained that the improvement plans ultimately approved by IDEM will guide much of what Indiana American plans to undertake with respect to the Wastewater System. Mr. Hoffman testified that based on the preliminary estimate ranges prepared by Wessler Engineering in their Preliminary Study for Wastewater System Needs (February 2014), improvements to the Wastewater System over a five-year period after the close of acquisition could cost between $2,000,000 and $5,000,000, depending on the alternatives implemented.

Mr. Hoffman further explained that Indiana American is committed to developing a sanitary sewer plan that will be implemented following closing. The plan will address I/I into the sanitary collection system. Indiana American will also develop and implement a preventative maintenance plan for the Wastewater System and document all maintenance (preventative and repair) in a permanent record.

Mr. Hoffman addressed Indiana American's proposed changes to its rules and regulations applicable to wastewater utility service, specifically to address IPP. Mr. Hoffman explained that Indiana American must get IDEM approval for any IPP it wishes to implement. Indiana American proposes to add a provision to its rules that requires, after closing of the acquisition, any customer that pre-treats discharge into the Wastewater System must comply with the IDEM-approved IPP. Mr. Hoffman further testified that Indiana American's current wastewater rules and regulations do not include typical wastewater utility service policy restrictions; he stated that Indiana American proposes to adopt specific portions of Sheridan's existing wastewater ordinance that restrict what can be disposed in sewers.

Next, Mr. Hoffman described the challenges facing the Water System. Sheridan does not currently have an asset management plan for replacing infrastructure. The water treatment plant is over 50 years old. Filters, filter control valves, the aerator, and other equipment could need rehabilitation or replacement within the next 10 years. The plant is not fully automated, and that requires more employee time to conduct direct manual daily operation of the plant. Some of the monthly reports of operations submitted to IDEM identify chlorine residual concentrations below what IDEM considers detectable. Other potential challenges with respect to the wells, plant, and distribution system are not fully known at this time. In addition, Sheridan is a small system and cannot achieve economies of scale.

Mr. Hoffman discussed Indiana American's plan for improvements to the Water System as follows: (1) reap benefits from Indiana American's economies of scale; (2) gather direct operational experience and data from operating the Water System; (3) conduct operational and



engineering evaluations; (4) implement an asset management strategy and plan, including models for prioritizing recommended improvements; (5) replace meters with automated meter reading / advanced metering infrastructure; (6) determine the causes of the low chlorine residual concentration reports in the distribution system; (7) implement operational and or capital improvements to increase the low chlorine residual concentrations to acceptable levels; (8) install SCADA system for control and monitoring; and (9) determine other improvement needs and prioritize them as part of Indiana American's asset management plan. He further testified improvements to the Water System over a five-year period after the close of the acquisition could cost between $1,500,000 and $3,000,000, depending on improvements implemented.

**(iv). Accounting and Ratemaking Treatment.** Mr. Roach testified Indiana American proposes accounting and ratemaking treatment for its acquisition. Mr. Roach sponsored the journal entry proposed for the acquisition. Jt. Pet. Ex. 2, Attach. GPR-1. Mr. Roach testified that the purchase price is $10,750,000 for Sheridan Systems, of which $6,200,000 is for the Water System, and $4,550,000 is for the Wastewater System. Assuming $200,000 of incidental expenses and other costs of acquisition, the original cost rate base for the Sheridan Systems would be $10,950,000. Mr. Roach explained that the purchase price includes a cost differential as defined in Ind. Code § 8-1-30.3-1. The cost differential is $200,000 of incidental expenses and other costs of acquisition, and the cost differential is not included in the purchase price of $10,750,000. Jt. Pet. Ex. 2, at 5.

**(v). Impact of Acquisition on Customer Rates.** Regarding wastewater rates, Sheridan's Wastewater System rate is currently computed at $45.49 per month for a residential customer using 4,000 gallons (a "Typical Customer"). But current rates are insufficient to fund the necessary improvements to Sheridan's Wastewater System. Mr. Prine testified that if Sheridan continued to own the Wastewater System and funded the needed improvements, a Typical Customer would have his monthly rate increase 21.33% to 103.11% for a computed increase ranging from $9.70 to $46.90 per month with a total monthly bill ranging from $55.19 to $92.39. Jt. Pet. Ex. 1, at 26-27. However, Mr. Prine testified that upon completion of the acquisition, a Typical Customer under Indiana American's proposed rates would have his monthly rate increase 30% for an increase of $13.65 per month and a total monthly bill of $59.14. Jt. Pet. Ex. 1, Attach MP-5. Sheridan is going to increase the residential rate to $59.14, and Indiana American will continue charging that rate after closing and until 2021.

Regarding water rates, Mr. Prine testified Sheridan's water rate is currently $41.11 per month for a Typical Customer. Jt. Pet. Ex. 1, at 16. Mr. Kinkead testified that if Sheridan continued to own the Water System and addressed the maintenance issues and standards, a Typical Customer would have his monthly rate increase 19.93% to 46.40% for an increase ranging from $6.57 to $15.29 per month with a total monthly bill ranging from $47.68 to $56.40. Jt. Pet. Ex. 3, Attach. DK-1, at 9 and 16. However, Mr. Prine testified that upon completion of the acquisition, a Typical Customer under Indiana American's Area One Rate would have an increase of $0.19 per month and a total monthly bill of $41.30. Jt. Pet. Ex. 1, at 16.



**B. OUCC's Pre-Settlement Case-in-Chief.** Ms. Margaret A. Stull, Chief Technical Adviser in the Water and Wastewater Division, and Mr. Carl N. Seals, Utility Analyst, testified on behalf of the OUCC.

**(i). Proposed Acquisition and Asset Purchase Agreement.** Ms. Stull testified Indiana American proposes to acquire all of the property that is the subject of Sheridan's appraisal, which corresponds to Section 2.01 of the Agreement. The acquired assets are listed in the return of appraisement sponsored by Mr. Kinkead as Jt. Pet. Ex. 3, Attach. DK-2. The proposed acquisition excludes Sheridan's storm water system. The total agreed purchase price is $10,750,000, consisting of $6,200,000 for the Water System and $4,550,000 for the Wastewater System.

**(ii). Aging Infrastructure, Violation Issues, and Indiana American's Plan for Improvements.** Mr. Seals testified regarding Indiana American's plan for reasonable improvements to comply with IDEM's Agreed Order. Mr. Seals acknowledged that Indiana American has committed under the APA to negotiate in good faith with IDEM to enter into a compliance plan to improve the Wastewater System upon Indiana American's acquisition of that system. Mr. Seals recommended Indiana American be required to file the compliance plan between IDEM and Indiana American with the Commission within 30 days of its approval by IDEM. The filing would allow the OUCC and the Commission to be informed of the final terms of the Agreed Order.

**(iii). Accounting and Ratemaking Treatment.** Ms. Stull testified Joint Petitioners request approval of accounting and rate base treatments that will allow Indiana American to reflect as net original cost rate base the full purchase price plus transaction costs, including approval of Indiana American's proposed accounting entry. The total amount Indiana American proposes to record and include in its rate base is $10,950,000, which includes an additional $200,000 of transaction costs. The purchase price to be recorded is $6,315,349 for Water System and $4,634,651 for Wastewater System.

Ms. Stull recommended that in addition to excluding Indiana American's payment of Sheridan's appraisal fees from the net original cost rate base, the transaction costs should be further limited to the qualified amounts actually incurred. Ms. Stull explained that the OUCC recommends that if the Commission authorizes the transfer, the Commission not allow Indiana American to include in rate base $16,062.35 of appraisal costs. The amount of transaction costs to be included in rate base should be limited to the amounts actually incurred not to exceed $183,938 ($200,000 - $16,062.35).

**(iv). Impact of Acquisition on Customer Rates.** Ms. Stull expressed concern regarding the methodology Indiana American used to calculate the rate impact. Ms. Stull said that the calculation presented by Mr. Roach is a single calculation based on total water and wastewater costs. Ms. Stull explained that although Indiana American has separate rates for its water and wastewater operations, Mr. Roach did not provide separate calculations for the impact on water and wastewater rates. This may suggest Indiana American plans to spread its investment in Sheridan's wastewater assets across Indiana American's entire water and wastewater operations. Otherwise, Indiana American's proposed acquisition would have a different impact on Indiana American's wastewater customers than it will have on its water



customers. While the rate impact on Indiana American's existing water customers will be relatively small, if the cost of the acquisition of the wastewater assets are solely attributed to Indiana American's wastewater customers, the rate impact for Indiana American's existing wastewater customers would be significant.

**5. Settlement Testimony.** The Settlement filed in this Cause was supported by testimony from Mr. Roach, on behalf of Indiana American, and Mr. Scott Bell, Director of the Water and Wastewater Division of the OUCC.

**A. Proposed Acquisition and Asset Purchase Agreement.** Mr. Roach testified Indiana American and the OUCC entered into good faith discussions regarding the issues related to the proposed acquisition and were able to independently conclude that the terms and conditions set forth in the Settlement represent a fair, reasonable, and just resolution of the issues in this Cause, subject to their incorporation into a final Commission Order which is no longer subject to appeal. Joint Petitioners and the OUCC stipulated that the relief requested by Joint Petitioners should be granted, subject to the conditions stated in the Settlement, and Indiana American should be authorized to consummate the acquisition of the Sheridan Systems. In addition, the Settling Parties stipulated that the notice requirement in Section 30.3-5(d)(2) was not triggered.

Mr. Bell testified regarding the terms of the Settlement. The OUCC recommends that Indiana American be authorized as follows: (1) to consummate the acquisition by Indiana American of the Water System and Wastewater System; (2) to apply the rules and regulations and rates and charges generally applicable to Indiana American's Area One rate group, as may be changed from time to time, for service to be provided by Indiana American in the areas currently served by the Sheridan Water System; (3) to apply the metered wastewater rates adopted by the Sheridan Town Council as of the closing date, for service to be provided by Indiana American in the areas currently served by the Sheridan Wastewater System; (4) to apply the rules and regulations for wastewater service applicable to Indiana American's Muncie Sewer Operation to the Sheridan Wastewater System, with the modifications described in Joint Petitioners' case-in-chief; (5) to apply Indiana American's depreciation accrual rates approved by the Commission in Cause No. 44992 to the properties comprising the Sheridan Systems; and (6) to encumber the properties comprising the Sheridan Systems with the lien of Indiana American's mortgage indenture.

Mr. Bell testified Joint Petitioners and the OUCC stipulated in the Settlement that all evidence filed in this Cause with respect to the relief constitutes a sufficient evidentiary basis for a Commission Order approving this stipulation. Mr. Bell testified that the Settlement is a reasonable compromise that appropriately addresses the issues raised by the OUCC.

**B. Aging Infrastructure, Violations, and Indiana American's Plan for Improvements.** Mr. Roach testified regarding the recommendation by Mr. Seals for Indiana American to file Indiana American's sanitary sewer compliance plan after it is approved by IDEM. Indiana American is not currently and will not necessarily become a party to [the Town's] Agreed Order with IDEM [because Indiana American was not the owner of the Wastewater System when the NOV's occurred.] Separately, when an agreement is reached in the future between Indiana American and IDEM with respect to improvements needed to the

Wastewater System, that plan will not be a "compliance plan," as that term is typically used by IDEM. Indiana American has agreed to provide the OUCC and the Commission the ultimate agreement between Indiana American and IDEM with respect to improvements.

**C. Accounting and Ratemaking Treatment.** Mr. Roach testified about resolution of the concerns raised by Mr. Seals and Ms. Stull in the OUCC's pre-filed testimony. The first concern is whether Indiana American can include $16,062.35 of appraisal costs Indiana American reimbursed to Sheridan. Mr. Bell further testified that based upon the particular facts of this Cause, and for purposes of settlement only, the Settling Parties agreed that upon closing of the acquisition, Indiana American will book as net original cost rate base an amount equal to the full purchase price, plus incidental expenses and other costs of acquisition, excluding appraisal costs of $16,062.35. For settlement purposes only, Indiana American agreed it will remove the $16,062.35 for appraisal costs from the amount to be included in rate base. The journal entry shall be as reflected in Jt. Pet. Ex. 2, Attach. GPR-1, as modified by the terms of the Settlement.

**D. Impact of Acquisition on Customer Rates.** Mr. Roach testified regarding resolution of Ms. Stull's concern about the impact of the acquisition on Indiana American's existing wastewater customers. It became clear that the OUCC's concern was that the existing Muncie and Somerset wastewater customers, both very small systems, should not be required to bear the cost of the acquisition of the Wastewater System. Mr. Roach testified Indiana American proposed to place Sheridan in its own rate classification for wastewater service. Sheridan's existing rates for wastewater service are volumetric, but Indiana American's rates in existing operations are flat. It is not proposed or contemplated that Indiana American would move to a consolidated wastewater rate at this point. Additionally, Indiana American stipulated in the Settlement its commitment that the Muncie and Somerset wastewater customers would not have their rates increased in Indiana American's upcoming general rate case as a result of the acquisition.

Mr. Bell testified that while the Settling Parties disagreed over the methodology for calculating the one percent threshold for the notice requirement in Section 30.3-5(d)(2), in light of the ratemaking commitments, the Settling Parties stipulated that that notice requirement was not triggered in this proceeding.

**6. Commission Discussion and Findings on Joint Petition and Settlement.** Indiana American and Sheridan seek approval of Indiana American's prospective acquisition of the Sheridan Systems. More specifically, their Joint Petition seeks approval under Section 30.3-5(d) and asserts the proposed transaction also satisfies the requirements of Section 30.3-5(c). As such, Joint Petitioners request the Commission approve the transaction under the terms and conditions of the APA, finding the transaction proposed is in the public interest in accordance with Section 6.1(e)(1) and that Indiana American should be authorized to include the cost differential in its rate base.

As the Commission explained in the *Georgetown* and *Lake Station* Orders, Section 6.1 applies to a municipality that adopts an ordinance under Ind. Code § 8-1.5-2-5(d) after March 28, 2016, that addresses the sale or disposition of nonsurplus utility property. *Indiana-Am. and Georgetown,* Cause No. 44915, 2017 WL 4604649 (Oct. 11, 2017) ("*Georgetown*"). *Indiana-Am. and Lake Station,* Cause No. 45041, 2018 WL 4006723 (Aug. 15, 2018). Section 6.1(b) requires a municipality adopting such an ordinance to obtain Commission approval before the transaction occurs. Sheridan's Town Council President David Kinkead testified that Sheridan adopted an ordinance approving the proposed acquisition of the Sheridan Systems by Indiana American on July 31, 2017. Thereafter, Sheridan and Indiana American entered into the APA on January 17, 2018 (Jt. Pet. Ex. 1, Attach. MP-2), of which they now seek Commission approval.



Under Section 6.1, the ultimate question the Commission must answer is whether "the sale or disposition according to the terms and conditions proposed is in the public interest." In evaluating whether the proposed transaction is in the public interest, Section 6.1(e) provides two avenues. First, under Section 6.1(e)(1), if a municipally owned utility files a petition under Section 30.3-5(d) and the Commission approves this petition under Section 30.3-5(c), then "the proposed sale or disposition is considered to be in the public interest." Alternatively, if Section 6.1(e)(1) does not apply, Section 6.1(e)(2) requires the Commission to consider the degree to which the acquisition will require one utility's customers to subsidize service to customers of the other utility and whether that subsidy causes the transaction not to be in the public interest. For purposes of this proceeding, the relevant inquiry is under Section 6.1(e)(1) because the Joint Petition was filed under Section 30.3-5(d) and Joint Petitioners seek approval under Section 30.3-5(c).

Indiana American and Sheridan also seek approval under Chapter 30.3, which applies if: (1) a utility company[1] is acquiring property from another utility company in a transaction involving a willing buyer and willing seller at a cost differential; and (2) at least one of the two utility companies is subject to the Commission's regulation. It is not disputed that Indiana American is subject to our regulation. There is also no dispute that with respect to the proposed transaction, Sheridan is a willing seller, and Indiana American is a willing buyer. Mr. Roach testified that the purchase price for the proposed acquisition includes a cost differential. Accordingly, the Commission finds that because Joint Petitioners seek Commission approval under Chapter 30.3 to include this cost differential in Indiana American's rate base, we will initially determine below whether Sections 30.3-5(d) and (c) have been satisfied. But a proposed sale cannot be consummated under Section 6.1 until the Commission also determines the proposed sale is in the public interest.

**A. Ind. Code § 8-1-30.3-5(d) Requirements.** This statute provides the threshold upon what a utility seeking the Commission's approval of an acquisition before the utility property is acquired must preliminarily provide, stating:

> (d) A utility company may petition the commission in an independent proceeding to approve a petition under subsection (c) [Section 30.3-5(c)] before the utility company acquires the utility property if the utility company provides:
> (1) notice of the proposed acquisition and any changes in rates or charges to customers of the distressed utility;

[1] A utility company for this purpose is defined as a public utility, municipally owned utility, or not-for-profit utility that provides water or wastewater service. Section 30.3-3(1).



> (2) notice to customers of the utility company if the proposed acquisition will increase the utility company's rates by an amount that is greater than one percent (1%) of the utility company's base annual revenue;
> (3) notice to the office of the utility consumer counselor; and
> (4) a plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility.

Ind. Code § 8-1-30.3-5(d).

Each element in Section 30.3-5(d) is addressed below, and we find each element is satisfied.

(1) Notice of the proposed acquisition and any changes in rates or charges to customers of the distressed utility. Mr. Prine sponsored Jt. Pet. Ex. 1, Attach. MP-5, a letter notifying Sheridan customers of the proposed acquisition. The letter explains the rates that will be charged to Sheridan customers after the closing and the total bill for a residential customer using 4,000 gallons. The letter was mailed on March 21, 2018, which is prior to the filing of Joint Petitioners' case-in-chief. The notice that was mailed is sufficient on its face because it was mailed early enough in the proceeding to afford customers an opportunity to participate in this proceeding if desired. It was mailed to all Sheridan customers. We find Joint Petitioners satisfied Section 30.3-5(d)(1).

(2) Notice to customers of the utility company if the proposed acquisition will increase the utility company's rates by an amount that is greater than one percent of the utility company's base annual revenue. There was some disagreement between Indiana American and the OUCC regarding the one percent calculation method. For purposes of the Settlement, the Settling Parties stipulated that the acquisition of Sheridan Systems will not increase Indiana American's rates by an amount greater than one percent. Therefore, we find the notice requirement in Section 30.3-5(d)(2) is not triggered by the proposed acquisition.

(3) Notice to the Indiana Office of Utility Consumer Counselor. Regarding Section 30.3-5(d)(3) we find that notice was provided to the OUCC through the service of the Joint Petition and Joint Petitioners' case-in-chief.

(4) A plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility. In determining whether Indiana American has satisfied Section 30.3-5(d)(4) by presenting "a plan for reasonable and prudent improvements," we note that Sheridan qualifies as a distressed utility under Section 30.3-6 for purposes of Section 30.3-5(c) because it serves fewer than 5,000 customers.

In Section 4A(iii) of this Order, Mr. Hoffman's testimony sets forth an eleven-point plan for reasonable improvements to the Wastewater System to address the violations that are the subject of IDEM's Agreed Order with Sheridan. Mr. Hoffman testified that Wessler Engineering estimated a cost for improvements to the Wastewater System of $2,000,000 to $5,000,000 over a five-year period, depending upon the alternatives implemented. We also understand that the specific components of the proposed sanitary sewer compliance plan are subject to negotiations and ultimate approval of IDEM, and this is an acceptable process. Mr. Hoffman's testimony also set forth a nine-point plan for reasonable improvements to the Water System. Mr. Hoffman



testified that the estimated costs for improvements to the Water System are $1,500,000 to $3,000,000 over a five-year period, depending upon the alternatives implemented.

No party disputed Indiana American's satisfaction of Section 30.3-5(d)(4). We find Indiana American's plans to incorporate both of the systems into their asset management strategy and plans, which include maintenance programs, and to install SCADA programs should be beneficial to the systems. These activities will take advantage of Indiana American's expertise and economies of scale and promote the regional benefits contemplated by the Indiana General Assembly. We find that Indiana American has presented a plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility.

**B. Ind. Code § 8-1-30.3-5(c) Requirements.** Section 30.3-5 applies when a utility company acquires property from another utility company at a cost differential in a transaction involving a willing buyer and a willing seller, and at least one of the utility companies is subject to the jurisdiction of the Commission. Under Section 30.3-5(b), there is a rebuttable presumption that a cost differential is reasonable. The utility company that acquires the utility property may petition the Commission to include the cost differential as part of its rate base. Pursuant to Section 30.3-5(c):

> The utility company that acquires the utility property may petition the commission to include the cost differentials as part of its rate base. The commission shall approve the petition if the commission finds the following:
> (1) The utility property is used and useful in providing water service, wastewater service, or both water and wastewater service.
> (2) The distressed utility failed to furnish or maintain adequate, efficient, safe, and reasonable service and facilities.
> (3) The utility company will make reasonable and prudent improvements to ensure that customers of the distressed utility will receive adequate, efficient, safe, and reasonable service.
> (4) The acquisition of the utility property is the result of a mutual agreement made at arms length.
> (5) The actual purchase price of the utility property is reasonable.
> (6) The utility company and the distressed utility are not affiliated and share no ownership interests.
> (7) The rates charged by the utility company before acquiring the utility property of the distressed utility will not increase unreasonably as a result of acquiring the utility property.
> (8) The cost differential will be added to the utility company's rate base to be amortized as an addition to expense over a reasonable time with corresponding reductions in the rate base.

Ind. Code § 8-1-30.3-5(c)(1)-(8).

Each element in Section 30.3-5(c) is addressed below, and we find that each element is satisfied.

(1) The utility property is used and useful in providing water service, wastewater service, or both water and wastewater service. Mr. Prine testified that Sheridan Systems are used and useful in providing water and wastewater service to its customers. Joint Petitioners asserted in their Joint Petition that following the closing of the proposed acquisition, day-to-day operation of the Sheridan Systems will be assumed by Indiana American's water and wastewater utility professionals. The evidence indicates that Indiana American will continue to operate the acquired water and wastewater assets to provide water and wastewater service, and no evidence was presented to the contrary. We find the utility property is used and useful in providing water and wastewater service.

(2) The distressed utility failed to furnish or maintain adequate, efficient, safe, and reasonable service and facilities. Mr. Prine testified that Sheridan Systems are municipally owned systems that serve fewer than 5,000 customers therefore satisfying the "distressed" requirement. Mr. Prine explained further that while it is not necessary to satisfy a second condition, Sheridan Systems would also satisfy the definitional requirement of "distressed" by meeting one of the conditions enumerated in Section 30.3-6. Due to the necessary improvements required to the Sheridan Systems, Sheridan is unable to furnish and maintain adequate service to customers at rates equal to or less than those of Indiana American. Mr. Prine and Mr. Hoffman identified the threshold, initial improvements that would be needed to bring the Wastewater System into compliance with IDEM's Agreed Order, and Mr. Kinkead sponsored the O.W. Krohn and Associates rate study which showed that making those improvements, as well as needed improvements to the Water System (with the costs spread over Sheridan's small customer base), would cause rates to be higher than Indiana American's rates. Therefore, we find the conditions set forth in Section 30.3-6 are satisfied. Accordingly, we find that Sheridan Systems have failed to furnish or maintain adequate, efficient, safe, and reasonable service and facilities.

(3) The utility company will make reasonable and prudent improvements to ensure that customers of the distressed utility will receive adequate, efficient, safe, and reasonable service. Pursuant to Section 30.3-5(c)(3), Mr. Hoffman testified regarding Indiana American's proposed plan for reasonable and prudent improvements to the Sheridan Systems. Mr. Hoffman's testimony set forth a plan to bring the Wastewater System into compliance with IDEM's contemplated Agreed Order with Sheridan and address the aging infrastructure concerns related to the Water System. After reviewing the financial, managerial, and technical ability of Indiana American to provide the utility service required and make improvements following closing, we find that Indiana American has provided evidence that it will make reasonable and prudent improvements to ensure that customers will receive adequate, efficient, safe, and reasonable service.

(4) The acquisition of the utility property is the result of a mutual agreement made at arm's length. Satisfying Section 30.3-5(c)(4), Mr. Kinkead described the process undertaken by Sheridan prior to entering the transaction. Mr. Kinkead testified that Sheridan issued a RFP to sell Sheridan Systems, and Indiana American was the successful bidder. He further testified that the negotiations proceeded while Sheridan was undergoing the statutory process and such negotiations were conducted at arm's length. Mr. Prine and Mr. Roach echoed Mr. Kinkead's testimony and testified that the negotiations leading up to the execution of the APA were conducted at arm's length. Based on our consideration of this



testimonial evidence, we find the acquisition is the result of a mutual agreement made at arm's length.

(5) The actual purchase price of the utility property is reasonable. Pursuant to Section 30.3-5(c)(5), the actual purchase price of $10,750,000 does not exceed the value of $12,637,000 determined by the statutory appraisers. The appraisal was sponsored by Mr. Kinkead as Jt. Pet. Ex. 3, Attach. DK-2. Mr. Kinkead testified the Sheridan Town Council determined that the sale price for the Sheridan Systems should be less than the appraised full value, as such is in the best interest of Sheridan so as to result in lower utility rates to be charged to customers of Sheridan Systems. The purchase price is deemed reasonable under Section 6.1 to the extent it does not exceed the appraised value. Because the purchase price does not exceed the appraised value, we find that the purchase price is reasonable.

(6) The utility company and the distressed utility are not affiliated and share no ownership interests. The utility company and the distressed utility are not affiliated and share no ownership interests. We find, based upon Mr. Prine's testimony to the effect, that Sheridan and Indiana American are not affiliated and share no ownership interests. Jt. Pet. Ex. 1, at 17.

(7) The rates charged by the utility company before acquiring the utility property of the distressed utility will not increase unreasonably as a result of acquiring the utility property. Pursuant to Section 30.3-5(c)(7), Mr. Roach testified that Indiana American's rates will not increase directly as a result of this Cause. Jt. Pet. Ex. 2, at 7-8. The Settling Parties stipulated that the acquisition of the Sheridan Systems will not increase Indiana American's rates by an amount greater than one percent. In addition, Indiana American will place Sheridan in its own rate classification for wastewater. The potential effect on rates for Indiana American's existing customers is expected to be nominal. We find the rates charged by Indiana American will not increase unreasonably as a result of this acquisition.

(8) The cost differential will be added to the utility company's rate base to be amortized as an addition to expense over a reasonable time with corresponding reductions in the rate base. Pursuant to Section 30.3-5(c)(8), Mr. Roach testified that his proposed journal entry allocates the entire purchase price reasonably among utility plant in service accounts. In this fashion, the cost differential will be amortized and charged to expense over a reasonable period of time through depreciation expense. Jt. Pet. Ex. 2, at 7. We approved a similar approach in *Georgetown*, and we find it to be appropriate here as well.

**C. Ind. Code § 8-1.5-2-6.1(d) Purchase Price Presumption and Compliance with Ind. Code § 8-1.5-2-4.** Before a municipality may sell its nonsurplus utility property under an ordinance adopted under Ind. Code § 8-1.5-2-5(d), the Commission must determine if the sale is in the public interest. More specifically, Section 6.1(d) provides:

> (d) The commission shall approve the sale or disposition of the property according to the terms and conditions proposed by the municipality and the prospective purchaser if the commission finds that the sale or disposition according to the terms and conditions proposed is in the *public interest*. For



> purposes of this section [Section 6.1], the purchase price of the municipality's nonsurplus utility property shall be considered *reasonable* if it does not exceed the appraised value set forth in the appraisal required under section 5 [Ind. Code § 8-1.5-2-5] of this chapter.

Ind. Code § 8-1.5-2-6.1(d) (emphasis added).

Section 6.1(e) is to be applied for purposes of determining public interest under Section 6.1(d). Under Section 6.1(e)(1), which is the subdivision of (e) applicable to the Joint Petition, the proposed sale is considered to be in the public interest if the municipally owned utility petitions the Commission under Section 30.3-5(d) and the Commission approves the petition under Section 30.3-5(c). We discussed the elements of Section 30.3-5(d) in this Order in Section 6A, and we found that each element was satisfied. We discussed the elements of Section 30.3-5(c) in this Order in Section 6B, and we found that each element was satisfied. Therefore, the sale is considered to be in the public interest.

Section 6.1(d) establishes a test to determine whether the purchase price is reasonable. The purchase price is considered reasonable if it does not exceed the appraised value set by the required appraisal under Ind. Code § 8-1.5-2-5. Under Ind. Code § 8-1.5-2-5(a), each appraiser must be appointed as provided by Section 4. For the Commission to determine whether the reasonableness presumption in Section 6.1(d) is applicable, the appraised value we are presented with must be the product of an appraisal performed consistent with Section 5. No evidence was presented that Indiana American failed to comply with the requirements of Ind. Code § 8-1.5-2-4 in this Cause. We find that Indiana American complied with the requirements of Ind. Code § 8-1.5-2-4. The total agreed purchase price of $10,750,000 for the Water and Wastewater Systems is less than the appraised value of $12,637,000. *See* Jt. Pet. Ex. 3, Attach. DK-2, at 1. Therefore, pursuant to Section 6.1(d), the Commission finds that the total agreed purchase price of $10,750,000 for Sheridan Systems (municipal nonsurplus utility property) is considered reasonable because it does not exceed the appraised value of $12,637,000 set forth in the appraisal required under Ind. Code § 8-1.5-2-5.

**D. Ind. Code § 8-1.5-2-6.1(e)(3) Ability of Purchaser.** Section 6.1(e)(3) states that in reviewing the proposed terms and conditions of the proposed sale, the Commission shall consider the financial, managerial, and technical ability of the prospective purchaser to provide the utility service required after the proposed sale. Therefore, in reviewing the APA, we are required to consider the financial, managerial, and technical ability of Indiana American to provide the required water and wastewater utility services. Mr. Prine testified that Indiana American currently provides residential, commercial, industrial, and municipal water service, including sale for resale and public and private fire protection service, to approximately 302,000 customers. This demonstrates Indiana American's financial, managerial, and technical ability to serve a large customer base. Mr. Prine stated that upon the acquisition by Indiana American, Sheridan customers will gain full-time management of Sheridan Systems, including a full-time operations staff, 24/7 customer service and emergency response, enhanced security measures, and full-time functional specialists in the areas of engineering and water quality. This demonstrates Indiana American's technical ability to perform operations full-time and to respond to customers' needs 24/7. Mr. Prine and Mr. Hoffman testified that Indiana American will



institute reasonable and prudent asset management by adding the Sheridan Systems to Indiana American's ongoing prioritization model. Mr. Hoffman's testimony regarding Indiana American's 11-point plan for the Wastewater System and 9-point plan for the Water System explained how Indiana American will utilize its managerial and technical skills to improve the operation and management of Sheridan Systems and to improve regulatory compliance of the Wastewater System. The OUCC did not contest Indiana American's financial, managerial, or technical ability to provide water and wastewater utility services. Therefore, we find that Indiana American possesses the financial, managerial, and technical ability to provide the required utility services after the sale.

**E. Settlement.** Settlements presented to the Commission are not ordinary contracts between private parties. *U.S. Gypsum, Inc. v. Ind. Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). When the Commission approves a settlement, that settlement "loses its status as a strictly private contract and takes on a public interest gloss." *Id.* (quoting *Citizens Action Coal. of Ind., Inc. v. PSI Energy, Inc.*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the Commission "may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement." *Citizens Action Coal.*, 664 N.E.2d at 406.

Further, any Commission decision, ruling, or order, including the approval of a settlement, must be supported by specific findings of fact and sufficient evidence. *U.S. Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coal. of Ind., Inc. v. Pub. Serv. Co. of Ind., Inc.*, 582 N.E.2d 330, 331 (Ind. 1991)). The Commission's own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before the Commission can approve the Settlement, we must determine whether the evidence in this Cause sufficiently supports the conclusions that the Settlement is reasonable, just, and consistent with the purpose of Ind. Code ch. 8-1-2, and that such agreement serves the public interest.

We note that the Settlement includes provisions indicating it will be deemed withdrawn if not accepted by the Commission in its entirety unless otherwise agreed to by the Settling Parties and that the terms of the Settlement represent a fair, just, and reasonable resolution and compromise. We have made specific findings above with respect to the factors this Commission is to consider in deciding a case brought under Section 6.1 and Section 30.3-5, noting the effect of the Settlement on such factors.

Based on our foregoing discussion and findings, we find that the Settlement is reasonable and in the public interest. Therefore, the authority and obligations proposed therein are approved. With regard to future citation of this Order, we find that our approval herein should be construed in a manner consistent with our finding in *Richmond Power & Light*, Cause No. 40434, 1996 WL 34880849, at 7-8 (IURC March 19, 1997).

**F. Accounting Treatment.** Mr. Bell further testified that the Settling Parties agreed that upon closing of the acquisition, Indiana American will book as net original cost rate base an amount equal to the full purchase price, plus incidental expenses and other costs of acquisition, excluding appraisal costs of $16,062.35. The journal entry shall be as reflected in Jt.

Pet. Ex. 2, Attach. GPR-1, as modified by the terms of the Settlement. Section 6.1(f) directs the Commission as follows:

> As part of an order approving a sale or disposition of property under this section, the commission shall, without regard to amounts that may be recorded on the books and records of the municipality and without regard to any grants or contributions previously received by the municipality, provide that for ratemaking purposes, the prospective purchaser shall record as the net original cost rate base an amount equal to:
> (1) the full purchase price;
> (2) incidental expenses; and
> (3) other costs of acquisition;
> allocated in a reasonable manner among appropriate utility plant in service accounts.

Ind. Code § 8-1.5-2-6.1(f).

We find that Indiana American's proposed accounting and journal entries as presented in Jt. Pet. Ex. 2, Attach. GPR-1, as modified by the Settlement, should be approved and that the costs so reflected on the books and records of Indiana American be used as the original cost of such properties for accounting, depreciation, and rate base valuation purposes. The journal entry should be adjusted to reflect actual (rather than estimated) incidental expenses and other costs of acquisition. We find that the Settling Parties' stipulation regarding exclusion of the $16,062.35 in appraisal costs is a reasonable resolution of the dispute between the parties with respect to that issue. We find that Indiana American's existing depreciation accrual rates approved by the Commission in Cause No. 44992 on May 30, 2018, should be applied on and after the closing date of the acquisition to depreciable property purchased from Sheridan pursuant to the APA.

**G. Rates and Rules.** Indiana American currently has on file with the Commission a schedule of rates and charges and rules and regulations applicable to water utility service provided by Indiana American in its Area One rate group. Consistent with the APA and the Settlement, we find that, on and after the closing, Indiana American's generally applicable rates and charges and rules and regulations for water service applicable in Indiana American's Area One rate group on file with and approved by the Commission shall apply to services provided by Indiana American through the Water System, as the same are in effect from time to time.

Pursuant to the terms of the APA, Sheridan has agreed to increase its wastewater rates by 30% across-the-board effective as of the closing. The Settling Parties have agreed in settlement, and we now find, that on and after closing, those metered wastewater rates adopted by the Sheridan Town Council will apply for service to be provided by Indiana American in the areas currently served by the Wastewater System.

The Settling Parties further stipulated, and we now find, that Indiana American's rules and regulations for wastewater service applicable to its Muncie Sewer Operation shall apply to the Wastewater System, with modifications (as described in Mr. Prine's and Mr. Hoffman's testimony) to: (1) incorporate the provisions of the Sheridan Sewer Use Ordinance governing



what substances shall and shall not be permitted to be discharged into the system; (2) require compliance by any user that pre-treats discharge into the wastewater system with the IPP approved by IDEM; and (3) permit Indiana American to pro-rate a user's partial payments for water and wastewater service except where a customer has followed Indiana American's existing complaint process as set forth in Rule 4.2(d) of its Rules and Regulations Applicable To Water Service.

**H. Encumbrances.** We find that the encumbering of the properties comprising the Water System and Wastewater System by subjecting such properties to the lien of Indiana American's General Mortgage as of the closing is approved.

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:**

1. The Stipulation and Settlement Agreement attached hereto is approved in its entirety.

2. Joint Petitioners are authorized to consummate the acquisition of Sheridan's water and wastewater by Indiana American on the terms described in the Asset Purchase Agreement and the Stipulation and Settlement Agreement entered into between the Settling Parties and discussed herein. Sheridan's storm water system is not included in the acquisition.

3. The acquisition of Sheridan Systems by Indiana American on the terms and conditions described in the Asset Purchase Agreement and the Stipulation and Settlement Agreement is in the "public interest" as defined in Ind. Code § 8-1.5-2-6.1(d) and (e) and the same is approved.

4. Indiana American is authorized to record for ratemaking purposes as net original cost rate base of the assets being acquired an amount equal to the full purchase price, actual incidental expenses, and other costs of acquisition, allocated among utility plant in service accounts as stipulated in the Stipulation and Settlement Agreement and reflected in Jt. Pet. Ex. 2, Attach. GPR-1, as the same is modified by the Stipulation and Settlement Agreement.

5. Indiana American is authorized to charge customers currently served by the Sheridan Water System the current rates and charges and apply the same rules and regulations for water service applicable in Indiana American's Area One rate group on file with and approved by the Commission, as the same are in effect from time to time. Such rates and charges and rules and regulations shall be effective subject to the Water and Wastewater Division's review and approval.

6. Indiana American is authorized to charge customers currently served by the Sheridan Wastewater System the rates and charges as the same have been adopted by the Sheridan Town Council as of the closing date. Prior to placing into effect the foregoing wastewater rates, Indiana American shall file with the Water and Wastewater Division of the Commission its revised Schedule of Charges for Sewer Service (IURC No. S-20-A) reflecting the metered wastewater rates authorized herein. Such rates and charges shall be effective subject to the Water and Wastewater Division's review and approval.



7. Indiana American is authorized to apply the rules and regulations for wastewater service applicable to Indiana American's Muncie Sewer Operation to the Sheridan Wastewater System, with the modifications described above. Prior to placing into effect the foregoing rules and regulation for wastewater service for customers of the Sheridan Wastewater System, Indiana American shall file with the Water and Wastewater Division of the Commission its proposed rules, as presented in Jt. Pet. Ex. 1, Attach. MP-8. Such rules and regulations shall be effective subject to the Water and Wastewater Division's review and approval.

8. Indiana American is authorized to reflect the acquisition of Sheridan Systems on its books and records as of the closing by making the accounting and journal entries described in Jt. Pet. Ex. 2, Attach. GPR-1, as modified by the terms of the Stipulation and Settlement Agreement and as adjusted to actual incidental expenses and other costs of the acquisition.

9. The net original cost, as defined herein, of the acquired property shall be used for accounting, depreciation, and rate base valuation purposes after closing.

10. Indiana American is authorized to apply its depreciation accrual rates on and after the closing date of the acquisition to depreciable property purchased from Sheridan pursuant to the Asset Purchase Agreement.

11. Indiana American is authorized to encumber the properties comprising Sheridan Systems with the lien of Indiana American's mortgage indenture.

12. This Order shall be effective on and after the date of its approval.

**HUSTON, FREEMAN, KREVDA, OBER, AND ZIEGNER CONCUR:**

**APPROVED:** SEP 12 2018

**I hereby certify that the above is a true and correct copy of the Order as approved.**

Mary M. Becerra
**Mary M. Becerra**
**Secretary of the Commission**



FILED
July 20, 2018
INDIANA UTILITY
REGULATORY COMMISSION

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

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| **JOINT PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. ("INDIANA AMERICAN") AND THE TOWN OF SHERIDAN, INDIANA ("SHERIDAN") FOR APPROVAL AND AUTHORIZATION OF: (A) THE ACQUISITION BY INDIANA AMERICAN OF SHERIDAN'S WATER UTILITY PROPERTY (THE "SHERIDAN WATER SYSTEM") AND OF SHERIDAN'S SEWER UTILITY PROPERTY (THE "SHERIDAN SEWER SYSTEM") (COLLECTIVELY THE "SHERIDAN SYSTEMS") IN HAMILTON COUNTY, INDIANA IN ACCORDANCE WITH A PURCHASE AGREEMENT THEREFOR; (B) APPROVAL OF ACCOUNTING AND RATE BASE TREATMENT; (C) APPROVAL OF THE RATES AND CHARGES TO BE APPLIED TO THE SHERIDAN WATER AND SEWER SYSTEMS AFTER CLOSING; (D) APPROVAL OF APPLICATION OF INDIANA AMERICAN'S MUNCIE SEWER RULES AND REGULATIONS TO THE SHERIDAN WASTEWATER SYSTEM, WITH CHANGES TO ALLOW ENFORCEMENT OF AN INDUSTRIAL PRETREATMENT PROGRAM ("IPP") AMONG OTHERS; (E) APPLICATION OF INDIANA AMERICAN'S DEPRECIATION ACCRUAL RATES TO SUCH ACQUIRED PROPERTIES; AND (F) THE SUBJECTION OF THE ACQUIRED PROPERTIES TO THE LIEN OF INDIANA AMERICAN'S MORTGAGE INDENTURE.** | **CAUSE NO. 45050** |

**STIPULATION AND SETTLEMENT AGREEMENT**

Joint Petitioners Indiana-American Water Company, Inc. ("Indiana American") and Town of Sheridan, Indiana ("Sheridan" and together with Indiana American, the "Joint Petitioners"), and the Office of Consumer Counselor ("OUCC") enter into this Stipulation and Settlement Agreement. Joint Petitioners and the OUCC agree that the terms and conditions set

forth below represent a fair and reasonable resolution of all issues, subject to incorporation into a final order of the Indiana Utility Regulatory Commission ("Commission") without any modification or condition that is not acceptable to Indiana American, Sheridan or the OUCC. Joint Petitioners and the OUCC stipulate as follows:

1. The relief requested by Joint Petitioners should be granted subject to the conditions stated herein. Joint Petitioners and the OUCC stipulate to the issuance by the Commission of a final order in the form attached hereto as Attachment A. To the extent Attachment A states that the parties have stipulated to a fact, then Joint Petitioners and the OUCC hereby so stipulate.

2. Indiana American should be authorized to consummate the acquisition by Indiana American of the water and wastewater utility properties owned by Sheridan (the "Sheridan Water System" and "Sheridan Wastewater System," respectively).

3. On and after the closing, Indiana American should be permitted to, and will, apply the rules and regulations and rates and charges generally applicable to Indiana American's Area One rate group, as the same may be changed from time to time, for service to be provided by Indiana American in the areas currently served by the Sheridan Water System.

4. On and after the closing, Indiana American should be permitted to, and will, apply the metered sewer rates as the same have been adopted by the Sheridan Town Council as of the Closing Date, for service to be provided by Indiana American in the areas currently served by the Sheridan Wastewater System. Indiana American will apply the rules and regulations for wastewater service applicable to Indiana American's Muncie Sewer Operation to the Sheridan Wastewater System, with the modifications described in Joint Petitioners' case-in-chief. Indiana



American agrees that its Muncie and Somerset sewer rates will not be increased in Indiana American's next upcoming general rate case to bear the costs of the Sheridan Wastewater System or otherwise as a result of Indiana-American's acquisition of Sheridan's wastewater system.

5. While the parties disagreed over the methodology for calculating the 1% threshold for the notice requirement in Section 30.3-5(d)(2), in light of the ratemaking commitments made in this stipulation, all parties stipulate that that notice requirement was not triggered in this proceeding.

6. Based upon the particular facts of this Cause, and for purposes of settlement only, the parties agree that upon closing of the acquisition, Indiana American will book as net original cost rate base an amount equal to the full purchase price, plus incidental expenses and other costs of acquisition, excluding appraisal costs in the amount of $16,062.35. For settlement purposes only, Indiana American agrees it will remove the $16,062.35 for appraisal costs from the amount to be included in rate base. The journal entry shall be as reflected in Attachment GPR-1, as modified by the terms of this Stipulation and Settlement Agreement. . .

7. Indiana American agrees to file with the Commission whatever agreement is ultimately reached with the Indiana Department of Environmental Management ("IDEM") post-closing with respect to necessary improvements to the Sheridan Wastewater System.

8. Following the closing, Indiana American should be permitted to, and will, apply its depreciation accrual rates approved by the Commission in Cause No. 44992 to the properties comprising the Sheridan Water and Wastewater Systems and to encumber the properties



comprising the Sheridan Water and Wastewater Systems with the lien of Indiana American's mortgage indenture.

9. Joint Petitioners and the OUCC stipulate that all evidence that has been filed in this Cause with respect to the relief provided herein is admissible in evidence and that such evidence constitutes a sufficient evidentiary basis for a Commission Order approving this Stipulation. The parties waive cross-examination of each other's witnesses.

10. If this Stipulation is not approved in its entirety by the Commission, the parties stipulate that the terms herein shall not be admissible in evidence or discussed by any party in a subsequent proceeding. Moreover, the concurrence of the parties with the terms of this Stipulation is expressly predicated upon the Commission's approval of this Stipulation in its entirety by issuance of the Order in the form set forth in Attachment A without any material modification or any material condition deemed unacceptable by any of them. If the Commission does not approve the Stipulation in its entirety or if the Commission makes modifications to the final order that are unacceptable to any party, the Stipulation shall be null and void and shall be deemed withdrawn upon notice made in writing by any party within 15 days after the date of the final order and stating that a modification made by the Commission is unacceptable to the party. In the event the Stipulation is withdrawn, any party may request, and no other party shall oppose, the convening of an attorneys' conference to establish a procedural schedule for the continued litigation of this proceeding.

11. Joint Petitioners and the OUCC stipulate that this Stipulation reflects a fair, just and reasonable resolution, and is agreed upon without prejudice and the ability of any party to propose a different term in future proceedings.



12. The parties agree that whether this stipulation is approved or rejected, none of the terms herein shall be considered an admission by any party. No party hereto shall cite as binding or persuasive precedent the resulting final order. As set forth in the Order in *Re Petition of Richmond Power & Light*, Cause No. 40434, p. 10, Joint Petitioners and the OUCC stipulate and request the Commission to incorporate as part of its final order that this Stipulation, or the order approving it, not be cited as precedent by any person or deemed an admission by any party in any other proceeding except as necessary to enforce its terms before the Commission or court of competent jurisdiction.

13. The undersigned represent and stipulate that they are fully authorized to execute this Stipulation on behalf of the respective parties who will be bound thereby.

*(signature page follows)*

Date: 7/19/18

Indiana-American Water Company, Inc.

Deborah D. Dewey, President

Town of Sheridan, Indiana

Date:_____

David Kinkead, President of Town Council

Indiana Office of Utility Consumer Counselor

Date: 7/20/18

Deputy Consumer Counselor

Daniel M. LeVay

DMS 12907608v1

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Indiana-American Water Company, Inc.

Date:_____

Deborah D. Dewey, President

Town of Sheridan, Indiana

Date: 7/20/2018

David Kinkead, President of Town Council

Indiana Office of Utility Consumer Counselor

Date:_____

Deputy Consumer Counselor

DMS 12907608v1

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**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

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| **JOINT PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. ("INDIANA AMERICAN") AND THE TOWN OF SHERIDAN, INDIANA ("SHERIDAN") FOR APPROVAL AND AUTHORIZATION OF: (A) THE ACQUISITION BY INDIANA AMERICAN OF SHERIDAN'S WATER UTILITY PROPERTY (THE "SHERIDAN WATER SYSTEM") AND OF SHERIDAN'S SEWER UTILITY PROPERTY (THE "SHERIDAN SEWER SYSTEM") (COLLECTIVELY THE "SHERIDAN SYSTEMS") IN HAMILTON COUNTY, INDIANA IN ACCORDANCE WITH A PURCHASE AGREEMENT THEREFOR; (B) APPROVAL OF ACCOUNTING AND RATE BASE TREATMENT; (C) APPROVAL OF THE RATES AND CHARGES TO BE APPLIED TO THE SHERIDAN WATER AND SEWER SYSTEMS AFTER CLOSING; (D) APPROVAL OF APPLICATION OF INDIANA AMERICAN'S MUNCIE SEWER RULES AND REGULATIONS TO THE SHERIDAN WASTEWATER SYSTEM, WITH CHANGES TO ALLOW ENFORCEMENT OF AN INDUSTRIAL PRETREATMENT PROGRAM ("IPP") AMONG OTHERS; (E) APPLICATION OF INDIANA AMERICAN'S DEPRECIATION ACCRUAL RATES TO SUCH ACQUIRED PROPERTIES; AND (F) THE SUBJECTION OF THE ACQUIRED PROPERTIES TO THE LIEN OF INDIANA AMERICAN'S MORTGAGE INDENTURE.** | **CAUSE NO. 45050** |

**Presiding Officers:**
**Sarah Freeman, Commissioner**
**Lora Manion, Administrative Law Judge**

On February 16, 2018, Joint Petitioners Indiana-American Water Company, Inc. ("Indiana American" or the "Company") and Town of Sheridan, Indiana ("Sheridan" or the "Town") filed their joint petition with the Indiana Utility Regulatory Commission ("Commission" or "IURC") in this matter.



On April 5, 2018, the Commission issued a Docket Entry vacating the prehearing conference and requesting Joint Petitioners and the Office of Utility Consumer Counselor ("OUCC") to file an agreed procedural schedule. On April 6, 2018, the parties filed a Stipulation as to Procedural Matters and on April 11, 2018, the Commission issued a Docket Entry establishing the procedural schedule in this Cause.

On April 13, 2018, Joint Petitioners filed the prepared testimony and exhibits of Mr. Matthew Prine, Mr. Gregory Roach, Mr. David Kinkead and Mr. Stacy Hoffman constituting their case-in-chief.

On June 29, 2018, the OUCC filed the prepared testimony and exhibits of Carl N. Seals and Margaret A. Stull.

On July 20, 2018, Joint Petitioners and the OUCC (the "Settling Parties") jointly filed a Stipulation and Settlement Agreement (the "Settlement") along with testimony in support thereof, which settlement presented the Settling Parties' proposed resolution of all issues raised between them in this proceeding.

Pursuant to notice of hearing duly given and published as required by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, a settlement hearing in this Cause was held commencing at 9:30am on August 1, 2018 in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana at which the parties' prefiled evidence, including the Settlement and testimony in support thereof, was admitted into the record. No members of the general public appeared.

Based upon the applicable law and evidence, the Commission now finds:

1. **Notice and Jurisdiction.** Due, legal and timely notice of the public hearing conducted herein was given by the Commission as required by law. Indiana American is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1 and is subject to the jurisdiction of the Commission in the manner and to the extent provided by law. The Sheridan systems are municipally owned utilities as that term is defined in Ind. Code § 8-1-2-1. The Commission has jurisdiction over Joint Petitioners and the subject matter of this proceeding.

2. **Joint Petitioners' Characteristics.** Indiana American is an Indiana corporation engaged in the provision of water utility service to the public in and around numerous communities throughout the State of Indiana for residential, commercial, industrial, public authority, sale for resale and public and private fire protection purposes. Indiana American also provides sewer utility service in Wabash and Delaware Counties.

Sheridan is a municipality located in Hamilton County, Indiana. Sheridan owns and operates a water distribution system serving approximately 1,261 individually metered customers and a wastewater treatment plant serving approximately 1,233 customers. Sheridan withdrew from the jurisdiction of the Commission for purposes of its water rates and charges and financing on December 4, 1988. The Sheridan systems are in the vicinity of Indiana American's existing Noblesville Operation.

**3. Relief Requested.** Joint Petitioners filed this case pursuant to Ind. Code § 8-1-30.3-5 ("Section 30.3-5") and § 8-1.5-2-6.1 ("Section 6.1") and requested that the Commission (1) grant such approvals as may be necessary to consummate the acquisition of the assets comprising the water distribution system owned by Sheridan (the "Sheridan Water System") and the assets comprising the wastewater treatment system owned by Sheridan (the "Sheridan Wastewater System") (collectively the "Sheridan Systems") by Indiana American on the terms described in the Joint Petition and the Asset Purchase Agreement between Indiana American and Sheridan (Attachment MP-2); (2) approve that without regard to amounts that may be recorded on Sheridan's books and records and without regard to any grants or contributions that Sheridan may have received, Indiana American may record for ratemaking purposes as the net original cost rate base of the assets being acquired an amount equal to the full purchase price, incidental expenses, and other costs of acquisition, allocated among utility plant in service accounts as proposed in Joint Petitioners' evidence; (3) authorize Indiana American to apply the rules and regulations and rates and charges generally applicable to Indiana American's Area One rate group, as the same may be changed from time to time, for service to be provided by Indiana American in the areas currently served by the Sheridan Water System; (4) approve the application of the metered sewer rates as the same have been adopted by the Sheridan Town Council as of the Closing Date, for service to be provided by Indiana American in the areas currently served by the Sheridan Wastewater System; (5) authorize Indiana American to apply the rules and regulations for wastewater service applicable to Indiana American's Muncie Sewer Operation to the Sheridan Wastewater System, with the three modifications as described in Joint Petitioners' Case-in-Chief; (6) authorize Indiana American to apply its existing depreciation accrual rates to the Sheridan Systems; and (7) approve the encumbering of the properties comprising the Sheridan Systems with the lien of Indiana American's Mortgage Indenture. The Settling Parties request Commission approval of Indiana American's acquisition of the Sheridan Systems on the terms set forth in the Settlement Agreement.

**4. Pre-Settlement Positions of the Parties.**

**A. Joint Petitioners' Direct Evidence.** Joint Petitioners presented direct testimony from Matthew Prine, Director of Community and Government Affairs for Indiana American, Gregory Roach, Senior Manager, Revenue Analytics for American Water Works Service Company, David Kinkead, President of the Sheridan Town Council, and Stacy S. Hoffman, Director of Engineering for Indiana American.

**(1) Indiana Code § 8-1.5-2-6.1 and Distressed Utility.** Mr. Prine testified regarding Section 6.1, the Indiana Code section which governs the relief sought in this Cause. He explained that, prior to the passage of Section 6.1, Ind. Code ch. 8-1-30.3 ("Chapter 30.3") was established as a new chapter during the 2015 legislative session governing the process and standards to be applied in the sale of municipal utility property. Mr. Prine further explained that during the 2016 legislative session, Section 6.1 was passed as a new section in the Code and Chapter 30.3 was amended. Together these changes redefined the Commission's role and the standards to be applied in approving the sale or disposition of non-surplus municipal utility property.

Mr. Prine explained that one of the results of these legislative changes was to encourage regionalization as a strategy in addressing the State's ongoing infrastructure needs, by allowing a





public water or wastewater utility that acquires the utility property of a "distressed utility" to petition the Commission to include the "cost differential" associated with the acquisition as part of its rate base. He stated that the term "distressed utility" is defined by statute (Ind. Code §§ 8-1-30.3-2 and -5(a)). Mr. Prine noted that in addition to these legislative changes, an Indiana Finance Authority report on water utility infrastructure needs throughout the State of Indiana (the "2016 IFA Report") also encouraged system regionalization and emphasized the need for (i) prioritization of replacement of aging or failing water mains and (ii) development of a schedule of asset management that organizes the construction needed to maintain and extend the life of a utility system. Attachment MP-3, pages 7-8 of 79. Mr. Prine testified that the Sheridan Systems face challenges in many of the areas highlighted in the 2016 IFA Report.

Mr. Prine further testified that due to these legislative changes, the process for the sale of a municipally owned water or sewer utility has changed. He explained that a municipality must now obtain the approval of this Commission to sell its water or sewer utility, with this grant of approval determined under either Section 6.1 or Section 30.3-5, as applicable.

Mr. Prine explained that under the new process, the Mayor/Council President or Council of a city or town considering an acquisition must appoint three appraisers to appraise the system's value. Upon return of the appraisal, the municipality must hold a public hearing on the proposed acquisition. If the municipality decides to sell, it must adopt an ordinance approving the proposed acquisition. For an ordinance adopted pursuant to this process after March 28, 2016, Commission approval is required under Section 6.1. The standard for approval is whether the sale according to the proposed terms and conditions is in the public interest. If a petition is filed pursuant to Section 30.3-5(d), and the Commission makes the required findings set forth in Section 30.3-5(c), then Section 6.1 directs that the proposed sale according to the proposed terms and conditions is in the public interest. Mr. Prine noted that under Section 6.1, the purchase price is deemed to be reasonable if it does not exceed the statutory appraised value. Mr. Prine described how the proposed acquisition of the Sheridan Systems followed this process. Mr. Prine testified that because the Sheridan Systems are each considered a "distressed utility," the Joint Petitioners in this Cause have filed a petition under Section 30.3-5. He outlined the various requirements of Section 30.3-5(c) and (d), which we will further describe as we undertake our required findings thereunder.

Mr. Prine testified that the proposed purchase price for the Sheridan Systems is $10,750,000, with $6,200,000 of that purchase price allocated to the Water System, and $4,550,000 for the Wastewater System. While the Sheridan appointed appraisers determined the appraised value of the Sheridan Systems to be $12,637,000, Mr. Prine testified that in order to produce lower utility rates to be charged the customers of the Systems, the Sheridan Town Council determined to sell the Systems for less than the full appraised value set forth in the Appraisal (Attachment DK-2 to Mr. Kinkead's direct testimony). Therefore, the purchase price does not exceed the appraised value of the system. Mr. Prine testified that the original cost rate base for the Sheridan Systems would be $10,950,000, assuming $200,000 of incidental expenses and other costs of acquisition. Mr. Prine further testified that the Sheridan Systems are used and useful in providing water and wastewater service to their customers.

With respect to the requirements in Section 30.3-5(d), Mr. Prine testified that Indiana American has provided the required notices and, as further explained in the testimony of Mr. Roach, the acquisition will not increase Indiana American rates by more than one percent (1%)





of Indiana American's base annual revenues. Mr. Prine further testified that, as more fully discussed in Mr. Hoffman's direct testimony, Indiana American has plans to make reasonable and prudent improvements to ensure the customers of the Sheridan Systems will receive adequate, efficient, safe, and reasonable service.

After describing how Indiana American satisfied each of the requirements listed under Sections 30.3-5(c) and 30.3-5(d), Mr. Prine summarized how Section 6.1 interacts with Chapter 30.3. He explained that if the purchase price of the proposed acquisition does not exceed the appraised value, and the elements of Sections 30.3-5(c) and 30.3-5(d) are met, Section 6.1 directs the issuance of a final order not later than 210 days after the filing of the case in chief authorizing the acquiring utility company to record: (1) the full purchase price; (2) incidental expenses; and (3) other costs of acquisition; as the net original cost of the utility plant in service assets being acquired, allocated in a reasonable manner among appropriate utility plant in service accounts.

**(2) Plan for Improvements to Sheridan's Systems.** Mr. Prine and Mr. Hoffman testified regarding the necessary improvements needed to the Sheridan Systems to address environmental and aging or failing infrastructure issues. Mr. Prine explained that under municipal ownership, the Systems face rising costs for necessary improvements to facilities and operations. He stated that in the last five years, the wastewater system has been issued notices of violations ("NOVs") for twenty-five (25) bypass and twelve (12) overflow events and the Indiana Department of Environmental Management ("IDEM") has cited the Town for an inadequate preventative maintenance program. Additionally, Mr. Prine explained the system has suffered from inflow and infiltration from the Sheridan's stormwater system. Mr. Prine further testified that Sheridan does not have a plan for replacement of aging or failing distribution infrastructure.

Mr. Prine testified that these necessary improvements will cause rates to continue to rise as improvements to the Systems are made. He further testified that Sheridan had a rate study performed by O.W. Krohn & Associates that predicted the necessary increases in rates if Sheridan were to continue to own and operate the Systems (Attachment DK-1 to Mr. Kinkead's Direct Testimony). Mr. Prine stated that the projected sewer rates (and in the case of the water system, the existing rates) are higher than the rates Indiana American proposes to charge the customers of the Sheridan Systems. He testified Sheridan has committed to adopt a 30% across-the-board rate increase for its wastewater customers as of closing, and Indiana American has committed to charging those wastewater rates until 2021.

Mr. Hoffman testified regarding Indiana American's plan for improvements to the Sheridan Systems and operations, as well as the costs of those improvements. Mr. Hoffman described the challenges faced by both Systems and the approaches Indiana American will likely take to address those challenges. Mr. Hoffman testified regarding the regulatory issues related to Sheridan's Wastewater System and explained that Sheridan negotiated an Agreed Order with IDEM to address the NOVs resulting from 25 bypass events and 12 overflow events related to the system. He further explained the Agreed Order requires Sheridan to implement an IDEM-approved stormwater compliance plan and to make improvements to the WWTP and wastewater system to improve permit compliance. Mr. Hoffman outlined Indiana American's proposed improvement plan to satisfy the Agreed Order. Mr. Hoffman testified that IDEM informally indicated the plan outlined in his testimony was acceptable. Mr. Hoffman further testified that





based on the preliminary estimate ranges prepared by Wessler Engineering in their Preliminary Study for Wastewater System Needs (February 2014), improvements to the wastewater system over a five year period after the close of acquisition could cost $2M to $5M.

Mr. Hoffman also described the challenges facing Sheridan's Water System, including the needed replacement of aging or failing infrastructure. Mr. Hoffman described Indiana American's plan to address the needed improvements. He testified the plan is to include the Sheridan Water System in Indiana American's prioritization model for the distribution system. He further testified improvements to the water system over a five year period after the close of the acquisition could cost $1.5M to $3M, depending on improvements implemented.

Mr. Hoffman also addressed Indiana America's proposed changes to its rules and regulations applicable to wastewater utility service, specifically to address industrial pre-treatment. Mr. Hoffman explained that Indiana American must get IDEM approval for any industrial pre-treatment program ("IPP") it wishes to implement. He testified Indiana American proposes to add a provision to its rules that requires, after closing of the acquisition, any customer that pre-treats discharge into the wastewater system to comply with the IDEM-approved IPP. A copy of the proposed change is contained in Attachment MP-8 to Mr. Prine's direct testimony. Mr. Hoffman further testified that Indiana American's current sewer rules and regulations do not include typical sewer USP restrictions; he stated that Indiana American proposes to adopt specific portions of Sheridan's existing sewer ordinance that restrict what can be placed in the sewers.

**(3) Proposed Acquisition and Asset Purchase Agreement.** David Kinkead, President of the Sheridan Town Council, testified regarding the purpose for the proposed acquisition of Sheridan's Systems by Indiana American. Mr. Kinkead provided an overview of Sheridan's Wastewater System and its history of environmental regulatory issues. He reiterated Mr. Prine's testimony regarding the IDEM NOVs and the inflow and infiltration issues related to the Town's stormwater system. Mr. Kinkead testified that selling the wastewater system would allow a company with greater expertise to take over investment, operation and maintenance of the system and enable the Town to invest in elimination of the stormwater source of the NOVs. He further testified that the Town's water system is also aged and in need of certain infrastructure improvements. Mr. Kinkead testified that Sheridan commissioned a rate study from O.W. Krohn and Associates (Attachment DK-1) and the results of the study made it clear the costs to Sheridan's citizens would be much greater if the Town continued to own and manage the utilities, than with a transfer to a private entity subject to IURC review.

Mr. Kinkead testified that the Town Council approved the issuance of a Request for Proposals ("RFP") in September 2016, to which Indiana American was the successful bidder. In response to the RFP, Indiana American also provided the Town a proposed purchase agreement. Mr. Kinkead further testified that the Town followed the statutory process necessary to sell its water and wastewater assets (described below) and conducted negotiations with Indiana American which resulted in a purchase agreement (the "Agreement") being finalized and signed on January 17, 2018. He testified that the negotiations leading up to the execution of the Agreement were conducted at arm's length.

Mr. Kinkead testified that the Town followed the statutory process necessary to sell its water and sewer utility assets and appointed three appraisers to appraise the Systems. He further testified the Sheridan Town Council voted on February 27, 2017 to appoint official appraisers of the Sheridan Systems. Mr. Kinkead testified Sheridan received the Return of Appraisement certifying the appraisal on June 8, 2017 (a copy of the appraisal is attached as Attachment DK-2 to Mr. Kinkead's direct testimony). He further testified that the statutory required public hearing was held on July 26, 2017. Mr. Kinkead testified that on July 31, 2017, the Town enacted the ordinance attached as Attachment DK-3, which ordinance explained the Town Council determined that the sale price for the Systems should be less than the full appraised value so as to result in lower utility rates to be charged to the customers of the Systems

Mr. Kinkead further testified regarding other communications he has had with Sheridan customers regarding the sale. He explained that Mr. Prine and other officials from Indiana American attended numerous town council meetings to provide customers the opportunity to get answers directly from Indiana American. He further testified the Town also held several additional meetings, in excess of statutory requirements, to determine public opinion and receive input regarding the proposed sale. Mr. Kinkead testified the response was clear that citizens were overwhelmingly in favor of the proposed transaction. He further testified no Sheridan customers have expressed opposition to the proposed sale.

The Asset Purchase Agreement was filed as Attachment MP-2. Mr. Prine testified that Indiana American proposes to acquire all of the property that is subject to the appraisal. He testified the Sheridan Town Council determined to sell the Systems for a purchase price of less than the appraised value in order to produce lower utility rates for Sheridan's customers. Mr. Prine stated that consummation of the transaction is conditioned on obtaining certain approvals from the Commission, including with respect to recognition of the full purchase price plus transaction costs in net original cost rate base, the application of Indiana American's Area One rates to Sheridan water customers, and approval of Sheridan's wastewater rates and charges, as adopted by the Town Council at closing, as well as Indiana American's application of those rates and charges to Sheridan wastewater utility customers.

Mr. Prine testified that the customers of the Sheridan Systems and Indiana American's existing customers will benefit from the acquisition. First and foremost, Sheridan customers will benefit from Indiana American making the necessary and IDEM-required improvements to Sheridan's wastewater system, as well as needed improvements to the water system. Further, Sheridan customers will benefit from full time management of their Systems, including, but not limited to, a full-time operations staff, 24/7 customer service and emergency response, enhanced security measures, along with full-time functional specialists in the areas of engineering and water quality. He further testified that customers will benefit from the acquisition, as the Systems will be included in Indiana American's prioritization model, allowing planning and asset management needs like those identified by the 2016 IFA Report to be met.

Mr. Prine testified that due to significant improvements needed to the Sheridan Wastewater System in order to comply with IDEM requirements, as well as the Sheridan Water System to address aging infrastructure concerns, continuation of current ownership could lead to a troubled future for the Systems. He echoed Mr. Kinkead's testimony that Indiana American is in a better position than the Town to address these issues. While both Mr. Prine and Mr. Roach





testified that the statute did not require Indiana American to provide notice to its existing customers because the proposed acquisition will not increase Indiana American rates in an amount greater than 1%, Mr. Roach described in his testimony the notice Indiana American provided to its existing customers. Mr. Prine testified that all Sheridan customers were notified of the proposed transaction and the rates that would be charged after closing.

**(4) Accounting and Ratemaking Treatment.**

Mr. Roach testified that the accounting and ratemaking treatment reflected in the proposed journal entry conforms with the treatment to be granted under Section 30.3-5(c), where all of the factors set forth in that section are met. Mr. Roach further testified that the purchase price for the acquisition includes a "cost differential" as that term is defined in Ind. Code § 8-1-30.3-1. Mr. Prine testified that pursuant to Section 30.3-5(e), if this Commission makes the required findings, the resulting Order is to authorize Indiana American "to make accounting entries recording the acquisition that reflect: (1) the full purchase price; (2) incidental expenses; and (3) other costs of acquisition; as the original cost of the utility plant in service assets being acquired, allocated in a reasonable manner among appropriate utility plant in service accounts." *Id.* Mr. Roach testified that as a result, Indiana American is proposing to record the net original cost of the Sheridan Systems in the manner reflected in the proposed journal entry shown on Attachment GPR-1. Mr. Prine testified that the depreciation accrual rates to be applied to the Sheridan Systems assets would be the rates approved by the Commission in Cause No. 44992 on May 30, 2018.

Mr. Roach further testified that notice of the acquisition to Indiana American's customers is not required because customer rates will not increase in future rate cases by more than one percent (1%) due to this acquisition. The calculation performed by Mr. Roach in accordance with the methodology approved by the Commission's March 14, 2018 Order in Cause Nos. 44976 and 44064 was included as Attachment GPR-2 to his direct testimony. Mr. Roach testified that despite the statute not requiring Indiana American to provide notice to existing customers, notice has been provided.

**B. OUCC's Evidence**. Ms. Margaret Stull, Chief Technical Adviser in the Water/Wastewater Division with the OUCC, testified regarding Indiana American's proposed accounting transaction. Ms. Stull expressed concerns regarding the methodology Indiana American used to calculate the rate impact on its current customers and the potential impact of the acquisition on Indiana American's existing wastewater customers. Ms. Stull testified that because the calculation presented by Mr. Roach and included on Attachment GPR-2 is a single calculation based on total water and wastewater costs, this may suggest Indiana American plans to spread its investment in Sheridan's wastewater assets across its entire water and wastewater operations. Ms. Stull stated that if the cost of the acquisition of the wastewater assets is solely attributed to Indiana American's wastewater customers, the rate impact for Indiana American's existing wastewater customers would be significant. Ms. Stull further testified she disagreed with including the $16,062.35 of appraisal costs in rate base. She recommended that the Commission not allow Indiana American to include in rate base the $16,062 of appraisal costs reimbursed to Sheridan. She further recommended that the amount of transaction costs to be included in rate base should be limited to amounts actually incurred not to exceed $183,938 ($200,000-$16,062).





Mr. Carl N. Seals, Utility Analyst with the OUCC, testified regarding Indiana American's plan for reasonable improvements to comply with IDEM's Agreed Order. Mr. Seals acknowledged that Indiana American has committed under the Purchase Agreement to negotiate in good faith with IDEM to enter into a compliance plan to improve the Sheridan Wastewater System upon Indiana American's acquisition of that system. Mr. Seals recommended that Indiana American be required to file the compliance plan between IDEM and Indiana American with the Commission within 30 days of its approval by IDEM, so that both the OUCC and the Commission will be informed of the final terms of the Agreed Order.

**5. Settlement.**

The Settlement Agreement filed in this Cause was supported by testimony from Mr. Roach and Scott Bell. Mr. Roach described the key terms of the Settlement, explaining that the parties agreed that the relief requested by Joint Petitioners should be granted, subject to stipulated conditions intended to address the concerns raised by OUCC witnesses Seals and Stull. The parties agreed that, for purposes of settlement only, the amount Indiana American should be allowed to record as net original cost rate base of the assets being acquired will exclude the appraisal costs in the amount of $16,062.35. The parties also agreed that the amount of incidental expenses and other costs to be included in rate base should be limited to amounts actually incurred.

The Settlement Agreement also sets forth Indiana American's commitment that its existing Muncie and Somerset sewer rates will not be increased in Indiana American's upcoming general rate case to bear the costs of the Sheridan Wastewater System. The parties also stipulated that Indiana American will file with the Commission the agreement ultimately reached with IDEM with respect to necessary improvements to the Sheridan Wastewater System.

The Settlement Agreement contains customary language establishing the parties' understanding regarding admissibility of evidence filed in the case and waiving cross-examination of each other's witnesses. If the Settlement Agreement is not approved in its entirety without material modification or material condition, the terms provide that a party may provide written notice within 15 days after the Commission's final order in this Cause that a modification of the settlement contained in that order is unacceptable to the party. Upon such notice, the Settlement Agreement is null and void and deemed withdrawn. The parties have stipulated that the Settlement Agreement and this Order may not be cited as precedent by any person or deemed an admission by any party in any other proceeding except as necessary to enforce its terms before the Commission or court of competent jurisdiction.

The parties stipulated, and supporting witnesses affirmed, that the Settlement Agreement reflects a fair, just and reasonable resolution of this proceeding.

**6. Commission Discussion and Findings on Joint Petition and Settlement.** This acquisition is proceeding pursuant to Section 6.1 and Section 30.3-5. Under Section 6.1, we must determine whether "the sale or disposition according to the terms and conditions proposed is in the public interest." (d). If we so find, then we are to authorize the transfer and the purchaser to record as net original cost rate base an amount equal to the full purchase price plus incidental expenses and other costs of acquisition "without regard to amounts that may be recorded on the





books and records of the municipality and without regard to any grants or contributions previously received by the municipality." (f).

Section 6.1 also provides us guidance as to how we are to approach this question of the public interest. If the petition is also filed under Section 30.3-5(d) (as it is here) and we approve the petition under Section 30.3-5(c), then Section 6.1 directs "the proposed sale or disposition is considered to be in the public interest." In order for Section 30.3-5 to apply, two things are required: first the utility is being acquired in a transaction involving a willing buyer and willing seller at a cost differential; and second, that one of the two utility companies is subject to our regulation. Both of these conditions are satisfied. There is no dispute that Indiana American is subject to our regulation, and there is no dispute that this transaction involves a willing buyer and a willing seller. Mr. Roach testified "the purchase price for the acquisition includes a 'cost differential' as that term is defined in Ind. Code § 8-1-30.3-1," and he went on to explain the basis for that conclusion. Joint Petitioners' Exhibit 2, pp. 5-7. No party disputed that statement, and we find there is a cost differential.

**A. IC § 8-1-30.3-5(c) Requirements**. For purposes of determining whether the proposed sale or disposition is in the public interest as required by Section 6.1, "the proposed sale is considered to be in the public interest [if it meets the requirements of Sections 30.3-5(c) and 30.3-5(d)]." Section 6.1(e). Section 30.3-5(c) provides that "the utility company that acquires the utility property may petition the commission to include the cost differentials as part of its rate base," and that the Commission shall approve the petition if it finds the following:

(1) The utility property is used and useful in providing water service, wastewater service, or both water and wastewater service.

(2) The distressed utility failed to furnish or maintain adequate, efficient, safe, and reasonable service and facilities.

(3) The utility company will make reasonable and prudent improvements to ensure that customers of the distressed utility will receive adequate, efficient, safe, and reasonable service.

(4) The acquisition of the utility property is the result of a mutual agreement made at arm's length.

(5) The actual purchase price of the utility property is reasonable.

(6) The utility company and the distressed utility are not affiliated and share no ownership interests.

(7) The rates charged by the utility company before acquiring the utility property of the distressed utility will not increase unreasonably as a result of acquiring the utility property.

(8) The cost differential will be added to the utility company's rate base to be amortized as an addition to expense over a reasonable time with corresponding reductions in the rate base.

The parties have stipulated that the criteria under Section 30.3-5 (d) have been met, which we address below, and therefore the relief afforded under Section 30.3-5(c) should be addressed:

(1) The utility property is used and useful in providing water service, wastewater service, or both water and wastewater service.

Mr. Prine testified that the Sheridan Systems are used and useful in providing water and wastewater service to its customers. Joint Petitioners asserted in their Petition that following the closing of the proposed acquisition, day to day operations of the Sheridan System will be assumed be assumed by Indiana-American's water and sewer utility professionals. The evidence indicates that Indiana-American will continue to operate the acquired water and wastewater assets to provide water and wastewater service respectively. No evidence was presented to the contrary. We find the utility property is used and useful in providing water and wastewater service.

(2) The distressed utility failed to furnish or maintain adequate, efficient, safe, and reasonable service and facilities.

Mr. Prine testified that the Sheridan Systems are municipally owned systems that serve fewer than 5,000 customers and therefore would satisfy the "distressed" requirement. Mr. Prine explained further that while it is not necessary to satisfy a second condition, the Sheridan Systems would also satisfy the definitional requirement of "distressed" as defined by meeting one of the conditions enumerated in Ind. Code § 8-1-30.3-6, because due to the necessary improvements required to the Systems, Sheridan is unable to furnish and maintain adequate service to their customers at rates equal to or less than those of Indiana American. Mr. Prine and Mr. Hoffman identified the minimal initial improvements that would be needed to bring the Wastewater System into compliance with IDEM's Agreed Order, and Mr. Kinkead sponsored the O.W. Krohn and Associates rate study which showed that making those improvements, as well as needed improvements to the Water System (with the costs spread over Sheridan's small customer base) would cause rates to be higher than Indiana American's rates.

Therefore, we find the conditions set forth in IC 8-1-30.3-6 are satisfied. Accordingly, we find that the Sheridan Systems have failed to furnish or maintain adequate, efficient, safe and reasonable service and facilities.





(3) The utility company will make reasonable and prudent improvements to ensure that customers of the distressed utility will receive adequate, efficient, safe, and reasonable service.

Mr. Hoffman testified regarding Indiana American's proposed plan for reasonable improvements to the Systems. Mr. Hoffman's testimony set forth a plan to bring the Wastewater System into compliance with IDEM's Agreed Order and address the aging infrastructure concerns related to the Water System. We have considered the financial, managerial and technical ability of Indiana American to provide the utility service required following closing. We find that Indiana American will make reasonable and prudent improvements to ensure that Sheridan customers will receive adequate, efficient, safe and reasonable service.

(4) The acquisition of the utility property is the result of a mutual agreement made at arm's length.

Mr. Kinkead described the process undertaken by Sheridan prior to entering the transaction. Mr. Kinkead testified that Sheridan issued an RFP to sell its Systems to which Indiana American was the successful bidder. He further testified that the negotiations proceeded while Sheridan was undergoing the statutory process and such negotiations were conducted at arm's length. Mr. Prine and Mr. Roach echoed Mr. Kinkead's testimony and testified that the negotiations leading up to the execution of the Asset Purchase Agreement were conducted at arm's length. We find the acquisition is the result of a mutual agreement made at arm's length.

(5) The actual purchase price of the utility property is reasonable.

The actual purchase price does not exceed the just and true value determined by the statutory appraisers. The appraisal was sponsored by Mr. Kinkead as Attachment DK-2. Mr. Kinkead testified the Sheridan Town Council determined that the sale price for the Systems should be less than the full appraised value, as such is in the best interest of the Town so as to result in lower utility rates to be charged to the customers of the Systems. The purchase price is deemed reasonable under Section 6.1 to the extent it does not exceed the appraised value. The purchase price does not exceed the appraised value, and so the purchase price is reasonable.

(6) The utility company and the distressed utility are not affiliated and share no ownership interests.

We find, based upon Mr. Prine's testimony to the effect, that Sheridan and Indiana American are not affiliated and share no ownership interests.





(7) The rates charged by the utility company before acquiring the utility property of the distressed utility will not increase unreasonably as a result of acquiring the utility property.

The Indiana American rates will not increase directly as a result of this Cause. In future cases, the potential effect on rates is nominal, as we will explain further in addressing Section 30.3-5(d)(2). We find the rates charged by Indiana American will not increase unreasonably as a result of this acquisition.

(8) The cost differential will be added to the utility company's rate base to be amortized as an addition to expense over a reasonable time with corresponding reductions in the rate base.

Mr. Roach testified that his proposed journal entry allocates the entire purchase price reasonably among utility plant in service accounts. In this fashion, the cost differential will be amortized and charged to expense over a reasonable period of time through depreciation expense. We approved a similar approach in Cause No. 44915 ("*Georgetown*") and we find it to be appropriate here as well.

**B. IC § 8-1-30.3-5(d) Requirements.** We must determine that the requirements of IC 8-1-30.3-5(d) have been met. The parties have stipulated the criteria has been met and we address each criteria below:

(1) Notice of the proposed acquisition and any changes in rates or charges to customers of the distressed utility.

Mr. Prine sponsored as Attachment MP-5 a letter which notifies of the proposed acquisition and explains what rates will be charged to Sheridan customers after the closing, and the total bill for a residential customer using 4,000 gallons. It appears the letter was mailed on March 21, 2018, which is prior to the time of the filing of Joint Petitioners' case-in-chief. The notice that was mailed is sufficient on its face, it was mailed early enough in the proceeding to afford customers an opportunity to participate if they chose to do so, and it was mailed to all Sheridan's customers. We find Joint Petitioners satisfied Section 30.3-5(d)(1).

(2) Notice to customers of the utility company if the proposed acquisition will increase the utility company's rates by an amount that is greater than one percent (1%) of the utility company's base annual revenue.

While there was some disagreement between Indiana American and the OUCC regarding the 1% calculation, for purposes of the Settlement, the parties stipulated that the acquisition of the Sheridan Systems will not increase Indiana American's rates by an amount greater than 1%. and therefore no notice to existing customers of Indiana American was required in this Cause.





Accordingly, we find the notice requirement in Section 30.3-5(d)(2) is not triggered by the proposed acquisition.

(3) Notice to the office of the utility consumer counselor.

We find that notice was provided to the OUCC through the service of the petition and the Joint Petitioners' case-in-chief.

(4) A plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility.

Section 30.3-5(d)(4) requires that a purchasing utility must provide a "plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility." Mr. Hoffman's testimony set forth a plan for reasonable improvements to the Sheridan Wastewater System to address the NOVs and bring the system into compliance with IDEM's Agreed Order. He further testified that Indiana American's plan for improvements includes including the Sheridan Systems in Indiana American's prioritization models for distribution system replacements so that commencement on an infrastructure improvement plan as contemplated in Attachment MP-3 can begin.

We find that Indiana American has presented a plan for reasonable and prudent improvements to provide adequate, efficient, safe, and reasonable service to customers of the distressed utility.

**C. Settlement.**

We have previously discussed our policy with respect to settlements:

> Indiana law strongly favors settlement as a means of resolving contested proceedings. *See, e.g., Manns v. State Department of Highways*, (1989) Ind., 541 N.E.2d 929, 932; *Klebes v. Forest Lake Corp.*, (1993), Ind. App. 607 N.E.2d 978, 982; *Harding v. State*, (1992), Ind. App., 603 N.E.2d 176, 179. A settlement agreement "may be adopted as a resolution on the merits if [the Commission] makes an independent finding, supported by substantial evidence on the record as a whole, that the proposal will establish 'just and reasonable' rates." *Mobil Oil Corp. v. FPC*, (1974), 417 U.S. 283, 314 (emphasis in original).

*Indianapolis Power & Light Co.*, Cause No. 39938, p. 7 (IURC 8/24/95); *see also Commission Investigation of Northern Ind. Pub. Serv. Co.*, Cause No. 41746, p. 23 (IURC 9/23/02). This policy is consistent with expressions to the same effect by the Supreme Court of Indiana. *See, e-g., Mendenhall v. Skinner & Broadbent Co.*, 728 N.E.2d 140, 145 (Ind. 2000) ("The policy of the law generally is to discourage litigation and encourage negotiation and settlement of disputes"); *In re Assignment of Courtrooms, Judge's Offices and Other Facilities of St. Joseph Superior*

*Court*, 715 N.E.2d 372, 376 (Ind. 1999) ("Without question, state judicial policy strongly favors settlement of disputes over litigation").

Nevertheless, a settlement agreement will not be approved by the Commission unless it is supported by probative evidence. 170 IAC 1-1.1-1 7. Settlements presented to the Commission are not ordinary contracts between private parties. *United States Gypsum, Inc. v. Indiana Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). Any settlement agreement that is approved by the Commission "loses its status as a strictly private contract and takes on a public interest gloss." *Id.* (quoting *Citizens Action Coalition v. PSI Energy, Inc.*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the Commission "may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement." *Citizens Action Coalition*, 664 N.E-2d at 406. Furthermore, any Commission decision, ruling or order — including the approval of a settlement — must be supported by specific findings of fact and sufficient evidence. *United States Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition v. Public Service Co.*, 582 N.E.2d 330, 331 (Ind. 1991)). Therefore, before the Commission can approve the Settlement, we must determine whether the evidence in this Cause sufficiently supports the conclusion that the agreement is reasonable, just, and consistent with the purpose of Indiana Code § 8-1-2-1 *et seq.*, and that the agreement serves the public interest.

We note that the Settlement Agreement includes provisions indicating it will be deemed withdrawn if not accepted by the Commission in its entirety unless otherwise agreed to by the Settling Parties and that the terms of the Settlement represent a fair, just and reasonable resolution and compromise. We have made specific findings above with respect to the factors this Commission is to consider in deciding a case brought under Section 6.1 and Section 30.3-5, noting the effect of the settlement on such factors.

Based on our foregoing discussion and findings, we find that the Settlement Agreement is reasonable and in the public interest and the authority and obligations proposed therein should be approved. With regard to future citation of this Order, we find that our approval herein should be construed in a manner consistent with our finding in *Richmond Power & Light*, Cause No. 40434, 1997 Ind. PUC LEXIS 459 (IURC March 19, 1997).

**D. Sale Approval and Accounting Treatment.**

We have made all of the required findings under Section 30.3-5(c), and we find that Joint Petitioners have satisfied the requirements of Section 30.3-5(d). We therefore approve the petition pursuant to 30.3-5(c).

Because we determined that Joint Petitioners have satisfied all of the requirements listed in Chapter 30.3 in order for a sale or disposition to be deemed in the public interest, we find, pursuant to Section 6.1(d), that the proposed acquisition of the Sheridan Systems is in the public interest and the sale is approved on the terms set forth in the Asset Purchase Agreement and the Settlement Agreement discussed herein.





Because the sale is in the public interest, we approve the sale. Section 6.1(f) directs the Commission as follows:

> "As part of an order approving a sale or disposition of property under this section, the commission shall, without regard to amounts that may be recorded on the books and records of the municipality and without regard to any grants or contributions previously received by the municipality, provide that for ratemaking purposes, the prospective purchaser shall record as the net original cost rate base an amount equal to:
> (1) the full purchase price;
> (2) incidental expenses; and
> (3) other costs of acquisition;
> allocated in a reasonable manner among appropriate utility plant in service accounts."

As directed by the statute, we therefore find that without regard to amounts that may be recorded on Sheridan's books and records and without regard to any grants or contributions that Sheridan may have received, Indiana-American may record for ratemaking purposes as the net original cost rate base of the assets being acquired an amount equal to the full purchase price, plus incidental expenses, and other costs of acquisition, allocated among utility plant in service accounts in the fashion recommended by Mr. Roach and as shown on the journal entry attached to his direct testimony as Attachment GPR-1, as modified by the terms of the Settlement agreement, whereby Indiana American agreed to exclude from rate base the costs of the appraisal. We find that the parties' stipulation regarding exclusion of the $16,062.35 in appraisal costs is a reasonable resolution of the dispute between the parties with respect to that issue. We also find that total incidental expenses and other costs of the acquisition should be limited to the actual such expenses and costs incurred.

We further find that Indiana-American's proposed accounting and journal entries as presented in Attachment GPR-1, as modified by the Settlement, should be approved and that the costs so reflected on the books and records of Indiana-American be used as the original cost of such properties for accounting, depreciation, and rate base valuation purposes. The journal entry should be adjusted to reflect actual (rather than estimated) incidental expenses and other costs of acquisition. We find that Indiana-American's existing depreciation accrual rates approved by the Commission in Cause No. 44992 on May 30, 2018 should be applied on and after the closing date of the acquisition to depreciable property purchased from Sheridan pursuant to the Asset Purchase Agreement.

**E. Rates and Rules.**

Indiana-American currently has on file with the Commission a schedule of rates and charges and rules and regulations applicable to water utility service provided by Indiana-American in its Area One rate group. Consistent with the Asset Purchase Agreement and the Settlement Agreement, we find that, on and after the closing, Indiana-American's generally applicable rates and charges and rules and regulations for water service applicable in Indiana-American's Area One rate group on file with and approved by the Commission should apply to services provided by Indiana-American through the Sheridan Water System, as the same are in effect from time to time.





Pursuant to the terms of the Asset Purchase Agreement, Sheridan has agreed to increase its sewer rates by 30% across-the-board effective as of the closing. The parties have agreed in settlement, and we now find, that on and after closing, those metered sewer rates adopted by the Sheridan Town Council will apply for service to be provided by Indiana American in the areas currently served by the Sheridan Wastewater System.

The parties have further stipulated, and we now find, that Indiana American's rules and regulations for wastewater service applicable to its Muncie Sewer Operation shall apply to the Sheridan Wastewater System, with modifications (as described in Mr. Prine's and Mr. Hoffman's testimony) to (1) incorporate the provisions of the Sheridan Sewer Use Ordinance governing what substances shall and shall not be permitted to be discharged into the system, (2) require compliance by any user that pre-treats discharge into the wastewater system with the Industrial Pretreatment Program approved by IDEM, and (3) permit Indiana American to pro-rate a user's partial payments for water and wastewater service except where a customer has followed Indiana American's existing complaint process as set forth in Rule 4.2(d) of its Rules and Regulations Applicable To Water Service.

**F. Encumbrances.**

We find that the encumbering of the properties comprising the Sheridan Water System and Sheridan Wastewater System by subjecting such properties to the lien of Indiana-American's General Mortgage as of the closing should be approved.

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION, that:**

1. The Settlement Agreement shall be and hereby is approved in its entirety.

2. Joint Petitioners are hereby authorized to consummate the acquisition of the Sheridan Systems by Indiana American on the terms described in the Asset Purchase Agreement and the Settlement Agreement entered into between the Parties and discussed herein.

3. The acquisition of the Sheridan Systems by Indiana-American on the terms and conditions described in the Asset Purchase Agreement and the Settlement Agreement is in the "public interest" as defined in Indiana Code § 8-1.5-2-6.1(d) and (e) and the same shall be and is hereby approved.

4. Indiana-American shall be and hereby is authorized to record for ratemaking purposes as net original cost rate base of the assets being acquired an amount equal to the full purchase price, actual incidental expenses, and other costs of acquisition, allocated among utility plant in service accounts as stipulated in the Settlement Agreement and reflected in Attachment GPR-1, as the same is modified by the Settlement Agreement.

5. Indiana-American shall be and is hereby authorized to charge customers currently served by the Sheridan Water System the current rates and charges and apply the same rules and





regulations for water service applicable in Indiana-American's Area One rate group on file with and approved by the Commission, as the same are in effect from time to time.

6. Indiana American shall be and is hereby authorized to charge customers currently served by the Sheridan Wastewater System the rates and charges as the same have been adopted by the Sheridan Town Council as of the Closing Date. Prior to placing into effect the foregoing wastewater rates, Indiana American shall file with the Water/Wastewater Division of the Commission its revised Schedule of Charges for Sewer Service (IURC No. S-20-A) reflecting the metered sewer rates authorized herein.

7. Indiana American shall be and is hereby authorized to apply the rules and regulations for wastewater service applicable to Indiana American's Muncie Sewer Operation to the Sheridan Wastewater System, with the modifications described in Finding Paragraph No. 6.E above. Prior to placing into effect the foregoing rules and regulation for wastewater service for customers of the Sheridan Wastewater System, Indiana American shall file with the Water/Wastewater Division of the Commission its proposed rules, as presented in Attachment MP-8.

8. Indiana-American shall be and is hereby authorized to reflect the acquisition of the Sheridan Systems on its books and records as of the closing by making the accounting and journal entries described in Attachment GPR-1, as modified by the terms of the Settlement and as adjusted to actual incidental expenses and other costs of the acquisition.

9. The net original cost, as defined herein, of the acquired property shall be used for accounting, depreciation and rate base valuation purposes after closing.

10. Indiana-American shall be and hereby is authorized to apply its depreciation accrual rates on and after the closing date of the acquisition to depreciable property purchased from Sheridan pursuant to the Asset Purchase Agreement.

11. Indiana-American shall be and is hereby authorized to encumber the properties comprising the Sheridan Systems with the lien of Indiana-American's mortgage indenture.

12. This Order shall be effective on and after the date of its approval.

**HUSTON, FREEMAN, KREVDA, OBER AND ZIEGNER CONCUR:**

**APPROVED:**

I hereby certify that the above is a true
and correct copy of the Order as approved.

_____
Mary M. Becerra, Secretary to the Commission
DMS 12772356v1

S&P Global
Market Intelligence

# Indiana American Water acquires Charlestown Water System in southern Indiana

**Friday, March 8, 2019 6:50 AM ET**

By Nephele Kirong
*Market Intelligence*

Indiana American Water Co. Inc. has completed its approximately $13.4 million acquisition of the municipal water utility Charlestown Water in southern Indiana, the company said March 7.

"Our community was facing tremendous capital costs to address water quality and local infrastructure needs," Charlestown Mayor Bob Hall said. "This acquisition will help us to address these concerns at a lower overall cost than we would otherwise be able to do and also provide funds to help us address other pressing priorities in our community."

The Indiana Utility Regulatory Commission approved the deal on March 14, 2018.

The acquisition adds approximately 2,900 customers to Indiana American Water's customer base, according to a news release. The Charlestown system will be incorporated into the company's Southern Indiana district, which currently serves approximately 100,000 residents.

Indiana American Water, a subsidiary of American Water Works Co. Inc., serves approximately 300,000 water customers.

*This article was published by S&P Global Market Intelligence and not by S&P Global Ratings, which is a separately managed division of S&P Global.*

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ILLINOIS AMERICAN WATER

# Illinois American Water Acquires City of Farmington Water System

***Acquisition will add approximately 1,125 new customers in Peoria Service Area***

April 05, 2018 03:42 PM Eastern Daylight Time

FARMINGTON, Ill.--(BUSINESS WIRE)--Illinois American Water President Bruce Hauk today announced the Company's acquisition of the City of Farmington's water system. The purchase of the system adds approximately 1,125 new customers to the Company's customer base in the Peoria District and serves a population of about 2,500 residents.

The Farmington City Council voted in favor of the sale in March 2017 and the Illinois Commerce Commission (ICC) approved the sale for $3.75 million on March 21, 2018. Today, Illinois American Water acquired the water system.

"We look forward to investing in the City of Farmington and ensuring quality water service to our new customers," said Hauk.

City of Farmington Mayor Kent Kowal also supports the acquisition. He said, "We welcome Illinois American Water and look forward to their team helping us meet our water service needs. Their knowledge and ability to upgrade our aging water system is critical to our community's economic future."

Illinois American Water will invest $5 million in the first five years of ownership. This investment will include a hydraulic study to be completed in 2018 with a focus on improving water pressure and fire flow. Investment will also include GIS updates and meter exchanges. In coming years, Illinois American Water will focus on water main replacements and installations to loop water mains.

Roger Goodson, sr. manager of field operations and production for the Peoria District, said, "We are excited to become a member of this vibrant community, not only as the water service provider, but as a good neighbor."

New customers will soon receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more.

The appraisal process used for the Farmington water system was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. According to Hauk, this law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility. He said, "Previous law only allowed the investor-owned water or sewer utility to pay the original cost minus depreciation to acquire a small system, public or private. Because of this, systems were deprived of receiving adequate value for their system."

The City of Farmington will be incorporated into the company's Peoria District, which currently serves residents in Peoria, West Peoria, Bartonville, Bellevue, Rome, Mapleton and parts of several surrounding townships. Dunlap, Hanna City and the Timber Logan Water District are sale for resale (wholesale) customers.

**About Illinois American Water -** Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville, where a team of highly skilled water experts test water. As the largest and most geographically diverse U.S. publicly traded water and wastewater utility company, the company employs more than 6,900 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

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Contacts
Illinois American Water
Karen Cotton, 309-566-4126
External Affairs Manager





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# American Water Works (AWK) Subsidiary Illinois American Water Reports Acquisition of Village of Fisher Water & Wastewater Systems

Article | Related Press Releases (1) | Stock Quotes (1) | Comments (0)

March 28, 2018 2:47 PM EDT

*News and research before you hear about it on CNBC and others. Claim your 2-week free trial to **StreetInsider Premium** here.*

Illinois American Water, a subsidiary of American Water (NYSE: AWK), President Bruce Hauk today announced the Company's acquisition of the Village of Fisher's water and wastewater systems. The purchase of the system adds approximately 850 new water and wastewater customers to the Company's customer base in the Champaign County District and serves a population of nearly 2,000 residents.

The Village of Fisher Board voted in favor of the sale in July 2017. The Illinois Commerce Commission (ICC) approved the sale for $6.8 million on March 7, 2018.

"We look forward to investing in the Village of Fisher and ensuring quality water and reliable wastewater service to our new customers," said Hauk.

Village of Fisher Mayor Michael Bayler also supports the acquisition. He said, "We are looking forward to Illinois American Water joining our community and helping us meet our water and wastewater needs. Their knowledge and ability to provide reliable service to our residents is an investment in our public health and economic future."

Illinois American Water will invest $2.9 million in the first five years of ownership including security upgrades, meter replacements, wastewater plant improvements for regulatory compliance, and inflow and infiltration upgrades.

According to Dave Farrar, sr. manager of field operations and production for Illinois American Water's Champaign County District, the company will also repair and paint the Fisher water tower. Farrar, a resident of Fisher, said, "We are committed to keeping the Fisher water tower painted orange to show community pride for residents and visitors of Fisher. The improvements planned will also enhance service, public health and fire protection to Fisher."

New customers will soon receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing, payment options and more. A payment drop box will be placed at the Fisher water treatment plant located at 110 West Front Street in Fisher. Payments will be picked up regularly.

The appraisal process used for the Fisher water and wastewater systems was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. According to Hauk, this law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility. He said, "Previous law only allowed the investor-owned water or sewer utility to pay the original cost minus depreciation to acquire a small system, public or private. Because of this, systems were deprived of receiving adequate value for their system."

The Village of Fisher will be incorporated into Illinois American Water's Champaign County District, which currently serves residents in Champaign, Urbana, Sadorus, Savoy, St. Joseph, Bondville and Pesotum.

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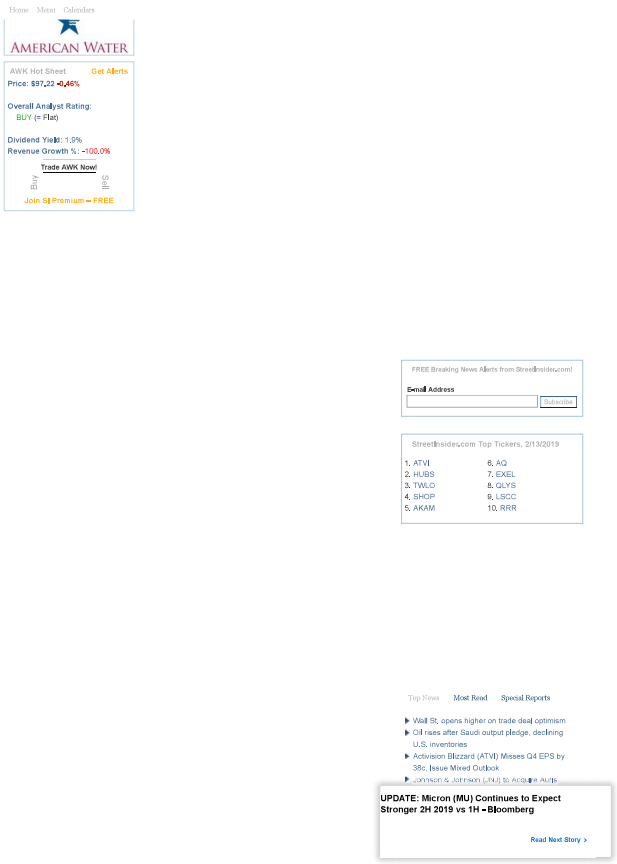
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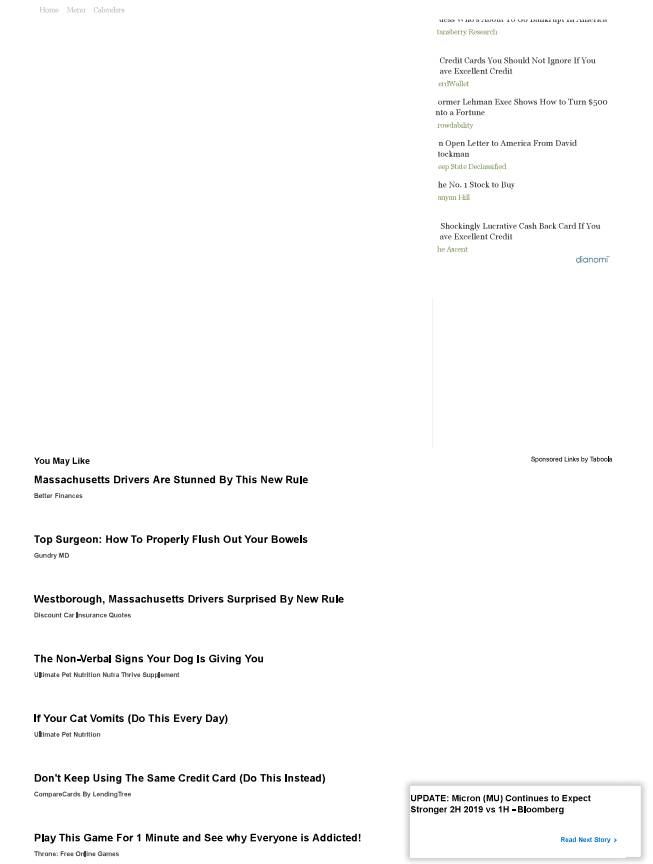
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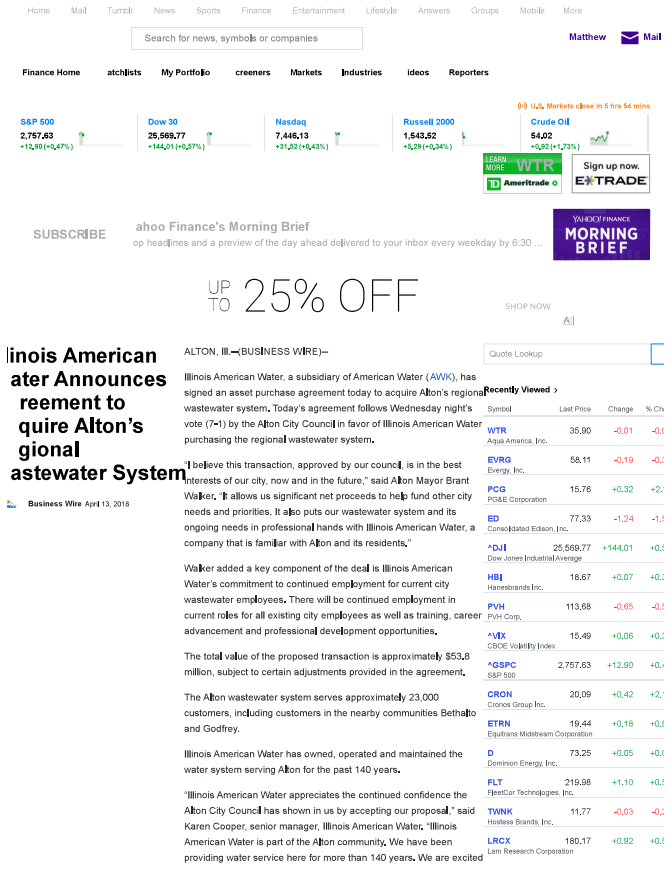
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linois American ater Announces reement to quire Alton's gional astewater System
Business Wire April 13, 2018
ALTON, Ill.--(BUSINESS WIRE)--
Illinois American Water, a subsidiary of American Water (AWK), has signed an asset purchase agreement today to acquire Alton's regional wastewater system. Today's agreement follows Wednesday night's vote (7-1) by the Alton City Council in favor of Illinois American Water purchasing the regional wastewater system.
"I believe this transaction, approved by our council, is in the best interests of our city, now and in the future," said Alton Mayor Brant Walker. "It allows us significant net proceeds to help fund other city needs and priorities. It also puts our wastewater system and its ongoing needs in professional hands with Illinois American Water, a company that is familiar with Alton and its residents."
Walker added a key component of the deal is Illinois American Water's commitment to continued employment for current city wastewater employees. There will be continued employment in current roles for all existing city employees as well as training, career advancement and professional development opportunities.
The total value of the proposed transaction is approximately $53.8 million, subject to certain adjustments provided in the agreement.
The Alton wastewater system serves approximately 23,000 customers, including customers in the nearby communities Bethalto and Godfrey.
Illinois American Water has owned, operated and maintained the water system serving Alton for the past 140 years.
"Illinois American Water appreciates the continued confidence the Alton City Council has shown in us by accepting our proposal," said Karen Cooper, senior manager, Illinois American Water. "Illinois American Water is part of the Alton community. We have been providing water service here for more than 140 years. We are excited
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WTR Aqua America, Inc. 35.90 -0.01
EVRG Evergy, Inc. 58.11 -0.19
PCG PG&E Corporation 15.76 +0.32
ED Consolidated Edison, Inc. 77.33 -1.24
^DJI Dow Jones Industrial Average 25,569.77 +144.01
HBI Hanesbrands Inc. 16.67 +0.07
PVH PVH Corp. 113.68 -0.65
^VIX CBOE Volatility Index 15.49 +0.06
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approval, the deal could close in First Quarter 2019.

Cooper said Illinois American Water is committed to making capital improvements to the infrastructure of the wastewater system, including upgrades to the city's wastewater treatment facility, pump station improvements, and completion of requirements set forth in the city's long-term control plan included in Alton's National Pollution Discharge Elimination System (NPDES) permit.

Bruce Hauk, president, Illinois American Water, said the company is committed to continued growth and economic development in the River Bend region, which includes Alton. A recent study by the University of Illinois said the sale of the wastewater system assets to Illinois American Water would mean $65.8 million overall economic impact in Alton in the first five years.

"This is an exciting acquisition for Illinois American Water and our team of employees in Alton and throughout the state of Illinois," said Hauk.

**Cautionary Statement Concerning Forward-Looking Statements.**

Certain statements in this press release are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements relate to, among other things, the execution of a definitive purchase agreement; the completion of the proposed acquisition; the ability to satisfy closing and other conditions related to the proposed transaction, including obtaining regulatory approvals; anticipated capital investments; and the ability to achieve certain benefits, synergies and goals relating to the transaction and the operations to be acquired. These statements are based on the current expectations of management of Illinois American Water. There are a number of risks and uncertainties that could cause actual results to differ materially from these forward-looking statements, including with respect to (1) obtaining the regulatory and other approvals required for the acquisition; (2) satisfying other conditions to the closing of the acquisition; (3) the occurrence of the benefits and synergies expected or predicted to occur as a result of the acquisition; (4) unexpected costs, liabilities or delays associated with the acquisition or the integration of the acquired business; (5) regulatory, legislative, local or municipal actions affecting the water and wastewater industries, which could adversely affect Illinois American Water; and (6) other economic, business and other factors. Forward-looking statements are not guarantees or assurances of future performance or results, and Illinois American Water and its affiliates do not undertake any duty to update any forward-looking statement

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ILLINOIS AMERICAN WATER

## Illinois American Water Acquires Sundale Utilities, Inc.

***Acquisition adds both water and wastewater customers***

May 18, 2018 03:40 PM Eastern Daylight Time

PEORIA, Ill.--(BUSINESS WIRE)--Illinois American Water President Bruce Hauk today announced the Company's acquisition of Sundale Utilities, Inc. The purchase of the water and wastewater systems adds approximately 1,415 new wastewater customers and approximately 475 water customers to the Company's customer base.

The Illinois Commerce Commission (ICC) approved the sale for $2 million on May 2, 2018. Today, Illinois American Water acquired the water and wastewater systems.

According to Brad Spurgeon, Vice President of Sundale Utilities, Inc., significant investment needs coupled with his retirement led to the decision to sell the systems. He said, "Over 60 years ago when the utility systems were created, there was a great need for water and sewer infrastructure in Washington Estates and for a sewer system in the Sundale area. This need is stronger today than ever before."

He explained, "Guidelines have become more stringent and the investment needed to remain in compliance has grown beyond our capacity. A benefit of selling the systems to Illinois American Water is knowing they will make the critical investment needed and will care for our customers as we have over the years."

Illinois American Water plans to invest an estimated $4.4 million over the first five years of ownership. This investment includes security and safety improvements including improved chemical storage and electrical upgrades for reliability. The Company will also complete a hydraulic study to ensure critical water pressure for service and fire protection. Water mains and water meters will also be replaced and upgraded. Additional wastewater improvements include installing a new aeration system, sewer main lining and overall system rehab for reliability and safety.

"Systems across the nation are facing incredible investment needs for public health and safety. We are committed to upgrading these systems and ensuring quality water and reliable wastewater service to our new customers," said Roger Goodson, sr. manager of field operations and production for Illinois American Water's Peoria District.

New customers will soon receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing, payment options and more.

The appraisal process used for the Sundale Utilities, Inc. water and wastewater systems was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. The Sundale Utilities, Inc. systems will be incorporated into the company's Peoria District, which currently serves residents in Peoria, West Peoria,

Bartonville, Bellevue, Rome, Mapleton, Farmington and parts of several surrounding townships. Dunlap, Hanna City and the Timber Logan Water District are sale for resale (wholesale) customers.

**About Illinois American Water** - Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,000 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

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Contacts
Illinois American Water
Karen Cotton
External Affairs Manager
309-566-4126



Control Number: 48448

Item Number: 1

Addendum StartPage: 0

48448

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

**Sale, Transfer, or Merger (STM) Application Instructions**

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER**: The ALJ will issue a final order issuing or amending the applicable CCNs

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| **FAQ:** | **Terms** |
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| ***Who can use this form?*** | ***Transferor***: Seller |
| Any retail public utility that provides water or wastewater service in Texas. | ***Transferee***: Purchaser |
| ***Who is required to use this form?*** | ***CCN***: Certificate of Convenience and Necessity |
| A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area. | ***STM***: Sale, Transfer, or Merger |
| | ***IOU***: Investor Owned Utility |



**Application Summary**

**Transferor:** Patton Village Water Company, Inc.
*(selling entity)*
**CCN No.s:** 11193

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** City of Patton Village
*(acquiring entity)*
**CCN No.s:**

☒ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Montgomery

## Table of Contents

Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part E: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☒ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☒ | List of Customer Deposits | Part B: Question 5 |
| ☐ | Partnership Agreement | Part C: Question 7 |
| ☐ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ | Certificate of Account Status | Part C: Question 7 |
| ☒ | Financial Audit | Part C: Question 10 |
| ☐ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☒ | Capital Improvement Plan | Part C: Question 10 |
| ☐ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☐ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |

## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

Proposed action of this application is for the sale of all of the water system(s) under CCN No.. 11193.

2. The proposed transaction will require (check all applicable):

For **Transferee** (Purchaser) CCN:

- ☐ Obtaining a NEW CCN for Purchaser
- ☐ Transfer all CCN into Purchaser's CCN (Merger)
- ☐ Transfer Portion of CCN into Purchaser's CCN
- ☒ Transfer all CCN to Purchaser and retain Seller CCN
- ☐ Uncertificated area added to Purchaser's CCN

For **Transferor** (Seller) CCN:

- ☒ Cancellation of Seller's CCN
- ☐ Transfer of a Portion of Seller's CCN to Purchaser
- ☐ Only Transfer of Facilities, No CCN or Customers
- ☐ Only Transfer of Customers, No CCN or Facilities
- ☐ Only Transfer CCN Area, No Customers or Facilities

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Patton Village Water Co., Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P. O. Box 308, Spring, Texas 77383-0308

Phone: (713) 248-1465 Email:

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Alan P. Petrov, Johnson Petrov LLP Title: City Attorney

Mailing Address: 2929 Allen Parkway, Suite 3150, Houston, Texas 77019

Phone: (713) 489-8977 Email: apetrov@johnsonpetrov.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: November 9, 2012

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 2011-2200-UCR

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

- ☐ There are *no* customers that will be transferred
- ☒ # of customers without deposits held by the transferor 227
- ☒ # of customers with deposits held by the transferor* 323

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: City of Patton Village
(individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☐ WSC ☒ Other:

B. Mailing Address: 16940 Main Street, Splendora, Texas 77372

Phone: (281) 689-9511 Email: llarrant@pattonvillage.us

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Alan P. Petrov Title: City Attorney

Address: 2929 Allen Parkway, Suite 3150, Houston, Texas 77019

Phone: (713) 489-8977 Email: apetrov@johnsonpetrov.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☐ N/A

7. The legal status of the transferee is:

- ☐ Individual or sole proprietorship
- ☐ Partnership or limited partnership (*attach* Partnership agreement)
- ☐ Corporation
  Charter number (as recorded with the Texas Secretary of State):
- ☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
  Charter number (as recorded with the Texas Secretary of State):
  ☐ Articles of Incorporation and By-Laws established (*attach*)
- ☒ Municipally-owned utility
- ☐ District (MUD, SUD, WCID, FWSD, etc.)



- ☐ County
- ☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
- ☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: n/a

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Leah Tarrant, CMO
Position: Mayor Ownership % (if applicable): 0.00%
Address: 16940 Main Street, Splendora, Texas 77372
Phone: (281) 689-9511 Email: ltarrant@pattonvillage.us

Name: Sarah Smith
Position: Council Position 1 Ownership % (if applicable): 0.00%
Address: 16940 Main Street, Splendora, Texas 77372
Phone: (281) 689-9511 Email:

Name: Garry Hershmann
Position: Council Position 2 Ownership % (if applicable): 0.00%
Address: 16940 Main Street, Splendora, Texas 77372
Phone: (281) 689-9511 Email:

Name: Scott Anderson
Position: Council Position 3 Ownership % (if applicable): 0.00%
Address: 16940 Main Street, Splendora, Texas 77372
Phone: (281) 689-9511 Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



Item 9 – Continued

David Daniel
16940 Main Street, Splendora, Texas 77372
Telephone: (281) 689-9511
Council Position 4

William Reeves
16940 Main Street, Splendora, Texas 77372
Telephone: (281) 689-9511
Council Position 5

***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or See Attachment "D"
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

**Part D: Proposed Transaction Details**

**11. A.** Proposed Purchase Price: $ 900,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☐ Yes ☒ N/A

Total Original Cost of Plant in Service: $

Accumulated Depreciation: $

Net Book Value: $

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $

Accumulated Amortization: $

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $

Accumulated Amortization: $

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☐ No ☒ Yes The entire water system will be reconstructed with funding from the USDA. TCEQ correspondence detailing current system non-compliance is attached as Attachment "F."



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

The USDA has committed a loan and grant for the purchase and reconstruction of the water system. Funding is immediately available upon completion of the purchase. See USDA Letter of Commitment, Attachment "E."

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

The city and owners of the current system have reached an agreement to sell/buy the current system through USDA funding. The funding also includes the upgrades to two current wells and a new facility. It is a loan/grant project to be paid by the City over the next 40 years.

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $

Accumulated Depreciation of Plant: $

Cash: $

Notes Payable: $

Mortgage Payable: $

(Proposed) Acquisition Adjustment*: $ *Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

Other (NARUC account name & No.):

Other (NARUC account name & No.):

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

No billing change is proposed.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

n/a



**Part E: CCN Obtain or Amend Criteria Considerations**

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

This transaction will eliminate old, metal pipes in the distribution system, replace outdated meters, provide fire protection and cap water wells that are currently in the floodway. The new system will provide safe water for the consumers with a new, reliable system that is compliant with all state and federal drinking water requirements.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

The City was recently appointed Emergency Manager of the Peach Creek Dam & Lake Club Water System by the PUC and is making positive changes to bring the system into TCEQ compliance. The City has also constructed a wastewater facility and is properly running this system.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

There will be temporary disruption to the land while the water system is reconstructed; however, after reconstruction, the environment will be better protected and maintained as the new system will not be subject to repeated line breaks and maintenance requirements.

**20.** How will the proposed transaction serve the public interest?

Once the system is transferred to the City, the City will be able to make all needed system upgrades necessary.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

1) Roman Forest Consol. MUD (Montgomery) CCN: 11327; 2) City of Splendora (Liberty, Montgomery) CCN: 11727; 3) T&W Water Service (Montgomery) CCN: 12892; 4) Quadvest LP (Montgomery) CCN: 11612; 5) Crystal Springs Water Co., Inc. (Montgomery) CCN: 11373; 6) Aqua Texas Inc. (Montgomery) CCN: 1157; 7) Consumers Water Inc. (Montgomery) CCN: 10347; 8) Montgomery County and 9) Lone Star Groundwater Conservation District.



**Part F: TCEQ Public Water System or Sewer (Wastewater) Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 1700503 (7 digit ID)

Name of PWS:

Date of last TCEQ compliance inspection: June 16, 2015 (attach TCEQ letter)

Subdivisions served:

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility:

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | 2 | 2" | | Residential |
| 548 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| Total Water Connections: | | 550 | | Total Sewer Connections: | |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☐ No ☒ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters): See Attachment "H"

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| Additional well production capacity is needed | | |
| Additional service pump capacity is needed; and | | |
| Additional hydropneumatic tank capacity is needed. | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☐ No ☒ Yes: City of Patton Village *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: 550 Sewer:

Control Number: 48505

Item Number: 1

Addendum StartPage: 0

48505

**Application for Sale of a Retail Public Utility**

Submitted to:

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

For:

Crest Water Company
P.O. Box 460
840 Betsy Road
Keene, Texas 76049

Issue Date: June 22, 2018

RECEIVED
2018 JUL -2 AM 10:49
PUBLIC UTILITY COMMISSION
FILING CLERK

Prepared Either By or
Under The Direction Of: Tamara M. Warrick, P.E.

STATE OF TEXAS
TAMARA M. WARRICK
128638
LICENSED
PROFESSIONAL ENGINEER

Tamara M. Warrick, P.E.
06/22/2018

consulting environmental engineers, inc.
150 n. harbin drive – suite 408 • stephenville, tx 76401
phone: (254) 968-8130 fax: (254) 968-8134
email: ceeinc@ceeinc.org registered firm: #F-2323

**Crest Water Company**
**Mustang Creek Ownership Transfer**
**Exhibit Cross Reference**

| Exhibit I.D. | Description |
|---|---|
| I | Project Summary |
| II | PUC STM Form |
| III | Maps/Drawings |
| IV | Notice Form A |
| V | Notice of Proposed Rate Change |
| VI | Legal Documents |
| VII | Crest Water Company Tariff |
| VIII | TCEQ Correspondence |

1

**Crest Water Company**
**Project Summary**

2

consulting environmental engineers, inc.
190 n. harbin drive – suite 408 • stephenville, tx 76401
phone: (254) 968-8130 fax: (254) 968-8134
email: ceeinc@ceeinc.org registered firm: #F-2323

## PROJECT SUMMARY

**Crest Water – Mustang Creek Ownership Transfer**

Mustang Creek Estates PWS (CCN No. 13055) has had multiple violations and is under enforcement by TCEQ. Multiple boil water notices were provided to customers under the current owner's operation. Crest Water Company proposes to provide customers with continuous and adequate water.

On December 8th, 2016 Crest Water Company and Shelcon Services entered into an agreement for the purchase of Mustang Creek Estates PWS. Upon approval of the transfer by the PUC, Shelcon Services will deed the Mustang Creek Estates water system facilities to Crest Water Company to ensure continuous and adequate service to Mustang Creek Estates customers.

Crest Water Company has taken over daily operational services and since that time, has strived to make corrections to deficiencies that need immediate attention. For example, Crest Water Company has installed a new air compressor for the pressure tank due to previous air compressor becoming inoperable. Crest Water Company has also installed a new gas chlorination system to correct absence of chlorine in the system, and updated and fixed multiple items in the chlorinator room. The exterior and interior of the pumphouse have been repaired to help stop deterioration, and the water system lots have been cleaned up and mowed/weedeated. A Drought Contingency Plan is now in place for the public water system. Lead-copper samples and numerous other samples have also been taken as required by the TCEQ.

Crest Water Company has made numerous other improvements along with the ones mentioned above and will continue to make improvements to Mustang Creek Estates PWS upon approval of the transfer.



**Crest Water Company**
**PUC STM Form**



## Application for Sale, Transfer, or Merger of a Retail Public Utility

Pursuant to Chapter 13.251 of the Texas Water Code

**Docket Number:** _____

(this number will be assigned by the Public Utility Commission after your application is filed)

7 copies of the application, including the original, along with one copy of the portable electronic storage medium (such as CD or DVD) containing the GIS data shall be filed with

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

No later than seven days after filing the application for the boundary change, provide a copy of each paper map and a portable electronic storage medium (such as CD, flash drive or DVD) containing complete and identical data to the portable electronic storage medium submitted above to

Texas Natural Resources Information System
1700 N. Congress Ave, Room B40
Austin, Texas 78701

**TABLE OF CONTENTS**

**Part A – General Information** ..... 2
**Part B – Current Service Provider or Seller Information** ..... 2
**Part C – Purchaser or Transferee Information** ..... 3
**Part D – Historicial Financial Information** ..... 9
**Part E – Projected Information** ..... 12
**Part F – Public Water System Information** ..... 16
**Part G – Oaths and Notices** ..... 18





### Part A – General Information

*RN# [redacted] *CN# [redacted] * (PRIOR TCEQ ID numbers)

1. Proposed action of application (check all the boxes that apply):
[X] Sale of [X] All [ ] Portion of the [X] Water system(s) under CCN No.: 13055
[ ] Acquisition [ ] Sewer system(s) under CCN No.:
[ ] Lease/Rental

[ ] Transfer of [ ] All [ ] Portion of the [ ] Certificated water service area – CCN No.:
[ ] Certificated sewer service area – CCN No.:

If only a portion of a system or certificated service area is affected by this transaction, please specify the areas or subdivision involved:

[redacted]

and to:
[ ] Obtain a CCN for the transferee (purchaser) – indicate if purchaser will take the seller's CCN
[ ] Amend the transferee's CCN No.:
[X] Merge or consolidate public utilities 12037
[ ] Cancel CCN of the transferor (seller)

2. Proposed effective date of this transaction: 1/1/2019
(Must be at least 120 days after proper notice is provided)

### Part B – Current Service Provider or Seller Information

**Questions 3 through 5 apply to the transferor (current service provider or seller)**

3. For the current CCN holder or service provider please indicate:
A. Name: [redacted]
(Individual, Corporation or Other Legal Entity)
who is a(n):of [X] Individual [ ] Corporation [ ] WSC [ ] HOA or POA [ ] Other

B. Utility Name (If different than above): [redacted]
Address: [redacted] Telephone: (AC) [redacted]

C. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.
Name: [redacted] Title: Engineer
Address: [redacted] Telephone: (AC) [redacted]

Fax: (254) 968-8134 Email: ceeinc@ceeinc.org

4. About the last rate increase for the system or facilities being transferred:
   A. What was the effective date of the last rate increase? 5/25/2004
   B. Was notice of this increase provided to the Public Utility Commission of Texas (commission or PUC) or a predecessor regulatory authority?
[X] No [ ] Yes- Application/Docket Number: Date

5. Please provide a list of all customers affected by this transaction who have deposits held by the transferor or seller utility, if any, and include the following information (attach additional sheets if necessary):

| Name and Address of Utility Customer | Date of Deposit | Amount of Deposit | Amount of Unpaid Interest on Deposit |
|---|---|---|---|
| None | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Part C – Purchaser or Transferee Information

☞ **Questions 6 through 16 refer to the transferee or purchaser.**

6. For the person or entity acquiring the facilities and/or CCN:
Applicant: James A. Dyche dba Crest Water Company
(Individual, Corporation, or Other Legal Entity)
Utility Name: Crest Water Company
(If different than above)
Utility Address: P.O. Box 460, 840 Betsy Road Keene, TX 76049
Fax: (817) 517-7141 Email: mldyche@gmail.com Telephone (AC): (817) 645-5493
CCN Numbers held prior to the filing of this application: 12037

7. Check the appropriate box and provide information regarding the legal status of the transferee applicant:
[X] Individual
[ ] Home or Property Owners Association
[ ] Partnership; attach copy of partnership agreement
[ ] Corporation; provide charter number as recorded with the Office of the Secretary of State for Texas:
[ ] Non-profit, member owned, member-controlled Cooperative Corporation (Article 1434(a) Water Sewer Service Corporation); provide charter number:



[ ] Municipally-owned utility
[ ] District (MUD, SUD, WCID, etc.)
[ ] County
[ ] Other (please explain):

8. If the applicant is an *Individual* or sole proprietorship, provide the following information. If not, skip to the next question.

| | | | |
|---|---|---|---|
| Name: | James A. Dyche | Email | mldyche@gmail.com |
| Address | P.O. Box 460, 840 Betsy Road Keene, TX 76049 | | |
| Telephone (AC): | (817) 645-5493 | Fax (AC): | (817) 517-7141 |

9. If the applicant is other than an *Individual*, provide the following information regarding the officers or partners of the legal entity applying for the transfer. You must complete either question 8 or question 9, whichever applies to the transferee applicant.

| | | | |
|---|---|---|---|
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |
| •Name: | | Telephone (AC): | |
| Address: | | | |
| Position: | | Ownership % (if applicable): | 0.00% |

- Attach additional sheet(s) if necessary –

☞ **Important:** • If the applicant is a for-profit corporation, please provide a copy of the corporation's "Certification of Account Status" from the State Comptroller Office. This "Certification of Account Status" can be obtained from:



Texas Comptroller of Public Accounts
P. O. Box 13528, Capitol Station
Austin, Texas 78711
1-800-252-5555

- If the applicant is an Article 1434a water supply or sewer service corporation or other non-profit corporation, please provide a copy of the Articles of Incorporation and By-Laws.

10. Contact person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney or accountant.

| | | | |
|---|---|---|---|
| Name: | Charles P. Gillespie, III | Title: | Engineer |
| Address: | 150 N. Harbin Dr., STE 408, Stephenville, TX 76401 | Telephone (AC): | (254) 968-8130 |
| Fax # | (254) 968-8134 | Email | ceeinc@ceeinc.org |
| Relationship to the applicant: | Engineer | | |

☞ **IF THERE ARE MORE THAN TWO PARTIES INVOLVED IN THIS TRANSACTION, PLEASE ATTACH SHEETS PROVIDING THE INFORMATION REQUIRED IN QUESTION 6 THROUGH QUESTION 10 FOR EACH PARTY**

11. Please respond to each of the following questions. Attach additional sheets if necessary.
   A. Describe the experience and qualifications of the applicant to provide adequate utility service to the requested area

The applicant has acted as the owner and operator of Crest Water Company since its inception in 1981, prior to that he worked as the Public Works Director for the City of Keene, Texas. The applicant currently holds a Class B Groundwater license. The applicant currently operates 16 water systems that serve approximately 1184 water supply connections.

   B. Has the applicant acquiring the CCN or facilities or an affiliated interest of the applicant been under enforcement action by the PUC, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG) or the Environmental Protection Agency (EPA) in the past for noncompliance with rules, orders or State Statutes? [X] Yes [ ] No

   If yes, please attach copies of any correspondence with these regulatory agencies concerning these enforcement actions and describe any actions and efforts to comply with those requirements. Attach additional sheets if needed.

See Exhibit VIII. Crest Water is actively working to get the Mustang Creek Estates PWS out of TCEQ Enforcement. The most recent letter from TCEQ regarding Mustang Creek Enforcement is attached.

   C. Describe the source and availability of funds required to make the planned or required improvements, if any, to meet minimum requirements of the TCEQ and PUC and ensure continuous and adequate service.

Improvement costs will be funded by capital provided from Crest Water Company's ongoing operations. It is anticipated that any required capital expenditure for future improvements will be funded by equity capital, to the extent not funded by internally generated funds.



   D. Describe the anticipated impact of this transaction on the quality of utility service and explain any anticipated changes in the quality of service.

The Mustang Creek Estates PWS has had multiple violations and is under enforcement by TCEQ. Multiple boil water notices were issued to customers under the current owner's operation. Crest Water Company proposes to provide customers with continuous and adequate water.

   E. How will the transaction serve the public interest?

Current customers of Mustang Creek Estates PWS have experienced various issues with operation and service. Crest Water proposes to address these issues and provide continuous and adequate water to existing and future customers.

12. Please describe the nature of the proposed transaction:

Upon approval of the transfer by the PUC, Shalcon Services will deed the Mustang Creek Estates water system facilities to Crest Water Company to ensure continuous and adequate service to Mustang Creek Estates customers. On December 9th, 2015 Crest Water Company and Shalcon Services entered into an agreement for the purchase of Mustang Creek Estates PWS. See Exhibit VI.

13. If the transferee applicant is an Investor Owned Utility (IOU) and will be under the rate jurisdiction of the PUC, please provide the following information. Water supply or sewer service corporations and political subdivisions of the state should mark this section N/A:
N/A

A.
- Total Purchase Price:
- Total Original Cost (as recorded on books of seller or merging entity):
- Accumulated Depreciation as of the proposed effective date of the transaction:
- Contributions in Aid of Construction:
  - Specific surcharges approved by TCEQ or PUC:
  - Revenues from explicit customer agreements:
  - Developer Contributions (please explain):
  - Other Contributions (please explain):

Total Contributions in Aid of Construction

- Net Book Value:

- If the Original Cost or any of the above items has been established in a rate case proceeding by the PUC, the TWC or the TCEQ, please provide the Application/Docket Number and date:

  Application/Docket Number: [ ] Date: [ ]

- If the applicant is not under the rate jurisdiction of the TCEQ, only the purchase price and information related to Contributions in Aid of Construction is required.

Please provide any other information concerning the nature of the transaction you believe should be given consideration if not explained elsewhere in the application.
[attach additional sheet(s) if necessary]:

Currently the Mustang Creek Estates PWS serves 79 of 91 total connections. The system has the capability to produce 40 GPM while the requirement for the current capacity is 47.4 GPM. This is approximately 119% total capacity. Upon approval of the transfer by the PUC, Crest Water Company proposed to drill a new well to be able to supply water to all 91 connections and meet TCEQ minimum standards.

C. Complete the following proposed entries listed below as shown in books of purchasing (or surviving) company. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations.

| | |
|---|---|
| Utility Plant in Service: | |
| Plant Acquisition Adjustment: | |
| Extraordinary Loss on Purchase: | |
| Accumulated Depreciation of Plant: | |
| Cash: | |
| Notes Payable: | |
| Mortgage Payable: | |
| Others (please list): | |

As the purchaser, I understand that it is **my responsibility** in any future rate proceeding to provide written evidence and support for the original cost and installation date of all facilities used and useful for providing utility service.

Purchaser's Initials: [ ] Date: [ ]

14. Please indicate the proposed effect of this transaction on the rates to be charged to the affected customers:

[ ] All the customers will be charged the same rates as they were charged before the transaction.
[ ] Some [X] All customers will be charged different rates than they were charged before the transaction.



If rates are changing, please explain:

Increase in production cost.

[ ] Applicant is an IOU and intends to file with the commission or municipal regulatory authority an application to change rates of some/all of its customers as a result of this transaction. If so, please explain:

[ ] Other. Please explain:

15. List all neighboring water and /or sewer utilities, cities, and political subdivisions providing the same service within two (2) miles of area affected by this proposed transaction. This information should be available from the water utility database (WUD) or Applicant's licensed water operator.

Monarch Utilities I LP (CCN No. 12983)
Chuck Bell Water Systems (CCN No. 12190)
City of Fort Worth (CCN No. 12311)

16. Financial, Managerial and Technical information for the acquiring entity.



**Part D – Historical Financial Information**

| HISTORICAL BALANCE SHEETS | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **CURRENT ASSETS** | | | | | | |
| Cash | 29,339.76 | 28,485.21 | 27,655.54 | 26,850.04 | 26,068.00 | 25,285.96 |
| Accounts Receivable | 124,104.61 | 119,907.64 | 115,852.98 | 111,935.25 | 108,150.00 | 104,364.75 |
| Inventories | 190,603.17 | 186,865.86 | 183,201.82 | 179,609.63 | 176,087.87 | 172,566.11 |
| Income Tax Receivable | | | | | | |
| Other | | | | | | |
| **Total** | 344,047.55 | 335,258.90 | 326,710.34 | 318,394.92 | 310,305.87 | 302,216.82 |
| **FIXED ASSETS** | | | | | | |
| Land | 22,510.18 | 21,854.54 | 21,218.00 | 20,600.00 | 20,000.00 | 19,400.00 |
| Collection/Distribution System | | | | | | |
| Buildings | 94,133.66 | 95,567.16 | 97,022.50 | 98,500.00 | 100,000.00 | 101,500.00 |
| Equipment | 62,562.79 | 63,639.59 | 65,142.43 | 66,471.87 | 67,828.44 | 69,185.01 |
| Other | 760,338.59 | 735,368.19 | 710,889.72 | 686,889.26 | 663,353.15 | 639,817.04 |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | 939,545.21 | 916,628.47 | 894,272.66 | 872,461.13 | 851,181.59 | 829,902.05 |
| **TOTAL ASSETS** | 1,282,064.83 | 1,250,794.96 | 1,220,287.76 | 1,190,524.65 | 1,161,487.40 | 1,132,450.27 |
| **CURRENT LIABILITIES** | | | | | | |
| Accounts Payable | 1,358.55 | 1,338.47 | 1,318.69 | 1,299.20 | 1,280.00 | 1,260.80 |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | 2,630.31 | 2,578.74 | 2,528.17 | 2,478.60 | 2,430.00 | 2,381.40 |
| **TOTAL** | 3,988.86 | 3,917.20 | 3,846.86 | 3,777.80 | 3,710.00 | 3,642.20 |
| **LONGTERM LIABILITIES** | | | | | | |
| Notes Payable, Long-term | 375,947.71 | 370,391.83 | 365,916.06 | 359,525.18 | 354,212.00 | 348,898.82 |
| Other | | | | | | |
| **TOTAL LIABILITIES** | 379,936.56 | 374,309.03 | 368,764.92 | 363,302.98 | 357,922.00 | 352,541.02 |
| **OWNER'S EQUITY** | | | | | | |
| Paid in Capital | 70,358.09 | 68,978.52 | 67,626.00 | 66,300.00 | 65,000.00 | 63,700.00 |
| Retained Equity | 831,261.93 | 807,050.42 | 783,544.10 | 760,722.42 | 738,565.46 | 716,406.50 |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | 901,620.02 | 876,028.94 | 851,170.10 | 827,022.42 | 803,565.46 | 780,106.50 |
| **TOTAL LIABILITIES AND EQUITY** | 1,281,556.58 | 1,250,337.97 | 1,219,935.01 | 1,190,325.40 | 1,161,487.46 | 1,132,649.52 |
| **WORKING CAPITAL** | 902,128.27 | 876,485.92 | 851,522.84 | 827,221.67 | 803,565.46 | 779,909.25 |
| **CURRENT RATIO** | 3.37 | 3.34 | 3.31 | 3.28 | 3.25 | 3.21 |
| **DEBT TO EQUITY RATIO EQUITY TO TOTAL ASSETS** | 0.42 | 0.43 | 0.43 | 0.44 | 0.45 | 0.45 |



| HISTORICAL INCOME STATEMENT | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **METER NUMBER** | | | | | | |
| Existing Number of Taps | 1,162.00 | 1,132.00 | 1,119.00 | 1,082.00 | 1,052.00 | 1,031.00 |
| New Taps Per Year | 22.00 | 31.00 | 16.00 | 27.00 | 40.00 | 23.00 |
| **Total Meters at Year End** | 1,184.00 | 1,163.00 | 1,135.00 | 1,119.00 | 1,092.00 | 1,054.00 |
| **METER REVENUE** | | | | | | |
| Fees Per Meter | 120.98 | 117.46 | 114.04 | 110.87 | 107.49 | 104.27 |
| Cost Per Meter | 59.51 | 58.20 | 56.92 | 55.66 | 54.44 | 53.22 |
| **Operating Revenue Per Meter** | 180.49 | 175.66 | 170.95 | 166.38 | 161.93 | 157.48 |
| **GROSS WATER REVENUE** | | | | | | |
| Fees | 37,168.00 | 35,738.00 | 34,384.00 | 33,042.00 | 31,771.00 | 30,500.16 |
| Other | 799,451.93 | 787,637.37 | 775,997.41 | 764,529.47 | 753,231.00 | 738,166.38 |
| **Gross Income** | 836619.93 | 823,375.37 | 810,381.10 | 797,571.70 | 785,002.00 | 768,666.54 |
| **OPERATING EXPENSES** | | | | | | |
| General & Administrative | 694,447.86 | 685,874.43 | 677,406.85 | 669,043.80 | 660,784.00 | 652,524.20 |
| Interest | | | | | | |
| Other | | | | | | |
| **NET INCOME** | 142,172.07 | 137,500.93 | 132,954.56 | 128,527.67 | 124,218.00 | 116,142.34 |

| HISTORICAL EXPENSE DETAIL | CURRENT YEAR (A) | A-1 YEAR | A-2 YEAR | A-3 YEAR | A-4 YEAR | A-5 YEAR |
|---|---|---|---|---|---|---|
| **GENERAL/ADMINISTRATIVE EXPENSES** | | | | | | |
| Salaries | 314,010.00 | 304,864.00 | 295,985.00 | 287,364.00 | 278,994.00 | 270,624.00 |
| Office Expense | 20,284.00 | 19,693.00 | 19,120.00 | 18,563.00 | 18,022.00 | 17,481.00 |
| Computer Expense | | | | | | |
| Auto Expense | 38,923.00 | 37,790.00 | 36,689.00 | 35,620.00 | 34,583.00 | 24,208.00 |
| Insurance Expense | 29,569.00 | 28,708.00 | 27,872.00 | 27,060.00 | 26,272.00 | 25,484.00 |
| Telephone Expense | | | | | | |
| Utilities Expense | 87,697.00 | 79,511.00 | 77,195.00 | 74,947.00 | 72,764.00 | 70,581.00 |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | 14,346.00 | 13,928.00 | 13,522.00 | 13,128.00 | 1,276.00 | 12,364.00 |
| Other | 52,221.00 | 51,671.00 | 50,166.00 | 48,705.00 | 47,286.00 | 45,867.00 |
| **Total** | 552,250.00 | 536,165.00 | 520,549.00 | 505,387.00 | 490,667.00 | 466,610.00 |
| **% Increase Per Year** | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| **OPERATIONAL EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | 192,455.00 | 186,850.00 | 181,408.00 | 176,124.00 | 170,994.00 | 168,864.10 |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | | | | | | |
| **% Increase Per Year** | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| **ASSUMPTIONS** | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |



**Part E – Projected Information**

**PROJECTED BALANCE SHEETS**

| | START UP | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|---|---|---|---|---|---|---|
| **CURRENT ASSETS** | | | | | | |
| Cash | 30,219.96 | 31,126.56 | 32,060.35 | 33,022.16 | 34,012.83 | 35,033.21 |
| Accounts Receivable | 128,448.27 | 132,943.96 | 137,597.00 | 142,412.90 | 147,397.35 | 152,556.26 |
| Inventories | 194,415.24 | 198,303.54 | 202,269.61 | 206,315.00 | 210,441.30 | 215,650.13 |
| Income Tax Receivable | | | | | | |
| Other | | | | | | |
| **Total** | 353,083.47 | 362,374.06 | 371,926.97 | 381,750.06 | 397,854.48 | 402,239.60 |
| **FIXED ASSETS** | | | | | | |
| Land | 23,185.48 | 23,881.05 | 24,597.48 | 25,335.40 | 26,095.46 | 26,878.33 |
| Collection/Distribution System | | | | | | |
| Buildings | 92,721.65 | 91,330.83 | 89,960.86 | 88,611.45 | 87,282.28 | 85,973.04 |
| Equipment | 61,311.54 | 60,085.31 | 58,883.60 | 57,705.93 | 56,551.81 | 55,420.77 |
| Other | 785,815.17 | 811,812.51 | 838,345.49 | 865,429.34 | 893,079.62 | 921,312.25 |
| Less: Accum. Depreciation or Reserves | | | | | | |
| **Total** | 963,033.84 | 987,109.69 | 1,011,787.43 | 1,037,082.12 | 10,653,009.17 | 1,089,584.40 |
| **TOTAL ASSETS** | 1,316,116.45 | 1,346,968.36 | 1,380,643.60 | 1,415,169.69 | 1,450,538.68 | 1,486,802.15 |
| **CURRENT LIABILITIES** | | | | | | |
| Accounts Payable | 1,378.92 | 1,399.51 | 1,420.60 | 1,441.91 | 1,463.54 | 1,485.49 |
| Notes Payable, Current | | | | | | |
| Accrued Expenses | | | | | | |
| Other | 2,682.92 | 2,736.57 | 2,791.31 | 2,847.14 | 2,904.07 | 2,962.16 |
| **Total** | 4,061.84 | 4,136.18 | 4,211.91 | 4,289.04 | 4,367.61 | 4,447.65 |
| **LONGTERM LIABILITIES** | | | | | | |
| Notes Payable, Long-term | 381,486.92 | 387,310.73 | 393,120.39 | 399,017.19 | 405,002.45 | 411,077.49 |
| Other | | | | | | |
| **TOTAL LIABILITIES** | 385,648.76 | 391,446.91 | 397,332.20 | 403,306.26 | 409,370.06 | 415,525.14 |
| **OWNER'S EQUITY** | | | | | | |
| Paid in Capital | 71,765.30 | 73,200.56 | 74,644.57 | 76,157.86 | 77,681.02 | 79,234.64 |
| Retained Equity | 856,199.79 | 881,885.78 | 908,342.36 | 935,592.63 | 963,660.41 | 992,570.22 |
| Other | | | | | | |
| Current Period Profit or Loss | | | | | | |
| **TOTAL OWNER'S EQUITY** | 927,965.04 | 955,086.34 | 983,006.93 | 1,011,750.49 | 1,041,341.42 | 1,071,804.86 |
| **TOTAL LIABILITIES AND EQUITY** | 1,313,613.80 | 1,346,533.25 | 1,380,339.22 | 1,415,056.72 | 1,450,711.49 | 1,487,329.99 |
| **WORKING CAPITAL** | 928,467.69 | 955,522.46 | 983,311.30 | 1,011,853.45 | 1,041,168.61 | 1,071,277.01 |
| **CURRENT RATIO** | 3.41 | 3.44 | 3.47 | 3.51 | 3.54 | 3.58 |
| **DEBT TO EQUITY RATIO** | 0.42 | 0.41 | 0.40 | 0.40 | 0.39 | 0.39 |
| **EQUITY TO TOTAL ASSETS** | 0.71 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 |



**PROJECTED INCOME STATEMENT**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **METER NUMBER** | | | | | | |
| Existing Number of Taps | 1,184 | 1,230 | 1,267 | 1,284 | 1,309 | |
| New Taps Per Year | 46 | 37 | 18 | 25 | 39 | |
| **Total Meters at Year End** | 1,230 | 1,267 | 1,285 | 1,309 | 1,348 | |
| **METER REVENUE** | | | | | | |
| Fees Per Meter | 124.61 | 128.35 | 132.20 | 136.17 | 140.25 | |
| Cost Per Meter | 60.85 | 62.22 | 63.62 | 65.05 | 66.51 | |
| **Operating Revenue Per Meter** | 185.46 | 190.56 | 195.81 | 201.12 | 206.76 | |
| **GROSS WATER REVENUE** | | | | | | |
| Fees | 38,654.00 | 40,200.00 | 41,808.00 | 43,481.00 | 45,220.00 | |
| Other | 811,433.71 | 823,615.36 | 8,359,693.59 | 848,509.14 | 861,236.77 | |
| **Gross Income** | 850,097.71 | 863,815.81 | 877,778.06 | 891,989.94 | 906,456.81 | |
| **OPERATING EXPENSES** | | | | | | |
| General & Administrative | 703,128.46 | 711,917.57 | 720,816.54 | 729,826.74 | 738,949.58 | |
| Interest | | | | | | |
| Other | | | | | | |
| **NET INCOME** | 146,969.26 | 151,898.25 | 156,961.52 | 162,163.20 | 167,507.24 | |



**PROJECTED EXPENSE DETAIL**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **GENERAL/ADMINISTRATIVE EXPENSES** | | | | | | |
| Salaries | 323,431.00 | 333,133.00 | 343,127.00 | 353,421.00 | 364,024.00 | |
| Office Expense | 20,892.00 | 21,519.00 | 22,165.00 | 22,830.00 | 23,515.00 | |
| Computer Expense | | | | | | |
| Auto Expense | 40,091.00 | 41,294.00 | 42,533.00 | 43,809.00 | 45,123.00 | |
| Insurance Expense | 60,456.00 | 61,370.00 | 32,311.00 | 33,281.00 | 34,279.00 | |
| Telephone Expense | | | | | | |
| Utilities Expense | 84,353.00 | 86,844.00 | 89,491.00 | 92,175.00 | 94,491.00 | |
| Depreciation Expense | | | | | | |
| Property Taxes | | | | | | |
| Professional Fees | 14,776.00 | 15,219.00 | 15,676.00 | 16,146.00 | 16,631.00 | |
| Other | 54,817.00 | 56,462.00 | 58,156.00 | 59,900.00 | 61,698.00 | |
| **Total** | 586,816.00 | 585,882.00 | 603,459.00 | 621,562.00 | 640,209.00 | |
| **% Increase Per Year** | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 0.00% |
| **OPERATIONAL EXPENSES** | | | | | | |
| Salaries | | | | | | |
| Auto Expense | | | | | | |
| Utilities Expense | | | | | | |
| Depreciation Expense | | | | | | |
| Repair & Maintenance | 198,229.00 | 204,176.00 | 210,301.00 | 216,610.00 | 223,108.00 | |
| Supplies | | | | | | |
| Other | | | | | | |
| **Total** | 198,229.00 | 204,176.00 | 210,301.00 | 216,610.00 | 223,108.00 | |
| **% Increase Per Year** | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 0.00% |
| **ASSUMPTIONS** | | | | | | |
| Interest Rate/Terms | | | | | | |
| Utility Cost/gal. | | | | | | |
| Depreciation Schedule | | | | | | |
| Other | | | | | | |

**PROJECTED SOURCES AND USES OF CASH STATEMENTS**

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | TOTALS |
|---|---|---|---|---|---|---|
| **SOURCES OF CASH** | | | | | | |
| Net Income | 151,898.25 | 156,961.52 | 162,183.20 | 167,507.24 | 172,997.72 | |
| Depreciation (If Funded) | | | | | | |
| Loan Proceeds | 96,859.26 | 78,261.97 | 56,956.91 | 32,549.84 | 4,589.09 | |
| Other | | | | | | |
| **Total Sources** | 248,757.51 | 235,223.49 | 219,140.11 | 200,057.07 | 177,586.81 | |
| **USES OF CASH** | | | | | | |
| Net Loss | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Principle Portion of Pmts. | 32,700.00 | 32,700.00 | 32,700.00 | 32,700.00 | 32,700.00 | |
| Fixed Asset Purchase | 50,000.00 | 0.00 | 23,000.00 | 18,000.00 | 0.00 | |
| Reserve | 11,000.00 | 18,000.00 | 10,000.00 | 14,000.00 | 19,000.00 | |
| Other | | | | | | |
| **Total Uses** | 93,700.00 | 50,700.00 | 65,700.00 | 62,700.00 | 61,700.00 | |
| **NET CASH FLOW** | 155,057.51 | 184,523.49 | 153,420.11 | 137,357.07 | 125,886.81 | |
| **DEBT SERVICE COVERAGE** | | | | | | |
| Cash Available for Debt | 38,300.00 | 38,300.00 | 38,300.00 | 38,300.00 | 38,300.00 | |
| **SERVICE (CADS)** | | | | | | |
| Net Income (Loss) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Depreciation, or Reserve Interest | 6,200.00 | 6,200.00 | 6,200.00 | 6,200.00 | 6,200.00 | |
| **Total** | 44,500.00 | 44,500.00 | 44,500.00 | 44,500.00 | 44,500.00 | |
| **REQUIRED DEBT SERVICE (RDS)** | | | | | | |
| Principle Plus Interest | 38,300.00 | 38,300.00 | 38,300.00 | 38,300.00 | 38,300.00 | |
| **DEBT SERVICE COVERAGE RATIO** | | | | | | |
| CADS Divided by RDS | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |



**Part F – TCEQ Public Water or Sewer System Information**

☛ Please answer questions 17 through 22 on a different sheet for each physically Distinct system being transferred or acquired.

17. A. For Water Systems, TCEQ Public Water System Identification Number: 2 2 0 0 3 5 3

Date of last inspection: 12/09/2016

B. For Wastewater Systems:

-TCEQ Discharge Permit Number: W Q - -
-Name of Permitee:
-Date of application to transfer Discharge Permit submitted:
-Date of application to transfer Discharge Permit approved by TCEQ:

18. A. Are any improvements required to meet TCEQ or PUC standards? [X] Yes [ ] No. If yes, please explain:

Crest Water is actively working to get Mustang Creek Estates out of TCEQ Enforcement. The most recent letter from TCEQ regarding Mustang Creek Enforcement is attached. See Exhibit VIII.

B. Is there a moratorium on new connections? [ ] Yes [X] No. If yes, please explain:

C. Provide details of each required major capital improvement to correct the deficiencies and meet the TCEQ or PUC standards (attach additional sheets if necessary):

| Description of the Required Improvement | Schedule to Complete | Estimated Cost |
|---|---|---|
| See Exhibit VIII | 7/1/2018 | $ 1,000.00 |
| | | |

19. Does the system being transferred operate within the city limits of a municipality or within district boundaries? [ ] Yes [X] No

If yes, indicate the number of customers within the city limits or district boundaries:
Water Sewer

☛ Attach copy of franchise agreement or consent letter from the city or district.



20. Do you currently purchase water or sewer treatment capacity from another source? [ ] Yes [X] No
[ ] Water [ ] Sewer Purchased on a [ ] Regular [ ] Seasonal [ ] Emergency Basis

- Source: % of total supply: 0.00%

21. List the number of existing connections to be effected by this transaction.

| Water | | | Sewer | |
|---|---|---|---|---|
| | -Non Metered | -2"meter | -Residential Connection | |
| 79 | -5/8" or 3/4" meter | -3" meter | -Commercial Connection | |
| | -1" meter | -4" meter | -Industrial Connection | |
| | -1 1/2" meter | -Other | -Other | |
| | Total Water Connections: | 79 | Total Sewer Connections | |

20. Has the system reached 85% of its capacity based on TCEQ's minimum requirements? [X] Yes [ ] No
If yes, please explain what steps are being taken to address the capacity issues:

Currently the Mustang Creek Estates PWS serves 79 of 91 total connections. The system has the capability to produce 40 GPM while the requirement for the current capacity is 47.4 GPM. This is approximately 119% total capacity. Upon approval of the transfer by the PUC, Crest Water Company proposed to drill a new well to be able to supply water to all 91 connections and meet TCEQ minimum standards.

23. List the name, class, and license number of the operator(s) that will be responsible for the system:

| Name | Class | License# |
|---|---|---|
| James A. Dyche | B | WG0001237 |
| Charles Evans | B | WG0002789 |
| David E. Crane | C | WG0011110 |
| Terry Barber | C | WG0011109 |

24. Attach the following maps with each copy of the application:
a. One small scale map clearly showing affected service area with enough detail to accurately locate the area if the application is for the transfer of all or a portion of a CCN.
b. One large scale map showing the proposed service area boundaries being sold, transferred, or merged and, if available, the existing and proposed facilities. Color coding should be used to differentiate existing from proposed facilities. Facilities and service area boundaries should be shown with such exactness that they can be located on the ground. If transferring area not currently in a CCN or a portion of an existing CCN area please attach the following hard copy maps with each copy of the application:
1. A general location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.
2. A map showing only the proposed area by:
i. metes and bounds survey certified by a licensed state or registered professional land surveyor; or
ii. projectable digital data with metadata (proposed areas should be in a single record and clearly labeled, data disk should be included); or
iii. following verifiable natural and man-made landmarks, or
iv. a copy of recorded plat map with metes and bounds.
3. A written description of the proposed service area.





(4) Existing public utility easements for all water lines and mains and piping in the Water System.

ARTICLE 3
BUYER'S CONSIDERATION TO SELLER

(1) BUYER will pay SELLER fifty thousand dollars ($50,000.00) at closing of sale which shall occur within sixty (60) days of TCEQ/PUC approval of the transfer of the Mustang Creek Estates Water System to Crest Water.

BUYER will operate the SYSTEM according to TCEQ/PUC rules until TCEQ/PUC approves the transfer of the System to Crest Water and the ensuing closing occurs or until the expiration of one year, whichever occurs first.

(2) BUYER will pay all costs involved in permitting, constructing, testing, and placing into public service any additional, future TECQ/PUC approved water wells and associated production, storage, and treatment facilities necessary to provide continuous and adequate water utility service to the Service Area.

(3) BUYER shall prepare and prosecute, at its expense, the application for TCEQ/PUC approval of this sale. Each party shall bear the cost of their own attorneys, engineers, accountants, consultants, or other agents in obtaining such state approval.

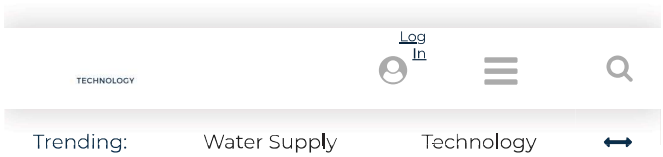
(4) BUYER shall pay all surveying costs associated with this transaction.

(5) BUYER shall pay all property taxes from the day of closing.

ARTICLE 4
TITLE INSURANCE/CLOSING/FORT WORTH AGREEMENT

(1) SELLER will not be required to furnish BUYER with an Owner's Policy of Title Insurance. However, the property to be conveyed in fee shall be conveyed by General Warranty Deed without liens or encumbrances of any kind on any portion of the Water System. If SELLER cannot furnish BUYER with an Owner's Policy of Title Insurance or cannot convey this property by General Warranty Deed without liens or encumbrances of any kind on any portion of the Water System then BUYER and SELLER may negotiate a settlement to transfer the Water System to BUYER which may include agreements with those parties who do hold titles or interests in the Water System, reduction or elimination of $50,000.00 purchase price, or other stipulations to facilitate the transfer.

Sellers warrants that it has good, clear and marketable title to all assets (real and personal) to be conveyed hereunder. This warranty shall survive closing and shall not be subject to any limitations otherwise provided by law.




4 JULY 2018 NEWS

# Aqua America to acquire Cheltenham Township's wastewater system

Aqua America's Pennsylvania subsidiary has signed an agreement to acquire Cheltenham Township's wastewater system for $50.25m.

This wastewater system currently serves around 10,500 connections in Montgomery County.

The deal must be approved by the Pennsylvania Public Utility Commission.





This deal will be Aqua Pennsylvania's fourth acquisition application referred to the Pennsylvania PUC after the enactment of Act 12 in 2017.

The Pennsylvania subsidiary has asset purchase agreements with New Garden Township wastewater system, which has 2,100 customers, in Chester County and the Limerick Township wastewater system, which has 5,400 customers, in Montgomery County.

Furthermore, the firm signed an agreement with East Bradford Township in Chester County last December to acquire its 1,200-customer wastewater collection system.

Aqua provides water service to East Bradford just as it does with Cheltenham.

These four systems total over 19,000 wastewater connections. It will almost double Aqua Pennsylvania's existing 22,000-customer wastewater operation.

The Act 12 encourages consolidation of the fragmented industry to benefit customers, the environment and local governments. This deal is expected to benefit customers as it would leverage





compliance expertise, purchasing power gained through economies of scale and operational efficiencies.

Aqua America chairman and CEO Christopher Franklin said: "We are pleased with the momentum we are gaining to reach agreements with municipal systems.

"Act 12 is having its intended impact, allowing municipalities to be compensated for the fair value of their water and wastewater assets and enabling utility professionals to bring expertise to systems in need."

Aqua Pennsylvania president Marc Lucca said: "As with our pending agreements with New Garden, East Bradford and Limerick, the Aqua Pennsylvania team is looking forward to assuming Cheltenham's sewer utility responsibilities so the township can direct its attention and capital to other priorities.

"We are anxious to begin the work necessary to help the township meet the requirements of an outstanding Pennsylvania Department of Environmental Protection consent order, specifically related to inflow and infiltration issues there."





Aqua has plans to invest almost $50m over the next decade to improve Cheltenham's wastewater system.

Aqua America is a publicly traded water utility, serving almost three million people in the US states of Pennsylvania, Ohio, Texas, New Jersey, Indiana, North Carolina, Illinois and Virginia.

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# Aqua Illinois Completes Village of Manteno Wastewater System Acquisition

*July 5, 2018*

***Aqua to provide lower wastewater rates, commits $7.5 million for capital investments***

BRYN MAWR, Pa. & MANTENO, Ill.– Aqua America Inc. (NYSE: WTR) and the Village of Manteno, Illinois announced today they have completed the acquisition of the village's wastewater system, which serves more than 9,000 people through approximately 3,800 wastewater connections. Under the agreement, approved by the Illinois Commerce Commission May 31, Aqua Illinois purchased the system for $25 million.

Aqua has committed to investing more than $7.5 million in wastewater system upgrades over the next ten years to continue enhancements already initiated by the village. The company is also planning other future investments to improve reliability, ensure adequate capacity for growth, and protect receiving streams through new and innovative treatment techniques.

"Aqua Illinois is happy to be able to provide the residents and businesses of Manteno with quality wastewater services, reasonable rates and excellent customer service," said Craig Blanchette, president of Aqua Illinois. "We have provided our award-winning water service to the village since 2007, and our company has been providing water and wastewater utility service throughout Illinois for more than 130 years, serving more than 250,000 people in 13 counties throughout the state. Our staff has extensive industry experience, and we look forward to serving Manteno for decades to come."

Aqua America Chairman and CEO Christopher Franklin noted the continued opportunity he sees in the municipal market.

"We are excited by the momentum we are gaining in reaching agreements with municipal systems," said Franklin. "This purchase is all part of Aqua's efforts to do our part to strengthen infrastructure for communities in the states we serve, which means improved compliance, service and environmental stewardship for generations to come."

In addition, Manteno Mayor Tim Nugent outlined several benefits to the sale.

"We are very happy to continue to work with Aqua. The sale of our wastewater system allows the village to reduce costs to our homeowners and still maintain the sale proceeds in an investment account," said Nugent. "Our citizens will see an immediate, positive impact on their monthly expenses, as the village eliminates each resident's garbage collection fee of $16.55 per month for the coming year. This will save each homeowner almost $200 per year this year and more in the years to come as garbage rates rise. This transaction locks in Manteno's stable financial future for generations."

Aqua Illinois provides water and wastewater service to approximately 250,000 people in 13 counties.

Including the Village of Manteno, Aqua America has five fair market value asset purchase agreements in place. Other agreements are with Cheltenham, East Bradford, Limerick and New Garden townships in Pennsylvania. A settlement agreement with Limerick is before the Pennsylvania Public Utility Commission, and the New Garden commission order is on appeal to Pennsylvania Commonwealth Court. When it completes these acquisitions, the company will welcome approximately 23,000 new customer connections to the Aqua family.

**About Aqua**

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com (http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.aquaamerica.com%2F&esheet=51832720&newsitemid=20180705005561&lan=en-US&anchor=AquaAmerica.com&index=1&md5=3913bb83f82f6f32e77bab512d7f1aeb) for more information, or follow Aqua on Facebook at facebook.com/MyAquaAmerica and on Twitter at @MyAquaAmerica.

**Forward-looking statement**

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: the company's ability to invest capital in the system over the next ten years. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions; the company's ability to fund needed infrastructure; changes in regulations or regulatory treatment; availability and access to capital; the cost of capital; disruptions in the credit markets; and other factors discussed in our Annual Report on Form 10-K and our Quarterly Report on Form 10-Q, which are filed with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Aqua America's business, please refer to Aqua America's annual, quarterly and other SEC filings. Aqua America is not under any obligation—and expressly disclaims any such obligation—to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

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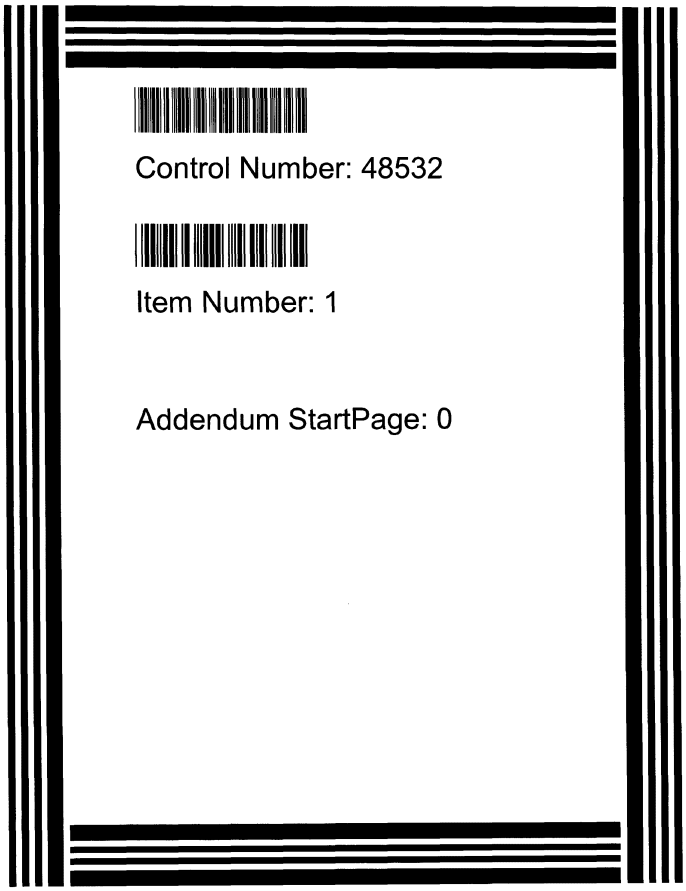


48532

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

**Sale, Transfer, or Merger (STM) Application Instructions**

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller

***Transferee:*** Purchaser

***CCN***: Certificate of Convenience and Necessity

***STM***: Sale, Transfer, or Merger

***IOU***: Investor Owned Utility

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**Application Summary**

**Transferor:** J & S Water Company, LLC.
*(selling entity)*
**CCN No.s:** 12085 & 20658

☐ Sale ☒ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** Nero Suplly, LLC
*(acquiring entity)*
**CCN No.s:** 12252 & 20366

☐ Water ☐ Sewer ☐ All CCN ☒ Portion CCN ☐ Facilities transfer

**County(ies):** Harris, Chambers & Liberty

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 |
| ☒ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☐ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ Certificate of Account Status | Part C: Question 7 |
| ☐ Financial Audit | Part C: Question 10 |
| ☒ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☒ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☒ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☐ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☐ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |

## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

The purpose of this transaction is for Nerro Supply, LLC to purchase portions of the water and sewer assets of J&S Water Company, LLC. and to add these transferred service areas to its water and sewer Certificates of Convenience and Necessity. This application is only for the sale and transfer of the existing water and sewer service areas of the transferred systems. No additional service area is being requested nor is any service area being amended as a part of this application. The existing water and sewer systems being purchased and transferred are Maple Leaf Gardens PWS #1011493 & WQ12342-001 Oakland Village PWS #1010049 and Woodland Acres PWS #0360027 & WQ11720-001.(See Attached Purchase and Sale Agreement between the Parties)

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☐ Cancellation of Seller's CCN |
| ☐ Transfer all CCN into Purchaser's CCN (Merger) | ☒ Transfer of a Portion of Seller's CCN to Purchaser |
| ☒ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: J & S Water Company, LLC
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 8010 Thompson Road, Highlands, Texas 77562

Phone: (281) 590-4359 Email: jswaterco@yahoo.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Jerry Nowling Title: Director

Mailing Address: 8010 Thompson Road, Highlands, Texas 77562

Phone: (281) 590-4359 Email: jswaterco@yahoo.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B: (See Attached Water & Sewer Tariffs)

A. Effective date for most recent rates: February 1, 2017

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 46438

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred (See Attached List of Customer Deposits)

☐ # of customers without deposits held by the transferor 130

☒ # of customers with deposits held by the transferor* 423

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Nerro Supply, LLC
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O. Box 691008, Houston, TX 77269

Phone: (281) 355-1312 Email: customerservice@gulfutility.net

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Chuck Peterson Title: Manager

Address: P.O. Box 691008, Houston, TX 77269

Phone: (281) 355-1312 Email: chuck@gulfutility.net

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 32043563207

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: N/A

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Charlie Castper
Position: Manager Ownership % (if applicable): 50.00%
Address: P.O. Box 1629 Spring, TX 77383
Phone: Email:

Name: Gregory Pappas
Position: Manager Ownership % (if applicable): 50.00%
Address: 718 Westcott Street Houston, TX 77007
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

11. A. Proposed Purchase Price: $ 1,485,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

B. Transferee has a copy of an inventory list of assets to be transferred (*attach*): (See Attached Assets List)

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 1,317,280.00

Accumulated Depreciation: $ 833,368.00

Net Book Value: $ 483,912.00

C. **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $
Accumulated Amortization: $

D. **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $
Accumulated Amortization: $

12. A. Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes

B. If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

N/A

13. Provide any other information concerning the nature of the transaction you believe should be given consideration:

None

14. Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 1,317,280.00 |
| Accumulated Depreciation of Plant: | $ 833,368.00 |
| Cash: | $ 594,000.00 |
| Notes Payable: | $ 891,000.00 |
| Mortgage Payable: | $ 0.00 |
| (Proposed) Acquisition Adjustment*: | $ 0.00 |

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

Other (NARUC account name & No.): None

Other (NARUC account name & No.): None

15. A. Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

No customer's rates will be changed by this application.

B. If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

No change in rates will occur within the next twelve months as a results of this application.



**Part E: CCN Obtain or Amend Criteria Considerations**

16. Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

The quality of utility service will increase as the applicant will operate these water and sewer systems after the sale of the utility through its operating company, Gulf Utility Services which operates other utilities systems located in the region and will be able to response quickly to emergencies.

17. Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

The applicant owns and operates a number of water and sewer utilities systems in the region. The applicant will maintain these systems in compliance with the rules and regulations of the PUC and TCEQ, as well as federal and local laws, rules and regulations.

18. Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies) (See Attached correspondence regarding enforcement actions)

☐ No ☒ Yes

19. Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

The service area affected by this transaction will continue to receive water and sewer service from Nerro. This eliminates the need for land owners to use individual wells and septic systems. Thus, protecting the environment in the area from potential sources of contamination and encouraging rationalization of water and sewer service.

20. How will the proposed transaction serve the public interest?

This transaction will be in the well-being and welfare of the public as the utility will be able to provide continuous and adquate water and sewer service to the customers of the affected systems.

21. List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

(See Attached List of neighboring utilities within 2 miles)



**Part F: TCEQ Public Water System or Sewer (Wastewater) Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

22. A. For Public Water System (PWS):

TCEQ PWS Identification Number: 1011493, 1010049 & 0360027 (7 digit ID)

Name of PWS: Maple Leaf Gardens, Oakland Village & Woodland Acres

Date of last TCEQ compliance inspection: See Enforcement Actions (attach TCEQ letter)

Subdivisions served: Maple Leaf Gardens and Windfern Meadows

B. For Sewer service: WQ 11720 - 001 &

TCEQ Water Quality (WQ) Discharge Permit Number: WQ 12342 - 001 (8 digit ID)

Name of Wastewater Facility: Maple Leaf Gardens & Woodland Acres

Name of Permitee:

Date of last TCEQ compliance inspection: See Enforcement Actions (attach TCEQ letter)

Subdivisions served: Maple Leaf Gardens and Windfern Meadows

Date of application to transfer permit *submitted* to TCEQ: July 18, 2018

23. List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | 2 | 2" | 332 | Residential |
| 546 | 5/8" or 3/4" | | 3" | 1 | Commercial |
| 5 | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 553 | | Total Sewer Connections: | 333 |

24. A. Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

B. Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

C. Is there a moratorium on new connections?

☒ No ☐ Yes:

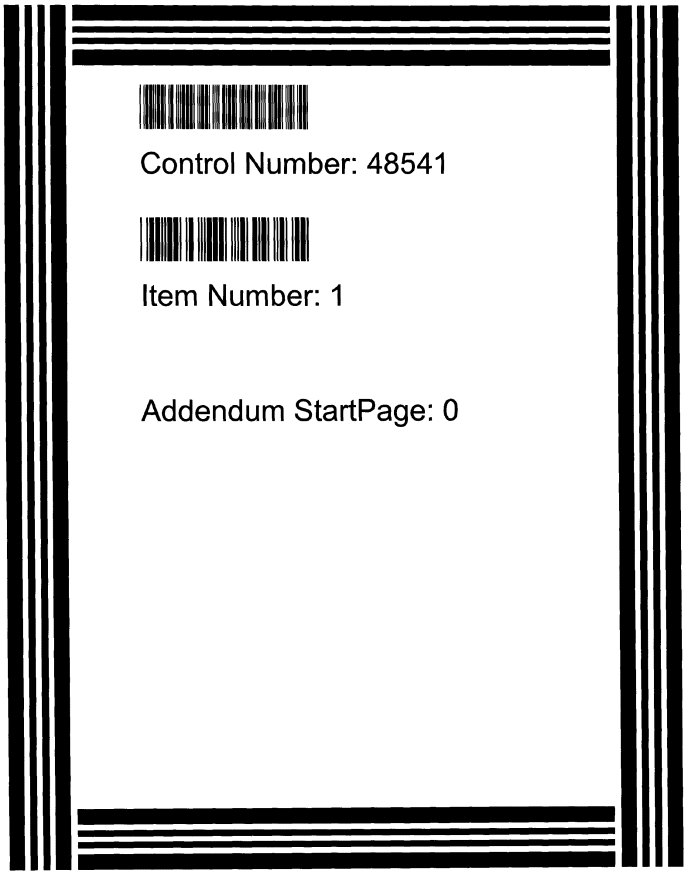
25. Does the system being transferred operate within the corporate boundaries of a municipality?

☐ No ☒ Yes: City of Old River - Winfree *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: 5 Sewer: 5





48541

# Application for Sale, Transfer, or Merger of a Retail Public Utility

2018 JUL 24 AM 10:58

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller

***Transferee:*** Purchaser

***CCN:*** Certificate of Convenience and Necessity

***STM:*** Sale, Transfer, or Merger

***IOU:*** Investor Owned Utility



## Application Summary

**Transferor:** Summit Ridge, LLC. *(selling entity)*

**CCN No.s:** 13264

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** Bandera East Utility, LP. *(acquiring entity)*

**CCN No.s:** 13118

☐ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Medina

## Table of Contents

Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part E: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 |
| ☐ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☐ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ Certificate of Account Status | Part C: Question 7 |
| ☐ Financial Audit | Part C: Question 10 |
| ☐ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☒ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☐ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☒ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☐ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

The purpose of this transaction is for Bandera East Utility, LP. to purchase the water assets of Summit Ridge, LLC. and to add the transferred service area to its water Certificate of Convenience and Necessity. This application is only for the sale and transfer of the existing water sewer service area of the transferred system. No additional service area is being requested nor is any service area being amended as a part of this application. The existing water system being purchased and transferred is Summit Ridge PWS #1630048.(See Attached Offer to Purchase Agreement between the Parties)

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☒ Cancellation of Seller's CCN |
| ☒ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Summit Ridge, LLC (individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 110 River Crossing Blvd., Suite 1, Spring Branch Texas 78070

Phone: (830) 228-5263 Email: rbw@gwtxlaw.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Randall B. Wilburn Title: Attorney

Mailing Address: 7000 N. Mopac Expressway, Suite 200, Austin,Texas 78731

Phone: (512) 535-1661 Email: rbw@gwtxlaw.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B: (See Attached Water Tariff)

A. Effective date for most recent rates: June 25, 2018

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 47463

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred

☒ # of customers without deposits held by the transferor 17

☐ # of customers with deposits held by the transferor* _____

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Bandera East Utility, LP. (individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O. Box 2501, Boerne, TX 78006

Phone: (830) 537-5755 Email: carla@kwutility.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Bret W Fenner, P E Title: Engineer

Address: 200 Harbor Circle, Georgetown, Texas 78633

Phone: (512) 264-9124 Email: bretfenner@yahoo.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 32051108010

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State): _____
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)

☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain): _____

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: N/A

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: John Mark Matkin
Position: Member — Ownership % (if applicable): 100.00%
Address: 8 Spencer Road, Suite 100, Boerne, Texas 78006
Phone: (830) 537-5755 — Email: johnmark@kwutility.com

Name:
Position: — Ownership % (if applicable): 0.00%
Address:
Phone: — Email:

Name:
Position: — Ownership % (if applicable): 0.00%
Address:
Phone: — Email:

Name:
Position: — Ownership % (if applicable): 0.00%
Address:
Phone: — Email:

**10.** **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A; (See Attached Historical Financial Statements)
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

**Part D: Proposed Transaction Details**

**11. A.** Proposed Purchase Price: $ 100,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 1,342,780.00
Accumulated Depreciation: $ 265,722.00
Net Book Value: $ 1,077,058.00

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $
Accumulated Amortization: $

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $
Accumulated Amortization: $

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

N/A

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

None

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ 1,342,780.00
Accumulated Depreciation of Plant: $ 265,722.00
Cash: $ 0.00
Notes Payable: $ 0.00
Mortgage Payable: $ 0.00
(Proposed) Acquisition Adjustment*: $ 0.00
*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)
Other (NARUC account name & No.): _____
Other (NARUC account name & No.): _____

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

No customer's rates will be changed by this application.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

No change in rates will occur within the next twelve months as a results of this application.



**Part E: CCN Obtain or Amend Criteria Considerations**

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

There will not be any significant impact on the quality of utility service, as the applicant will operate this water utility after the sale and transfer of the utility through its operating company, Kendall West Utility The applicant's operating company is located in the region and will be able to response quickly to emergencies.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

The applicant owns and operates a number of water and sewer utilities systems in the region. The applicant will maintain these systems in compliance with the rules and regulations of the PUC and TCEQ, as well as federal and local laws, rules and regulations.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

The service area affected by this transaction will continue to receive water service from Bandera East Utility. This eliminates the need for land owners to use individual wells. Thus, protecting the environment in the area from potential sources of contamination and encouraging rationalization of water service.

**20.** How will the proposed transaction serve the public interest?

This transaction will be in the well-being and welfare of the public as the utility will be able to provide continuous and adquate water service to the customers of the affected systems.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

(See Attached List of neighboring utilities within 2 miles)

## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 1630048 (7 digit ID)

Name of PWS: Summit Ridge

Date of last TCEQ compliance inspection: March 11, 2009 (attach TCEQ letter)

Subdivisions served: Summit Ridge

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility:

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| | 5/8" or 3/4" | 17 | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 17 | | Total Sewer Connections: | 0 |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

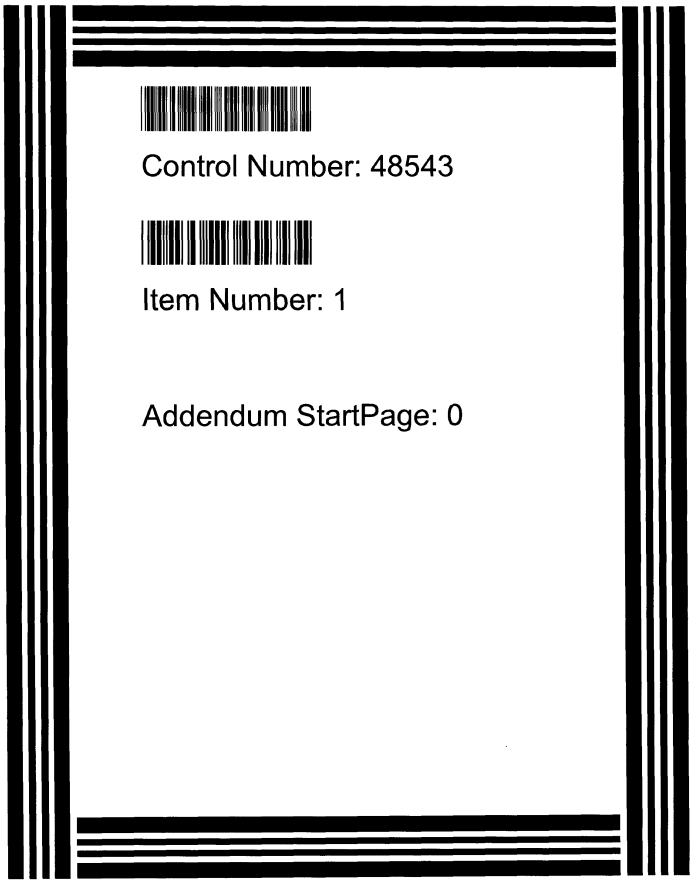
**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:



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48543

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**Terms**

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***Transferee***: Purchaser

***CCN***: Certificate of Convenience and Necessity

***STM***: Sale, Transfer, or Merger

***IOU***: Investor Owned Utility



## Application Summary

**Transferor:** Chambers Meadow Estate Water Company *(selling entity)*

**CCN No.s:** 12459

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** HILCO United Services, Inc. *(acquiring entity)*

**CCN No.s:** 12988

☐ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Ellis County

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
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| ☒ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☐ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |

## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

HILCO United Services, Inc. will acquire substantially all assets, both real and personal properties, of Chambers Meadow Estate Water Company, a privately-owned Texas water company in Italy, Ellis County, Texas. Buyer will not assume any of the seller's liabilities, but will merge the CCN of the seller into the buyer's CCN and cancel the seller's CCN. A copy of the purchase agreement is attached.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☒ Cancellation of Seller's CCN |
| ☒ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. **A.** Name: Chambers Meadow Estate Water Company
(individual, corporation, or other legal entity)
☒ Individual ☐ Corporation ☐ WSC ☐ Other:

**B.** Mailing Address: 4793 FM 639, Frost, Texas 76641-3544

Phone: (254) 678-1129 Email:

**C.** Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Lynn Whitsitt Title: Owner

Mailing Address: 4793 FM 639, Frost, Texas 76641-3544

Phone: (254) 678-1129 Email:

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

**A.** Effective date for most recent rates: July 2, 1998

**B.** Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 32049S

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are no customers that will be transferred

☒ # of customers without deposits held by the transferor 50

☒ # of customers with deposits held by the transferor* 7

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. **A.** Name: HILCO United Services, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

**B.** Mailing Address: P.O. Box 26, Itasca, Texas 76055

Phone: (254) 687-2331 Email: dcole@hilco.coop

**C.** Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Debra Cole Title: Board President

Address: P.O. Box 26, Itasca, Texas 76055

Phone: (254) 687-2331 Email: dcole@hilco.coop

**D.** If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

**E.** If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 01411399-00 8-9-1996

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: HILCO H2O

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Debra Cole
Position: Board President Ownership % (if applicable): 0.00%
Address: P.O. Box 26, Itasca, TX 76055
Phone: (254) 687-2331 Email: dcole@hilco.coop

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

11. **A.** Proposed Purchase Price: $ 45,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☒ No ☐ Yes ☐ N/A

Total Original Cost of Plant in Service: $

Accumulated Depreciation: $

Net Book Value: $

Information not available - No records from the seller.

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $

Accumulated Amortization: $

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $

Accumulated Amortization: $

12. **A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes

**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

The existing company did not have accurate financial records as far as original cost of assets so we have calculated to the best of our ability.

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 45,000.00 |
| Accumulated Depreciation of Plant: | $ |
| Cash: | $ |
| Notes Payable: | $ |
| Mortgage Payable: | $ |
| (Proposed) Acquisition Adjustment*: | $ |
| Other (NARUC account name & No.): | |
| Other (NARUC account name & No.): | |

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

**15.** **A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

No proposed rate changes at this time.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Yes, we intend to file an application to change the rates for all meters. Chambers Meadow current Tariff rates are $17.50 customer charge, including 2,000 free gallons, then $1.75 per 1000 gallons. There are 57 active meters. HILCO H2O's current rates are $35.00 customer charge that includes 2,000 gallons, $3.00 per 1,000 gallons up to 10,000 gallons, and $4.00 per 1,000 gallons after 10,000 gallons. We are uncertain at this time what rate will be proposed.



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

This will have a positive impact on the quality and quantity of water and the quality of service due to the full time staff, twenty-four/seven office/dispatch staff, service crew, equipment and faster response time thus providing a more reliable water system.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

HILCO United Services has purchased/managed and provided water to customers and has staffed quality Operators for the past twenty-one years. The meters in this system are adjacent to one of our systems.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

No impact or disruption will occur as a result of the transaction.

**20.** How will the proposed transaction serve the public interest?

It will provide more reliable water service.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

South Ellis County WSC, Files Valley WSC, City of Italy, Nash Forreston WSC



## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22.** **A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 0700071 (7 digit ID)
Name of PWS: Chambers Meadow Estate Water Company
Date of last TCEQ compliance inspection: November 1, 2017 (attach TCEQ letter)
Subdivisions served: Chambers Meadow Estates

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ (8 digit ID)
Name of Wastewater Facility:
Name of Permitee:
Date of last TCEQ compliance inspection: (attach TCEQ letter)
Subdivisions served:
Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| 57 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| Total Water Connections: | | | | Total Sewer Connections: | |

**24.** **A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

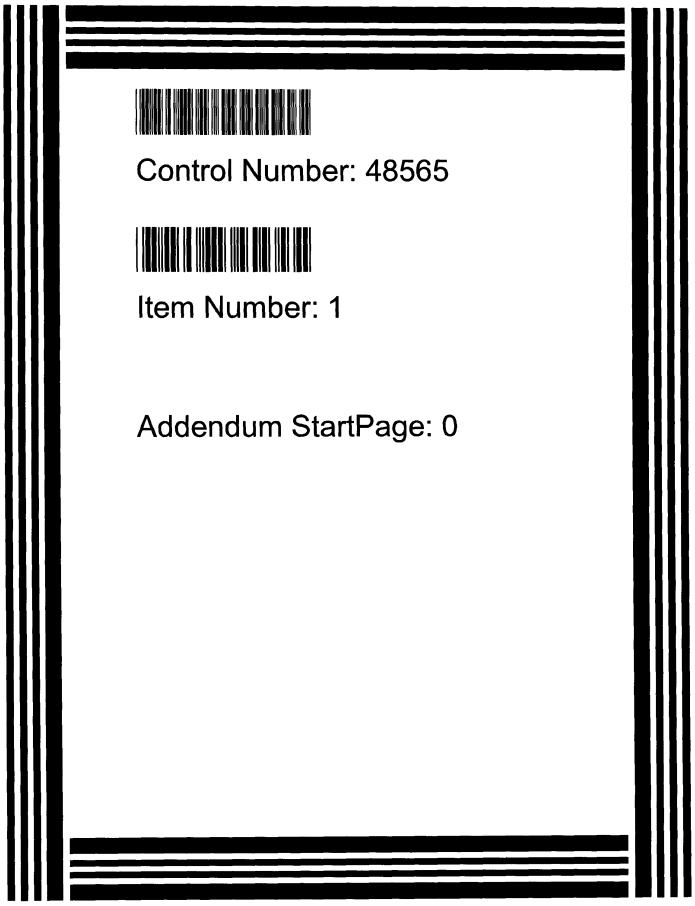
**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:





48565

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

2018 AUG -2 PM 3:36

PUBLIC UTILITY COMMISSION
FILING CLERK

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

| **FAQ:** | **Terms** |
|---|---|
| ***Who can use this form?*** Any retail public utility that provides water or wastewater service in Texas. ***Who is required to use this form?*** A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area. | ***Transferor***: Seller<br>***Transferee***: Purchaser<br>***CCN***: Certificate of Convenience and Necessity<br>***STM***: Sale, Transfer, or Merger<br>***IOU***: Investor Owned Utility |



## Application Summary

**Transferor**: Aqua Texas, Inc. *(selling entity)*
**CCN No.s**: 13201

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee**: Town of Buffalo Gap, Texas *(acquiring entity)*
**CCN No.s**: Not applicable

☒ Water ☐ Sewer ☐ All CCN ☒ Portion CCN ☒ Facilities transfer

**County(ies)**: Taylor

## Table of Contents

Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part E: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 |
| ☒ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☐ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ Certificate of Account Status | Part C: Question 7 |
| ☒ Financial Audit | Part C: Question 10 |
| ☐ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☐ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☒ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☒ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

See Attachment A.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☒ Obtaining a NEW CCN for Purchaser | ☐ Cancellation of Seller's CCN |
| ☐ Transfer all CCN into Purchaser's CCN (Merger) | ☒ Transfer of a Portion of Seller's CCN to Purchaser |
| ☒ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Aqua Texas, Inc. *(individual, corporation, or other legal entity)*
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 1106 Clayton Lane, Suite 400W, Austin, Texas 78723

Phone: (512) 990-4400 Email:

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Geoffrey P. Kirshbaum Title: Attorney

Mailing Address: Terrill & Waldrop, 810 West 10th Street, Austin, Texas 78701

Phone: (512) 474-9100 Email: gkirshbaum@terrillwaldrop.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: May 3, 2018

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: Tariff Control No. 48097

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred

☒ # of customers without deposits held by the transferor 246

☒ # of customers with deposits held by the transferor* 23

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Town of Buffalo Gap, Texas *(individual, corporation, or other legal entity)*
☐ Individual ☐ Corporation ☐ WSC ☒ Other: Municipality

B. Mailing Address: P.O. Box 506, Buffalo Gap, Texas 79508-0506

Phone: (325) 572-3347 Email:

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Eileen M. Hayman Title: Attorney

Address: Messer Rockefeller Fort, 500 Chestnut St., Suite 1601, Abilene, Texas 79602

Phone: (325) 701-7960 Email: eileen@txmunicipallaw.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☒ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☒ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☐ Corporation
Charter number (as recorded with the Texas Secretary of State):

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☒ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)

☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain): _____

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: Not applicable.

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: See Attachment D.
Position: _____ Ownership % (if applicable): 0.00%
Address: _____
Phone: _____ Email: _____

Name: _____
Position: _____ Ownership % (if applicable): 0.00%
Address: _____
Phone: _____ Email: _____

Name: _____
Position: _____ Ownership % (if applicable): 0.00%
Address: _____
Phone: _____ Email: _____

Name: _____
Position: _____ Ownership % (if applicable): 0.00%
Address: _____
Phone: _____ Email: _____

**10.** **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 397,500.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☐ Yes ☐ N/A

Total Original Cost of Plant in Service: $ _____

Accumulated Depreciation: $ _____

Net Book Value: $ _____

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☐ No ☐ Yes

Total Customer CIAC: $ _____
Accumulated Amortization: $ _____

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☐ No ☐ Yes

Total developer CIAC: $ _____
Accumulated Amortization: $ _____

**12.** **A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☐ No ☒ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

The Town has determined that there is a booster station which serves three connections at the top of a hill that is not compliant because it does not have ground storage. However, TCEQ personnel have inspected the system multiple times over the years and have not noted this as a non-compliant item despite observing the same. The Town plans to address this issue after it closes on the purchase of Gap Water System and use part of its USDA funding for this minor improvement project. Additionally, Gap Water System has experienced public drinking water quality exceedances of TCEQ's secondary standard for total dissolved solids set forth in 30 TAC § 290.105, but its wells are authorized for use by TCEQ. Further, Gap Water System has experienced intermittent fluctuation of water levels in its groundwater wells, particularly in times of drought. Both these issues will be resolved after the Town's purchase by providing Gap Water System with access to City of Abilene water. This project will also be financed by part of the Town's USDA funding.

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

The transaction will serve the public interest by enabling Gap Water System customers to have access to City of Abilene water, which is a reliable and consistent regional water source in the area. Aqua's Gap Water System wells have experienced problems in the past during times of drought. In some of those instances, Buffalo Gap has supplied Aqua with water on an emergency basis to use for the Gap Water System. Buffalo Gap currently utilizes City of Abilene Water indirectly through a contract with adjacent Steamboat Mountain Water Supply Corporation. However, Buffalo Gap is developing a project to receive its wholesale water supply directly from the City of Abilene and plans to use that water source to establish even better service in terms of reliability for both its current and future customers.

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ _____
Accumulated Depreciation of Plant: $ _____
Cash: $ _____
Notes Payable: $ _____
Mortgage Payable: $ _____
(Proposed) Acquisition Adjustment*: $ _____
*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)
Other (NARUC account name & No.): _____
Other (NARUC account name & No.): _____

**15.** **A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

The Town of Buffalo Gap plans to keep Aqua's Gap Water System rates in place for transferred customers immediately following the proposed transaction closing.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Not applicable.



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

The quality of service to Gap Water System customers will remain at a high level due to the Town of Buffalo Gap's experienced water system operator. Service will meet or exceed current levels at closing. Service quality will improve after the Town's USDA funded projects are completed.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

The Town of Buffalo Gap, Texas, does not hold a CCN, but has provided water service to its residents since 1961. Documents reflecting the Town of Buffalo Gap's compliance history for the past five years is attached. See Attachment H.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☐ No ☒ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

There will be no change with respect to environmental integrity or land impact/disruption as a result of the proposed transaction. Gap Water System will no longer need to be fully reliant on groundwater wells in this arid region of Texas which will represent an improvement to environmental integrity, particularly in times of drought.

**20.** How will the proposed transaction serve the public interest?

The transaction will serve the public interest by enabling Gap Water System customers to have access to City of Abilene water, which is a reliable and consistent regional water source in the area.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

See Attachment J.

**Part F: TCEQ Public Water System or Sewer (Wastewater) Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 2210023 (7 digit ID)

Name of PWS: Gap Water System

Date of last TCEQ compliance inspection: November 12, 2015 (attach TCEQ letter)

Subdivisions served: The Gap

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility: Not applicable.

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| 269 | 5/8" or 3/4" | | 3" | | Commercial |
| 1 | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 269 | | Total Sewer Connections: | 0 |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☐ No ☒ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| Not applicable. | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☐ No ☒ Yes: Town of Buffalo Gap *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: 4 Sewer:

PUCT Sale, Transfer, Merger
Page 9 of 20 (March 2018)



https://www.pottsmerc.com/news/million-sale-of-limerick-sewer-system-completed/article_c2829766-f124-57d9-8617-5cf820d4e1c6.html

# $75 million sale of Limerick sewer system completed

by Evan Brandt
Aug 8, 2018



Limerick's wastewater treatment plant on King Road is one of two that has been sold to Aqua PA.
Digital First Media File Photo

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LIMERICK >> The long-delayed sale of the Limerick Township sewer system to a private utility company for $75.1 million has finally been closed, township supervisors were informed this week.

The sale to Aqua Pennsylvania was approved by the Pennsylvania Utility Commission on July 13. The closing on the sale occurred on July 25, Assistant Township Manager/Treasurer Beth DiPrete said.

The system has two treatment plants, one on Possum Hollow Road and the other on King Road, as well as 18 pump stations and miles of underground pipe.

DiPrete said after deductions were made to the sale price to pay off a $3.7 million sewer bond incurred by the sewer authority, and other debts by the township, that the net gain for Limerick is $70,489,941.

Supervisors' Chairwoman Elaine DeWan said the board decided to sell the sewer system because of the potential for increased operating costs, and the need to pay for a number of major capital projects driven by the burgeoning population.

Twitter recap: Mega Projects and Sewer Systems

"When I moved here in 2001, there were 9,000 people and now there are 19,000," she said.

One of those capital projects can be seen at 646 Ridge Pike, where a new $10 million township and police building has risen where the former township building once stood. The township has been operating for months out of temporary quarters on South Limerick Road.

Plans call for the township to move back into the new offices on Aug. 15, when the township will be closed for business.

DiPrete said the township borrowed $6 million for that project because of the delay caused by the PUC in obtaining the money from the sewer system sale. "We initially thought it would close about December of last year," she said.





Another $4 million was borrowed to pay for the new public works garage built behind the new township building.

DeWan said the township built a new Limerick Fire Station on Ridge Pike and intends to undertake a $2.5 million renovation of the Linfield Fire station. Both fire companies are in the process of merging into a single company, but both stations are still needed, she said.

She said the sale will also fund other major capital projects, such as improvements to the intersection of Royersford Road and Linfield-Trappe Road.

"To pay for all that would have required us to double the township's taxes or more," DeWan said.

The sale was made easier, said DiPrete, by a change in Pennsylvania law on how the value of such facilities are calculated.

The transaction falls under the recently enacted Act 12, which allows municipalities that own water and wastewater systems to sell their systems to regulated public utilities at fair market valuation.

"Aqua is thrilled to welcome our new Limerick customers and employees," Aqua America Chairman and CEO Christopher Franklin, said in a prepared statement.

"This purchase was a collaborative effort that will allow us to bring benefits to the Limerick community by leveraging expertise in compliance, large-scale purchasing power and efficiencies in a larger, regional operation."

Including Limerick, Aqua America has four fair market value asset purchase agreements in place, with Cheltenham, East Bradford and New Garden townships in Pennsylvania.

Also aided by Act 12, Exeter Township in Berks County sold its sewer treatment plant to Pennsylvania American Water Co. for $96 million earlier this year.

In the same prepared statement, Aqua Pennsylvania President Marc Lucca says his team will bring a sharp environmental focus to the service they provide for Limerick's residents.

"It's imperative we return treated wastewater back to our rivers and streams cleaner than when we first take it out," Lucca said. "I welcome our new employees who've done a great job ensuring the Limerick system is compliant and well maintained, and look forward to serving our new

customers."

The sale of the Limerick system, which serves approximately 5,400 wastewater connections, comes with some historical baggage.

The township took over operation of the sewer system from the Limerick Sewer Authority in 2008 in what might be described as a hostile take-over and only after a protracted fight between the two.

Limerick Township Municipal Authority was created by the Limerick supervisors in 1966 and operated as an independent municipal authority.

In March, 2008, one month after the supervisors moved to dissolve the authority, the authority filed a court injunction to prevent the township from taking over the authority.

The township argued said such a power transfer would achieve cost savings for Limerick in the long run, while those representing the authority said pure politics were at play.

Much of the political accusations were aimed at former supervisors chairman David Kane, who was sentenced to four years in federal prison in 2012 after pleading guilty to filing a false income tax return, failure to file income tax returns, tax evasion and mail fraud.

Kane was a member of both the authority board and the board of supervisors and after he admitted publicly he wanted to install former supervisor Frank Kotch as sewer authority administrator, as well as install a member of Township Solicitor Joe McGrory's law firm as the authority solicitor, he was accused of cronyism.

But ultimately, the issue was resolved in the township's favor, after thousands of dollars in legal fees had been accumulated, and the transfer moved ahead in September of 2008.

Flash forward to 2016, when the Board of Supervisors unanimously approved the $75.1 million sale of the township sewer system to Aqua Pennsylvania Wastewater Inc.

The sale, which had been discussed previously, but not seriously, got more serious after the passage of Act 12 and the offers for the system started coming in much higher.





Aqua's $75.1 million bid came in 43 percent higher than the other two offers, includes an additional $400,000 for future developments and requires that sewer rates not be raised for three years.

Evan Brandt
@PottstownNews on Twitter

Evan Brandt has been a staff reporter for The Mercury for more than 20 years. He covers municipal, school district, political, state government, federal government and environmental news.



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## Missouri American Water Announces Acquisition of the City of Lawson Water and Wastewater Systems

August 31, 2018 01:41 PM Eastern Daylight Time

LAWSON, Mo.--(BUSINESS WIRE)--Missouri American Water completed its acquisition of the Lawson water and wastewater systems today, adding approximately 968 new water customers and 913 new sewer customers to its more than 480,000 statewide customers. The purchase price for both the water and wastewater system is $4 million.

Customers in Lawson, located southeast of the St. Joseph district, will receive their first statement from Missouri American Water during the first week of October. All customers will be charged the existing inside city water and wastewater rates upon completion of the acquisition.

Information about the system purchase, and general information about water and wastewater service with Missouri American Water was delivered to residents the week of August 27.

"We are very excited to welcome our new customers in the Lawson community and expand our presence in the northwest part of the state," said Cheryl Norton, President of Missouri American Water. "Missouri American Water brings over 125 years of expertise to the water and wastewater industries, by joining our large customer base, we will be able to utilize that expertise to provide high quality service for a reasonable cost in Lawson."

A town hall meeting is scheduled for September 11, at the Lawson Community Center at 6:30 p.m. This will allow residents to meet with representatives from Missouri American Water who can answer billing and service related questions.

**Missouri American Water**

Missouri American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.5 million people.

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to over 14 million people in 45 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Contacts

Missouri American Water
Christie Barnhart
External Affairs Manager
C – 417-529-9781
christie.barnhart@amwater.com

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**Central Penn Business Journal** - cpbj.com

Energy & Environment

# Pennsylvania American Water paying nearly $62K for wastewater system in Pike County

By **Jason Scott**, September 19, 2018 at 9:09 AM

Pennsylvania American Water, the commonwealth's largest investor-owned water utility, is scooping up a small wastewater system in Pike County.

The Derry Township-based company, which is **moving to Cumberland County next year**, announced Tuesday that it has signed an agreement to purchase the wastewater assets of the Delaware Sewer Company in Delaware Township. The system serves 40 customers and the transaction is valued at $61,700.

**Pennsylvania American Water** said the small system has suffered from a lack of investment and proper maintenance, including failing sand mounds, which led to an investigation by the Pennsylvania Public Utility Commission in 2016. That process resulted in the the system being put up for sale.

The PUC must approve the system sale and Pennsylvania American will be required to submit a plan for infrastructure upgrades.

Pennsylvania American Water said it expects to close on the deal by the third quarter of 2019. After the deal wraps up, the utility said it plans to start making improvements.

The company also owns the Clean Treatment wastewater operations in Delaware Township. That system, which was acquired in 2013, serves about 1,000 residents.

The Pike County system is one of several recent additions for Pennsylvania American Water.

Last month, the company agreed to buy **Steelton's water system in Dauphin County.**

Prior to that, the company completed **a $1 million acquisition in the Borough of Turbotville**, Northumberland County. At the end of May, it spent **$96 million on a wastewater system** in Exeter Township, Berks County.

Pennsylvania American is a subsidiary of New Jersey-based American Water.

## More From This Industry

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- **Nuclear aid plan draws fire**
- **Engineering growth: Gannett Fleming CEO talks mergers, workforce and innovation**







**Jason Scott**

Jason Scott covers state government, real estate and construction, media and marketing, and Dauphin and Cumberland counties. Have a tip or question for him? Email him at **jscott@cpbj.com**. Follow him on Twitter, **@JScottJournal**.

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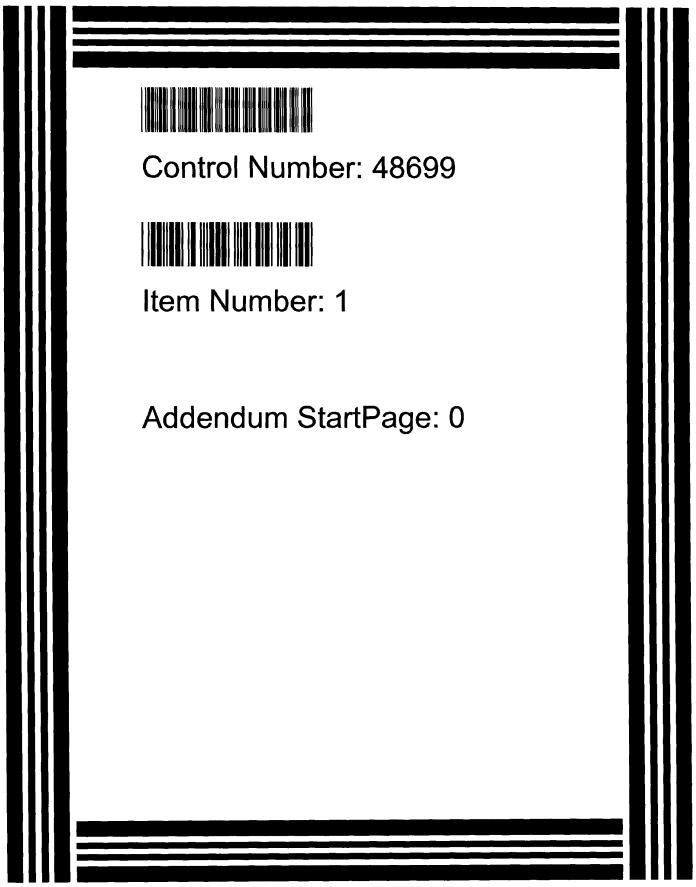


**KAMIRA PROPERTY OWNERS ASSOCIATION**
1548 Harper Road
Kerrville, Texas 78028
September 18, 2018

RECEIVED
2018 SEP 19 AM 9:22
PUBLIC UTILITY COMMISSION
FILING CLERK

Public Utility Commission of Texas
Central Records
1701 N Congress PO Box 13326
Austin, Texas 78711-3326

Re: Application of Kamira Property Owners Association for a Sale, Transfer, Merger agreement

Dear Sir or Madame:

The Kamira Property Owners Association is filing the referenced application for the Sale of the Kamira Water System (PWS #1330135) to the Arimak Water Supply Corporation (Arimak WSC). All required paperwork is contained in the following application.

In the PUC electronic version of the STM application, there exists a corrupted line on page 19 under PROJECTED EXPENSE DETAIL; GENERAL/ADMINISTRATIVE EXPENSES; Interest. To wit: an entry under any year on the Interest line converts all year values to that value. Individual year entrys are not possible. Our interest expenses are contained in the next line, "other".

Additionally, the CCN boundaries are not changing with this sale. The geographical area remains the same as previously described.

Thank you for your consideration of this application. We look forward to a rapid approval.

Sincerely,

Wilmer L. Carroll, for the Board of Directors, Arimak WSC

48699

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller

***Transferee:*** Purchaser

***CCN:*** Certificate of Convenience and Necessity

***STM***: Sale, Transfer, or Merger

***IOU***: Investor Owned Utility



## Application Summary

**Transferor:** KAMIRA PROPERTY OWNERS ASSN, INC dba KAMIRA WATER SYSTEM
*(selling entity)*
**CCN No.s:** 12176

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** ARIMAK WATER SUPPLY CORPORATION
*(acquiring entity)*
**CCN No.s:** 12176

☒ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** KERR AND GILLESPIE

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☐ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☐ | List of Customer Deposits | Part B: Question 5 |
| ☐ | Partnership Agreement | Part C: Question 7 |
| ☒ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ | Certificate of Account Status | Part C: Question 7 |
| ☐ | Financial Audit | Part C: Question 10 |
| ☐ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ | Capital Improvement Plan | Part C: Question 10 |
| ☐ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☐ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

TRANSFEROR PROPOSES TO SELL TO TRANSFEREE THE GEOGRAPHICAL AREA (CCN) AND THE PRODUCTION AND DISTRIBUTION FACILITIES PRESENTLY IN PLACE.

2. The proposed transaction will require (check all applicable):

For **Transferee** (Purchaser) CCN:

☐ Obtaining a NEW CCN for Purchaser
☐ Transfer all CCN into Purchaser's CCN (Merger)
☐ Transfer Portion of CCN into Purchaser's CCN
☒ Transfer all CCN to Purchaser and retain Seller CCN
☐ Uncertificated area added to Purchaser's CCN

For **Transferor** (Seller) CCN:

☒ Cancellation of Seller's CCN
☐ Transfer of a Portion of Seller's CCN to Purchaser
☐ Only Transfer of Facilities, No CCN or Customers
☐ Only Transfer of Customers, No CCN or Facilities
☐ Only Transfer CCN Area, No Customers or Facilities

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: KAMIRA PROPERTY OWNERS ASSN, INC dba KAMIRA WATER SYSTEM
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other: _____

B. Mailing Address: 1548 HARPER ROAD, KERRVILLE, TEXAS 78028

Phone: (210) 316-8751 Email: willie@ktc.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: WILMER CARROLL Title: DIRECTOR, KPOA

Mailing Address: 320 KAMIRA DRIVE, KERRVILLE, TEXAS 78028

Phone: (210) 316-8751 Email: willie@ktc.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: _____

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☐ Yes Application or Docket Number: _____

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred
☒ # of customers without deposits held by the transferor 33
☐ # of customers with deposits held by the transferor* _____

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: ARIMAK WATER SUPPLY CORPORATION
(individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☒ WSC ☐ Other:

B. Mailing Address: 152 KAMIRA DRIVE, KERRVILLE, TEXAS 78028

Phone: _____ Email: _____

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: THOMAS DURANDETTO Title: DIRECTOR, ARIMAK WSC

Address: 285 KAMIRA DRIVE, KERRVILLE, TEXAS 78028

Phone: (443) 677-2562 Email: tsdurand@verizon.net

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☒ No ☐ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☒ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship
☐ Partnership or limited partnership (*attach* Partnership agreement)
☐ Corporation
Charter number (as recorded with the Texas Secretary of State): 803101769
☒ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State): _____
☒ Articles of Incorporation and By-Laws established (*attach*)
☐ Municipally-owned utility
☐ District (MUD, SUD, WCID, FWSD, etc.)

☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain): _____

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: NOT APPLICABLE

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: WILMER L. CARROLL
Position: PRESIDENT — Ownership % (if applicable): 0.00%
Address: 320 KAMIRA DRIVE, KERRVILLE, TEXAS 78028
Phone: (210) 316-8751 — Email: willie@ktc.com

Name: TOM DURANDETTO
Position: DIRECTOR — Ownership % (if applicable): 0.00%
Address: 285 KAMIRA DRIVE, KERRVILLE, TEXAS 78028
Phone: (830) 896-4149 — Email: TSDURAND@VERIZON.NET

Name: JEREMY WICKER
Position: DIRECTOR — Ownership % (if applicable): 0.00%
Address: 117 CRESTLINE, KERRVILLE, TEXAS 78028
Phone: (830) 257-4036 — Email: jeremy.wicker@windstream.net

Name: _____
Position: _____ — Ownership % (if applicable): 0.00%
Address: _____
Phone: _____ — Email: _____

**10.** **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 12,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☒ No ☐ Yes ☐ N/A

Total Original Cost of Plant in Service: $ _____
Accumulated Depreciation: $ _____
Net Book Value: $ _____

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $ _____
Accumulated Amortization: $ _____

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $ _____
Accumulated Amortization: $ _____

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

NOT APPLICABLE

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

NONE

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 78,457.00 |
| Accumulated Depreciation of Plant: | $ -66,331.00 |
| Cash: | $ 536.00 |
| Notes Payable: | $ -12,000.00 |
| Mortgage Payable: | $ |
| (Proposed) Acquisition Adjustment*: | $ 662.00 |
| Other (NARUC account name & No.): | |
| Other (NARUC account name & No.): | |

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

TRANSFEREE WILL INCREASE THE CONNECTION CHARGE AS SOON AS THE STM IS APPROVED AND TRANSFEREE IS AUTHORIZED TO INCREASE RATES. TRANSFEREE ANTICIPATES INCREASING THE CONNECT AND GALLONAGE CHARGE GRADUALLY TO BE COMPETITIVE WITH OTHER LOCAL WATER PROVIDERS.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

NOT APPLICABLE



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

Service to customers will be significantly improved when the STM is approved. The system has suffered from a lack of funds to maintain equipment and distribution lines under the very complicated rate change requirements of PUC. Transferee will be able to set rates that ensure a positive cash flow, thereby creating a major positive change in service.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

THE DIRECTORS OF TRANSFEREE HAVE EXPERIENCE WITH SYSTEMS MANAGEMENT IN VARIOUS FIELDS. TRANSFEREE WILL CONTINUE WITH THE CURRENT OPERATOR.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

THE PROPOSED TRANSACTION WILL NOT AFFECT THE ENVIRONMENT OR THE LAND.

**20.** How will the proposed transaction serve the public interest?

CUSTOMERS OF TRANSFEREE WILL BE BETTER SERVED BY A COMPANY STREAMLINED IN OPERATIONS, MAINTENANCE AND MANAGEMENT.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

1. AQUA VISTA WSC.

THERE ARE NO CITIES, GWCD'S, COUNTIES, OR POLITICAL ENTITIES PROVIDING WATER SERVICE WITHIN TWO MILES.

## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 1330135 (7 digit ID)

Name of PWS: KPOA dba KAMIRA WATER SYSTEM

Date of last TCEQ compliance inspection: February 15, 2017 (attach TCEQ letter)

Subdivisions served: KAMIRA AND BOX S SUBDIVISIONS

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility: NOT APPLICABLE

Name of Permitee: NOT APPLICABLE

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served: NOT APPLICABLE

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| 5 | 5/8" or 3/4" | | 3" | | Commercial |
| 29 | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 34 | | Total Sewer Connections: | |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: NOT APPLICABLE *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: _____ Sewer: _____





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# ith Peotone, linois Acquisition, ua America lebrates 1 illion Customer- nnection ilestone

Business Wire October 2, 2018

BRYN MAWR, Pa.--(BUSINESS WIRE)--

Aqua America Inc., one of the largest U.S.-based, publicly traded water utilities, today announced it has reached its 1 million customer connection milestone with the purchase of Peotone Village's water and wastewater systems by subsidiary Aqua Illinois. The purchase was finalized Oct. 1 and will result in the company welcoming nearly 3,000 new customer connections.

"We are pleased to welcome the residents and businesses of Peotone to the Aqua family with this momentous occasion," said Aqua America Chairman and CEO Christopher Franklin. "From day one, Aqua has been committed to expertly addressing the water needs of growing communities, and being a partner where we serve. We have a long history as a guardian of Earth's most essential resource, and I congratulate our dedicated team as we reach this milestone together."

Founded in 1886 in southeastern Pennsylvania, Aqua America and its eight state subsidiaries own and operate approximately 1,700 water and wastewater systems, many of which have been acquired in Aqua's 300 acquisitions since 1995. In these communities, Aqua leverages its expertise in compliance, large-scale purchasing power and efficiencies to provide needed infrastructure improvements to enhance water quality and reliability. Since 2012, Aqua has invested approximately $2.2 billion to improve infrastructure in the communities it serves, with plans to invest an additional $1.4 billion through 2020.

"The growth that has led to our 1 millionth customer connection is a direct result of Aqua's commitment to improving water quality and infrastructure in the United States," said Franklin. "By partnering with municipalities that need help with maintaining their water and wastewater systems, we make essential infrastructure investments in the communities we serve, and that leads to improved service for our customers, regulatory compliance and environmental stewardship."

Quote Lookup
Recently Viewed
Symbol Last Price Change % Ch
WTR Aqua America, Inc. 35.91 -0.13 -0.
PCG PG&E Corporation 15.43 +1.10 +7.
EVRG Evergy, Inc. 58.30 +0.23 +0.
ED Consolidated Edison, Inc. 78.57 +0.34 +0.
^DJI Dow Jones Industrial Average 25,425.76 +372.65 +1.
HBI Hanesbrands Inc. 18.60 +0.21 +1.
PVH PVH Corp. 114.33 +1.55 +1.
^VIX CBOE Volatility Index 15.45 -0.52 -3.
^GSPC S&P 500 2,744.73 +34.83 +1.
CRON Cronos Group Inc. 19.67 +0.23 +1.
ETRN Equitrans Midstream Corporation 19.26 +0.44 +2.
D Dominion Energy, Inc. 73.20 +0.39 +0.
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TWNK Hostess Brands, Inc. 11.80 +0.08 +0.
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Village of Peotone Mayor Steven Cross echoed the sentiment.

"It's wonderful for Peotone to be recognized in such a significant way and we look forward to the service Aqua will provide now and in the future."



AdChoice

Aqua has several fair market value asset purchase agreements in place, including Cheltenham, East Bradford and New Garden townships in Pennsylvania. The Village of Manteno in Illinois and Limerick Township in Pennsylvania both closed in July 2018. When it completes all these acquisitions, the company will welcome approximately 23,000 new customer connections to the Aqua family. Aqua paid $12.3 million for Peotone's systems.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information, or follow Aqua on Facebook at facebook.com/MyAquaAmerica and on Twitter at @MyAquaAmerica.

WTGR

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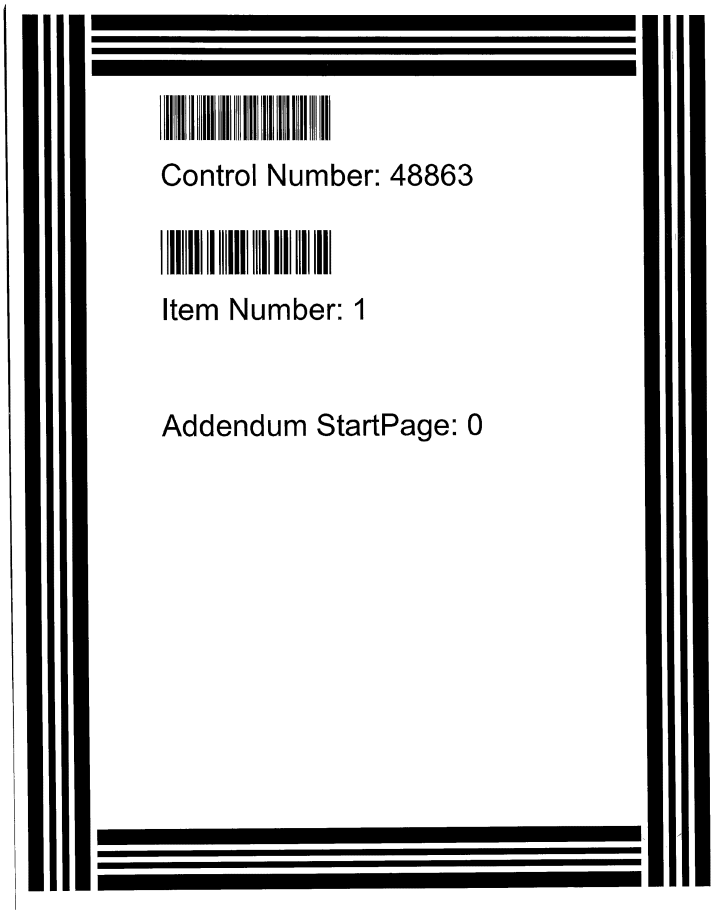


48863

**Application Summary**

**Transferor:** Brookshires Camp Joy
*(selling entity)*
**CCN No.s:** 12960

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** TWS Holdings Texas Water Systems
*(acquiring entity)*
**CCN No.s:** 12473

☒ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Upshur

Table of Contents

Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part E: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 |
| ☐ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☐ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☒ Certificate of Account Status | Part C: Question 7 |
| ☒ Financial Audit | Part C: Question 10 |
| ☒ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☒ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☐ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☒ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |

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**Part A: General Information**

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

cash sale. contract attached

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☒ Cancellation of Seller's CCN |
| ☒ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

**Part B: Transferor Information**

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Henry Brookshire Jr
(individual, corporation, or other legal entity)
☒ Individual ☐ Corporation ☐ WSC ☐ Other:

B. Mailing Address: PO Box 397, Ore City, Texas 75683-0397

Phone: (903) 968-6518 Email:

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Henry Brookshire J Title: Owner

Mailing Address: PO Box 397, Ore City, Texas 75683-0397

Phone: (903) 968-6518 Email:

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: June 1, 2003

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: TCEQ 34231G CCN12960

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred

☒ # of customers without deposits held by the transferor 119

☐ # of customers with deposits held by the transferor* _____

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

**Part C: Transferee Information**

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: TWS Holdings/Texas Water Systems
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 7891 US Hwy 271 Tyler, Texas 75708-4002

Phone: (903) 597-5788 Email: cs@txwatersystems.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Belinda Tompkins Title: administrator

Address: 7891 US Hwy 271 Tyler, Texas 75708-4003

Phone: (903) 597-5788 Email: belinda@txwatersystems.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): CN600729727

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State): _____
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)

☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain): _____

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: _____

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: James K Brown
Position: President — Ownership % (if applicable): 75.00%
Address: 7891 US Hwy 271 Tyler, Texas 75708-4002
Phone: (903) 597-5788 — Email: rad@bwatersystems.com

Name: Hudson White
Position: VP — Ownership % (if applicable): 25.00%
Address: 7891 US Hwy 271 Tyler, Texas 75708-4002
Phone: (903) 597-5788 — Email:

Name:
Position: — Ownership % (if applicable): 0.00%
Address:
Phone: — Email:

Name:
Position: — Ownership % (if applicable): 0.00%
Address:
Phone: — Email:

**10.** **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 90,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 120,200.00
Accumulated Depreciation: $ 56,045.00
Net Book Value: $ 64,155.00

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $ 0.00
Accumulated Amortization: $ 0.00

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $ 0.00
Accumulated Amortization: $ 0.00

**12.** **A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

cash sale

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ 120,200.00
Accumulated Depreciation of Plant: $ 56,045.00
Cash: $ 0.00
Notes Payable: $ 0.00
Mortgage Payable: $ 0.00
(Proposed) Acquisition Adjustment*: $ 64,155.00
*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)
Other (NARUC account name & No.): _____
Other (NARUC account name & No.): _____

**15.** **A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

None

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Not within the 1st year



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

None. The buyer has been operating the water system for the last 7 years.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

TWS Holdings owns 9 water systems in Smith, Upshur, Gregg and Henderson County. CCN #12473

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

None

**20.** How will the proposed transaction serve the public interest?

Current owner is in his 80's. The sale will insure continued uninterupted service

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Bi County WSC (10490)
City of Ore City (10424)
Diana SUD (10425)

## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: TX2300015 (7 digit ID)

Name of PWS: Brookshires Camp Joy

Date of last TCEQ compliance inspection: September 27, 2016 (attach TCEQ letter)

Subdivisions served: Camp Joy

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility:

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| 119 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| Total Water Connections: | | | | Total Sewer Connections: | |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:



**26. A.** Does the system being transferred purchase water or sewer treatment capacity from another source?

☒ No ☐ Yes: If yes, attach a copy of purchase agreement or contract.

Capacity is purchased from:

Water:

Sewer:

**B.** Is the PWS required to purchase water to meet capacity requirements or drinking water standards?

☒ No ☐ Yes

**C.** What is the amount of water supply or sewer treatment purchased, per the agreement or contract? What is the percent of overall demand supplied by purchased water or sewer treatment (if any)?

| | Amount in Gallons | Percent of demand |
|---|---|---|
| Water: | | 0.00% |
| Sewer: | | 0.00% |

**D.** Will the purchase agreement or contract be transferred to the Transferee?

☐ No ☐ Yes:

**27.** Does the PWS or sewer treatment plant have adequate capacity to meet the current and projected demands in the requested area?

☐ No ☒ Yes:

**28.** List the name, class, and TCEQ license number of the operator that will be responsible for the operations of the water or sewer utility service:

| Name (as it appears on license) | Class | License No. | Water or Sewer |
|---|---|---|---|
| David L Odle | C | WG0011502 | W |
| Randy Lovejoy | C | WG0001737 | W |
| | | | |
| | | | |

## Part G: Mapping & Affidavits

**ALL applications require mapping information to be filed in conjunction with the STM application.**
***Read question 29 A and B to determine what information is required for your application.***

**29. A.** For applications requesting to transfer an entire CCN, without a CCN boundary adjustment, provide the following mapping information with each of the seven (7) copies of the application:

1. A general location (small scale) map identifying the requested area in reference to the nearest county boundary, city, or town. The following guidance should be adhered to:
   - **i.** If the application requests to transfer certificated service areas for both water and sewer, separate maps must be provided for each.
   - **ii.** A hand drawn map, graphic, or diagram of the requested area is not considered an acceptable mapping document.



   - **iii.** To maintain the integrity of the scale and quality of the map, copies must be exact duplicates of the original map. Therefore, copies of maps cannot be reduced or enlarged from the original map, or in black and white if the original map is in color.

2. A detailed (large scale) map identifying the requested area in reference to verifiable man-made and natural landmarks such as roads, rivers, and railroads. The Applicant should adhere to the following guidance:
   - **i.** The map must be clearly labeled and the outer boundary of the requested area should be marked in reference to the verifiable man-made or natural landmarks. These verifiable man-made or natural landmarks must be labeled and marked on the map as well.
   - **ii.** If the application requests an amendment for both water and sewer certificated service area, separate maps need to be provided for each.
   - **iii.** To maintain the integrity of the scale and quality of the map, copies must be exact duplicates of the original map. Therefore, copies of maps cannot be reduced or enlarged from the original map, or in black and white if the original map is in color.
   - **iv.** The outer boundary of the requested area should not be covered by any labels, roads, city limits or extraterritorial jurisdiction (ETJ) boundaries.

**B.** For applications that are requesting to include area not currently within a CCN, or for applications that require a CCN amendment (any change in a CCN boundary), such as the transfer of only a portion of a certificated service area, provide the following mapping information with each of the seven (7) copies of the application:

1. A general location (small scale) map identifying the requested area with enough detail to locate the requested area in reference to the nearest county boundary, city, or town. Please refer to the mapping guidance in part A 1 (above).
2. A detailed (large scale) map identifying the requested area with enough detail to accurately locate the requested area in reference to verifiable man-made or natural landmarks such as roads, rivers, or railroads. Please refer to the mapping guidance in part A 2 (above).
3. One of the following identifying the requested area:
   - **i.** A metes and bounds survey sealed or embossed by either a licensed state land surveyor or a registered professional land surveyor. Please refer to the mapping guidance in part A 2 (above);
   - **ii.** A recorded plat. If the plat does not provide sufficient detail, Staff may request additional mapping information. Please refer to the mapping guidance in part A 2 (above); or
   - **iii.** Digital mapping data in a shapefile (SHP) format georeferenced in either NAD 83 Texas State Plane Coordinate System (US Feet) or in NAD 83 Texas Statewide Mapping System (Meters). The digital mapping data shall include a single, continuous polygon record. The following guidance should be adhered to:
     - **a.** The digital mapping data must correspond to the same requested area as shown on the general location and detailed maps. The requested area must be clearly labeled as either the water or sewer requested area.
     - **b.** A shapefile should include six files (.dbf, .shp, .shx, .sbx, .sbn, and the projection (.prj) file).
     - **c.** The digital mapping data shall be filed on a data disk (CD or USB drive), clearly labeled, and filed with Central Records. Seven (7) copies of the digital mapping data is also required.



## Part H: Notice Information

The following information will be used to generate the proposed notice for the application.
**DO NOT provide notice** of the application until it is found sufficient and the Applicants are ordered to provide notice.

**30.** Complete the following using verifiable man-made or natural landmarks such as roads, rivers, or railroads to describe the requested area (to be stated in the notice documents). Measurements should be approximated from the outermost boundary of the requested area:

The total acreage of the requested area is approximately: 470.00

Number of customer connections in the requested area: 119

Affected subdivision : Camp Joy Subdivision

The closest city or town: Ore City, Texas

Approximate mileage to closest city or town center: 2

Direction to closest city or town: NNE of downtown Ore City, Texas

The requested area is generally bounded on the North by: Unnamed creek, S of Upshur Landing Road

on the East by: Lake O' The Pines

on the South by: Unnamed creek, N of Marion County line

on the West by: N Front Street

**31.** A copy of the proposed map will be available at:

**32.** What effect will the proposed transaction have on an average bill to be charged to the affected customers? Take into consideration the average consumption of the requested area, as well as any other factors that would increase or decrease a customer's monthly bill.

☒ All of the customers will be charged the same rates they were charged before the transaction.

☐ All of the customers will be charged different rates than they were charged before the transaction.

☐ higher monthly bill ☐ lower monthly bill

☐ Some customers will be charged different rates than they were charged before (i.e. inside city limit customers)

☐ higher monthly bill ☐ lower monthly bill

WaterWorld

# AQUA PENNSYLVANIA TO ACQUIRE NEIGHBORING WASTEWATER SYSTEM

*November 13, 2018*

**BRYN MAWR, PA, NOV 13, 2018 --** Aqua America Inc. announced its Pennsylvania subsidiary has signed an agreement with East Norriton Township, Montgomery County to acquire its wastewater assets, serving roughly 4,950 wastewater connections, for $21 million. The agreement falls under Pennsylvania's Act 12 fair market value legislation.

Act 12 encourages consolidation in a fragmented water and wastewater industry, allowing resources to be shared among a larger service area, ultimately benefiting utility customers, according to Aqua America Chairman and CEO Christopher Franklin.

"Act 12 has enabled water utilities like Aqua and municipal systems like East Norriton to enter into agreements that benefit customers by ensuring professionally run, reliable service into the future," said Franklin. "The legislation also provides municipalities with a fair market price for their assets, which can be used to address other important community priorities."

Aqua Pennsylvania President Marc Lucca said he is looking forward to working with the township and residents in East Norriton.

"The decision to sell water and wastewater assets is an important one for municipal leaders," said Lucca. "We look forward to serving this community."

Aqua Pennsylvania has three other fair market value asset purchase agreements in place: New Garden and East Bradford townships in Chester County with 2,100 and 1,200 customer connections, respectively; and Cheltenham Township, Montgomery County with 10,500 customer connections. In addition to these three fair market value agreements, Aqua Pennsylvania has an asset purchase agreement with the Borough of Phoenixville, Chester County that would yield another 556 water connections outside its municipal boundary. Collectively, when closed, these five agreements would allow the company to welcome roughly 19,300 additional customer connections.





Aqua Pennsylvania completed the acquisition of the Limerick Township, Montgomery County wastewater system in July 2018 using Act 12 fair market value legislation, adding 5,400 customer connections.

Aqua America's Illinois subsidiary completed acquisitions of the Village of Manteno's wastewater assets July 2, and the Village of Peotone wastewater system on Oct. 1 and employing similar Illinois legislation, collectively adding more than 6,800 new customer connections and bringing Aqua America to its 1 million customer-connection milestone.

In terms of the company's growth efforts in other regulated utilities, on Oct. 23, Aqua America announced it will acquire Pittsburgh-based natural gas company Peoples for $4.275 billion, creating a partnership that can have a more significant impact on improving infrastructure reliability, quality of life and economic prosperity in the areas it will serve. When this acquisition closes, expected in mid-2019, Aqua will add 740,000 customers in Western Pennsylvania, Kentucky and West Virginia to its family of companies.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves about 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

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**Idaho Public Utilities Commission**
PO Box 83720 Boise, ID 83720-0074

Governor C.L. "Butch" Otter

Paul Kjellander, Commissioner
Kristine Raper, Commissioner
Eric Anderson, Commissioner

*Case Nos. EAG-W-18-01, SUZ-W-18-02*
*Contact: Matt Evans*
*Office: (208) 334-0339*
*Cell: (208) 520-4763*
*matt.evans@puc.idaho.gov*

## Deadline to intervene set in case involving proposed sale of Eagle Water Company

**BOISE (Dec. 10, 2018) –** State regulators have set a deadline for parties seeking to intervene in a case involving the proposed sale of Eagle Water Company to Suez Water Idaho.

The proposal, which requires the approval of the Idaho Public Utilities Commission, calls for a purchase price of $10 million as well as significant rate increases for the approximately 4,200 customers of Eagle Water.

The proposal includes a third entity, Wyoming-based H2O Eagle Acquisition LLC, which has entered into asset purchase agreements with both Suez and Eagle Water. Those agreements call for H2O Eagle to purchase Eagle Water and its assets, and for H2O Eagle to sell the company and assets to Suez.

If the deal is approved as proposed, these transactions would close simultaneously, and Suez would take over all ownership and operations of the water system, which is not the same as the city of Eagle's municipal water system.

Suez has proposed that rates for Eagle Water's current customers be increased in three phases over three years, in order to create "rate parity" with Suez's approximately 96,000 customers in the Boise area.

Under the proposed rate adjustment period, Eagle Water customers would see an approximate monthly increase of $6.44 in the first year, and monthly increases of $9.40 in both the second and third years.

Eagle Water's owner cited his age, "the increasing complexity of regulatory requirements, necessary and costly system upgrades" and the utility's limited access to capital to fund those upgrades as reasons for the proposed sale.

Both Eagle Water and Suez contend that the proposal is in the public interest and will result in significant benefits to customers of both utilities by "among other things, realizing certain efficiencies in water service, water supply and operating costs."

Parties seeking to intervene in order to present testimony and exhibits and cross-examine witnesses must do so by Dec. 28.

Later, the Commission will announce dates for public comment deadlines and customer workshops and hearings.

Written comments are being accepted. Go here to submit a comment electronically. Or go to the Commission's web site, www.puc.idaho.gov and click on "Case Comment Form" under the "Water" heading.

Comments can also be submitted via fax to (208) 334-3762 or by mail to P.O. Box 83720, Boise, ID 83720-0074. Please be sure to include the case number, EAG-W-18-01 or SUZ-W-18-02.

All documents related to this case are available here. Or go to the Commission's web site, www.puc.idaho.gov, click on "Open Cases" under the "Water" heading and scroll down to case number EAG-W-18-01 or SUZ-W-18-02.

AQUA

Search the site Go ›

# Press Release

Print page
<< Back

## Aqua Pennsylvania Closes Purchase of East Bradford Wastewater System

Dec 13, 2018

BRYN MAWR, Pa.--(BUSINESS WIRE)--Dec. 13, 2018-- Aqua America Inc. (NYSE: WTR) announced today that its Pennsylvania subsidiary acquired the nearly 1,250-connection wastewater assets of East Bradford Township, Chester County for $5 million, marking Aqua Pennsylvania's second acquisition to close under fair market valuation legislation, which encourages consolidation in a fragmented water and wastewater industry and allows resources to be shared among a larger service area.

Aqua Chairman and CEO Christopher Franklin firmly believes these aspects benefit customers.

"Our acquisition of East Bradford is another example of how Act 12 can help a municipality ensure its residents have professional and reliable wastewater service into the future, while reaping the benefit of a fair price for its assets for their community," said Franklin.

Aqua Pennsylvania President Marc Lucca looks forward to adding wastewater to the water service it already provides for East Bradford.

"I'd like to thank the community leaders of East Bradford Township for having the confidence to entrust their residents' wastewater service to Aqua," he said. "We're proud to have the opportunity to now provide wastewater service to our East Bradford water customers, which enables us to offer greater economies of scale and operational efficiencies. We look forward to this additional service opportunity."

Aqua Pennsylvania has three other fair market value asset purchase agreements in place: New Garden Township, Chester County with approximately 2,100 customer connections; and Cheltenham and East Norriton townships in Montgomery County with about 10,500 and 4,950 customer connections, respectively. In addition to these fair market value agreements, Aqua Pennsylvania has an asset purchase agreement with the Borough of Phoenixville, Chester County that would yield approximately 960 water connections. Collectively, when closed, these agreements, along with East Bradford, will allow the company to welcome more than 19,000 additional customers. Aqua Pennsylvania acquired the Limerick Township, Montgomery County wastewater system July 25 using Act 12, adding more than 5,400 customer connections.

Outside of Pennsylvania, Aqua America's Illinois subsidiary acquired the Village of Manteno's wastewater assets July 2, and the Village of Peotone wastewater system Oct., 1 employing similar Illinois legislation. These two acquisitions added more than 6,800 new customer connections and brought Aqua to its 1 million customer-connection milestone.

In terms of the company's growth efforts in other regulated utilities, on Oct. 23, Aqua announced it will acquire Pittsburgh-based natural gas company Peoples for $4.275 billion, creating a platform that can have a more significant impact on improving infrastructure reliability, quality of life and economic prosperity in the areas it will serve. When this acquisition closes, expected in mid-2019, Aqua will add 740,000 customers in Western Pennsylvania, Kentucky and West Virginia to its family of companies.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

**Forward-Looking Statements**

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: that the implementation of Act 12 allows resources to be shared to the benefit of utility customers and that the Aqua America and Peoples transaction will have a more significant impact on improving infrastructure reliability, quality of life, and economic prosperity in the areas the Company will serve following the closing of the transaction. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: the company's ability to close the company's and Peoples transaction; the company's ability to close the company's and Peoples transaction with reasonable conditions; general economic business conditions; the company's ability to fund the Company and Peoples transaction; the company's ability to fund capital growth; housing and customer growth trends; changes in regulations or regulatory treatment; availability and access to capital; the cost of capital; disruptions in the credit markets; the success of growth





initiatives; and other factors discussed in our Annual Report on Form 10-K and our Quarterly Report on Form 10-Q, which is filed with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Aqua America's business, please refer to Aqua America's annual, quarterly and other SEC filings. Aqua America is not under any obligation - and expressly disclaims any such obligation - to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

WTRF

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AQUA

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Control Number: 49230

Item Number: 1

Addendum StartPage: 0

49230

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

2018 DEC 5 AM 9:22

Retail

**Sale, Transfer, or Merger (STM) Application Instructions**

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding: staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor***: Seller
***Transferee***: Purchaser
***CCN***: Certificate of Convenience and Necessity
***STM***: Sale, Transfer, or Merger
***IOU***: Investor Owned Utility

**Transferor:** BEVERLY MINALDI
*(selling entity)*
**CCN No.s:**

☑ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** KEVIN HESTER / SIMPLY AQUATICS-INC
*(acquiring entity)*
**CCN No.s:**

☑ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** SABINE

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☑ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☑ Tariff including Rate Schedule | Part B: Question 4 |
| ☐ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☑ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ Certificate of Account Status | Part C: Question 7 |
| ☐ Financial Audit | Part C: Question 10 |
| ☐ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☑ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☐ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☑ Detailed (large scale) Map | Part G: Question 29 |
| ☑ General Location (small scale) Map | Part G: Question 29 |
| ☐ Digital Mapping Data | Part G: Question 29 |
| ☐ Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☑ Cancellation of Seller's CCN |
| ☐ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: BEVERLY LEE MINALDI
(individual, corporation, or other legal entity)
☐ Individual ☑ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O. BOX 1611 ; NEDERLAND , TEXAS 77627

Phone: 409-722-1897 (Home) Email: beverlyminaldi@yahoo.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: BEVERLY LEE MINALDI Title: OWNER/OPERATOR

Mailing Address: P.O. BOX 1611 NEDERLAND , TEXAS 77627

Phone: 409-543-5521 (C) Email: BEVERLYMINALDI@YAHOO.COM

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: JANUARY 1, 2009

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☑ No ☐ Yes Application or Docket Number:

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred
☑ # of customers without deposits held by the transferor 46
☐ # of customers with deposits held by the transferor* _____

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information SAME Info

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: KEVIN HESTER / SIMPLY AQUATICS INC
(individual, corporation, or other legal entity)
☐ Individual ☑ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O BOX 157 , KIRBYVILLE TX 75956

Phone: 409-420-0774 _____ Email: SAINATERSYSTEMS@YAHOO.COM

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: CALEB ROSS Title: OPERATOR

Address: P.O. BOX 157 , KIRBYVILLE TX 75956

Phone: 409-423-9386 Email: SAINATERSYSTEMS@YAHOO.COM

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☐ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship
☐ Partnership or limited partnership (*attach* Partnership agreement)
☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 800 198 192
☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State): _____
☐ Articles of Incorporation and By-Laws established (*attach*)
☐ Municipally-owned utility
☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County
☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: SIMPLY AQUATICS INCORPORATION

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: KEVIN WAYNE HESTER
Position: PRESIDENT Ownership % (if applicable): ~~100%~~ 50%
Address: 921 CR 3065 KIRBYVILLE TX 75956
Phone: 409-381-0271 Email: SAINATERSYSTEMS@YAHOO.COM

Name: STEPHANIE ~~ANN~~ HESTER
Position: 921 CR 3065 KIRBYVILLE TX 75956 (SECRETARY/TREASURE) Ownership % (if applicable): ~~100%~~ 50%
Phone: 409-381-0275 Email: SAINATERSYSTEMS@YAHOO.COM

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

**Part D: Proposed Transaction Details**

**11. A.** Proposed Purchase Price: $ 35,000

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☑ Yes ☐ N/A

Total Original Cost of Plant in Service: $ _____

Accumulated Depreciation: $ _____

Net Book Value: $ _____

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☑ No ☐ Yes

Total Customer CIAC: $ 0

Accumulated Amortization: $ _____

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☑ No ☐ Yes

Total developer CIAC: $ 0

Accumulated Amortization: $ 0

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes

WAITING ON APPROVAL OF THE ADDITION OF PRESSURE TANKS & DISTRIBUTION PUMPS
* 1/22/19 WAS APPROVED ALREADY TCEQ



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

NO IMPROVEMENTS NEEDED.
FUTURE DRILL NEW WELL? $10,000

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

LOT #20 - FREE WATER FOR 20 YEARS - BEVERLY

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ 35,000

Accumulated Depreciation of Plant: $ _____

Cash: $ _____

Notes Payable: $ _____

Mortgage Payable: $ _____

(Proposed) Acquisition Adjustment*: $ _____

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

Other (NARUC account name & No.): _____

Other (NARUC account name & No.): _____

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

NO.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

?



**Part E: Other Obligations Among Criteria Considerations**

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

NONE

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

SIMPLY AQUATICS INC. ~~PROVIDES CHEMICALS~~ HAS BEEN IN BUSINESS SINCE 2001. WE PROVIDE CHEMICAL TO WATER & WASTE WATER TREATMENT PLANTS. OUR COMPANY KNOWS TO THE OPERATIONS OF WATER SYSTEMS. WE HAVE A FULL TIME OPERATOR ON STAFF.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

N/A

**20.** How will the proposed transaction serve the public interest?

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

*SEE ATTACHMENT





District | Maps | Documents | Reports | W

# District Name: ANGELINA & NECHES RIVER A

Affiliations | Documents

## Responsible Party

Organization: **ANGELINA & NECHES RIVER AUTHORITY**
Address: **361 RED LOVING RD**
**LUFKIN , TX 75901-4369**
Individual: **JODY ANDERSON**

## Customers

| Reference Number | Name |
|---|---|
| CN601550635 | ANGELINA & NECHES RIVER AUTHORITY |

## Official Address / Phone

Address: **PO BOX 387**
**LUFKIN , TEXAS 75902-0387**
Telephone: **(936) 632-7795**

## Properties

CR Regulated Entity Number: **RN102315181**
CCEDS Status: **NO ACTIVE NOE EXISTS**
District Type: **RIVER AUTHORITY**
Creation Type: **LEGISLATURE**
Primary County: **ANGELINA**
Financial Status: **AUDIT FILED**
Directors: **9**

## Functions

**Function**
SPECIAL LAW
RETAIL WASTEWATER
SUPPLY TREATED OR RETAIL WATER
Occurrences retrieved.

## Associated Public Water Systems

| PWS Name | PWSID | Status | CCN |
|---|---|---|---|
| HOLMWOOD ANGELINA & NECHES RIVER AUTHORITY | 1210020 | ACTIVE | 12303 |

Water System occurrences retrieved.

## Associated Utility Systems

District details for ANGELINA & NECHES RIVER AUTHORITY http://www14.tceq.texas.gov/iwud/dist/index.cfm?fuseaction=Det

ANGELINA & NECHES RIVER AUTHORITY
ANGELINA & NECHES RIVER AUTHORITY
Utility occurrences retrieved.

## Counties

| Code | County Name |
|---|---|
| 1 | ANDERSON |
| 3 | ANGELINA |
| 37 | CHEROKEE |
| 107 | HENDERSON |
| 113 | HOUSTON |
| 121 | JASPER |
| 174 | NACOGDOCHES |
| 181 | ORANGE |
| 187 | POLK |
| 201 | RUSK |
| 202 | SABINE |
| 203 | SAN AUGUSTINE |
| 210 | SHELBY |
| 212 | SMITH |
| 228 | TRINITY |
| 234 | VAN ZANDT |

Occurrences retrieved.

## Activity

Creation Date: **04/22/1935**
Activity Status: **ACTIVE**
Last Registration Date: **10/20/2017**
Boundary Change Date: **08/29/1977**

District successfully retrieved

For all filter and queries to perform effectively best to view with IE

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Statewide Links: Texas.gov | Texas Homeland Security | TRAIL Statewide Archive | Texas Veterans Portal

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2/7/2019 **TAP ACCOUNTS BY STATUS CODE** 1

| Tap/Acct | Name | Status | Type | Balance | Location |
|---|---|---|---|---|---|
| 63 | Amy, Becky Ritchie | A N | R S | 0.00 | |
| 20 | Arnaud, Sheila | A N | R S | 0.00 | |
| 6 | Babin, James | A N | R S | 35.35 | |
| 21 | Beale, Luther Alton | A N | R S | 35.35 | |
| 19 | Brewer, Lacey | A N | R S | 106.05 | |
| 29 | Broussard, James | A N | R S | 35.35 | |
| 11 | Brown, Larry & Kathleen | A N | R S | 35.35 | |
| 58 | Chambers, Charles | A N | R S | 35.35 | |
| 60 | Currier, Bill | A N | R S | 30.70 | |
| 12 | Damico, Tom | A N | R S | 35.35 | |
| 13 | Dorman, Louis & Barbara | A N | R S | 35.35 | |
| 18 | Forest, David & Jane | A N | R S | 35.35 | |
| 9 | Gentz, Fred & Jane | A N | R S | 35.35 | |
| 62 | Graves, Charles | A N | R S | 35.35 | |
| 27 | Guidry, Ray | A N | R S | 0.00 | |
| 16 | Guin, Andrea | A N | R S | 106.05 | |
| 31 | Hamilton, Dub | A N | R S | 35.35 | |
| 36 | Harshbarger, Tim | A N | R S | (30.95) | |
| 68 | Howell, Micah | A N | R S | 35.35 | |
| 52 | Johson, William & Sue | A N | R S | 106.05 | |
| 64 | Kennaugh, Chris | A N | R S | 35.35 | |
| 23 | Knowles, Chip | A N | R S | 35.35 | |
| 15 | Koehler, Joel | A N | R S | 20.35 | |
| 45 | Langford, Bric | A N | R S | 35.35 | |
| 43 | Martin, Glenn J | A N | R S | 35.35 | |
| 59 | McKeever, Rick | A N | R S | 35.35 | |
| 61 | McLamara, Jay | A N | R S | 35.35 | |
| 35 | Minaldi, Beverly | I N | R S | 0.00 | |
| 22 | Minaldi, Ronnie | A N | R S | 35.35 | |
| 33 | Moore, Mark & Lauri | A N | R S | 35.35 | |
| 2 | Murff, Bill | A N | R S | 35.35 | |
| 3 | Murff, John | A N | R S | 35.35 | |
| 41 | Nicholas, Wilson | A N | R S | 35.35 | |
| 25 | Nicklebur, Jimmy | A N | R S | 35.35 | |
| 55 | Pratt, Bobbie | A N | R S | 35.35 | |
| 40 | Richey, Keith & Carolyn | A N | R S | 35.35 | |
| 8 | Roberts, Thomas | A N | R S | 0.00 | |
| 38 | Seago, Vera | A N | R S | 35.35 | |
| 50 | Seymour, Ed | A N | R S | 70.70 | |
| 4 | Smits, Harry | A N | R S | 35.35 | |
| 10 | Smits, Karen | A N | R S | 35.35 | |
| 39 | Teague, Randy & Carrie | A N | R S | 35.35 | |
| 30 | Weber, Clifton | I N | R S | 0.00 | |
| 37 | | A N | R S | 0.00 | |
| 65 | Wesner, Ernest | A N | R S | 35.35 | |
| 42 | Wike, Pat | A N | R S | 35.35 | |
| | 47 Accounts | | | **$1,575.50** | |

2/7/2019 **READING AND USAGE LIST** 1

| Tap/Acct | Name | Code | Date | Current | Previous | Usage | Status/Est | Book Sequence |
|---|---|---|---|---|---|---|---|---|
| **11/26/2018** | | | | | | | | |
| 29 | Broussard, James | Water | 11/26/2018 | 1146 | 1141 | 5,000 | C A N | |
| | | | | **1,146** | | **5,000** | | |
| **12/31/2018** | | | | | | | | |
| 63 | Amy, Becky Ritchie | Water | 12/31/2018 | 489 | 487 | 2,000 | C A N | |
| 20 | Arnaud, Sheila | Water | 12/31/2018 | 389 | 389 | 0 | C A N | |
| 6 | Babin, James | Water | 12/31/2018 | 593 | 593 | 0 | C A N | |
| 21 | Beale, Luther Alton | Water | 12/31/2018 | 463 | 463 | 0 | C A N | |
| 19 | Brewer, Lacey | Water | 12/31/2018 | 567 | 567 | 0 | C A N | |
| 11 | Brown, Larry & Kathleen | Water | 12/31/2018 | 84 | 84 | 0 | C A N | |
| 58 | Chambers, Charles | Water | 12/31/2018 | 18 | 18 | 0 | C A N | |
| 60 | Currier, Bill | Water | 12/31/2018 | 656 | 656 | 0 | C A N | |
| 12 | Damico, Tom | Water | 12/31/2018 | 47 | 47 | 0 | C A N | |
| 13 | Dorman, Louis & Barbara | Water | 12/31/2018 | 81 | 81 | 0 | C A N | |
| 18 | Forest, David & Jane | Water | 12/31/2018 | 555 | 555 | 0 | C A N | |
| 9 | Gentz, Fred & Jane | Water | 12/31/2018 | 457 | 457 | 0 | C A N | |
| 62 | Graves, Charles | Water | 12/31/2018 | 13 | 13 | 0 | C A N | |
| 27 | Guidry, Ray | Water | 12/31/2018 | 29 | 29 | 0 | C A N | |
| 16 | Guin, Andrea | Water | 12/31/2018 | 754 | 754 | 0 | C A N | |
| 31 | Hamilton, Dub | Water | 12/31/2018 | 33 | 33 | 0 | C A N | |
| 36 | Harshbarger, Tim | Water | 12/31/2018 | 270 | 270 | 0 | C A N | |
| 68 | Howell, Micah | Water | 12/31/2018 | 28 | 28 | 0 | C A N | |
| 52 | Johson, William & Sue | Water | 12/31/2018 | 753 | 753 | 0 | C A N | |
| 64 | Kennaugh, Chris | Water | 12/31/2018 | 80 | 79 | 1,000 | C A N | |
| 23 | Knowles, Chip | Water | 12/31/2018 | 230 | 230 | 0 | C A N | |
| 15 | Koehler, Joel | Water | 12/31/2018 | 26 | 26 | 0 | C A N | |
| 45 | Langford, Bric | Water | 12/31/2018 | 196 | 196 | 0 | C A N | |
| 43 | Martin, Glenn J | Water | 12/31/2018 | 1052 | 1052 | 0 | C A N | |
| 59 | McKeever, Rick | Water | 12/31/2018 | 285 | 285 | 0 | C A N | |
| 61 | McLamara, Jay | Water | 12/31/2018 | 527 | 526 | 1,000 | C A N | |
| 22 | Minaldi, Ronnie | Water | 12/31/2018 | 36 | 36 | 0 | C A N | |
| 33 | Moore, Mark & Lauri | Water | 12/31/2018 | 21 | 21 | 0 | C A N | |
| 41 | Nicholas, Wilson | Water | 12/31/2018 | 102 | 102 | 0 | C A N | |
| 25 | Nicklebur, Jimmy | Water | 12/31/2018 | 96 | 96 | 0 | C A N | |
| 55 | Pratt, Bobbie | Water | 12/31/2018 | 58 | 58 | 0 | C A N | |
| 40 | Richey, Keith & Carolyn | Water | 12/31/2018 | 187 | 187 | 0 | C A N | |
| 8 | Roberts, Thomas | Water | 12/31/2018 | 121 | 120 | 1,000 | C A N | |
| 38 | Seago, Vera | Water | 12/31/2018 | 312 | 312 | 0 | C A N | |
| 50 | Seymour, Ed | Water | 12/31/2018 | 82 | 82 | 0 | C A N | |
| 4 | Smits, Harry | Water | 12/31/2018 | 57 | 54 | 3,000 | C A N | |
| 10 | Smits, Karen | Water | 12/31/2018 | 222 | 222 | 0 | C A N | |
| 39 | Teague, Randy & Carrie | Water | 12/31/2018 | 153 | 153 | 0 | C A N | |
| 37 | , | Water | 12/31/2018 | 0 | 0 | 0 | C A N | |
| 65 | Wesner, Ernest | Water | 12/31/2018 | 158 | 157 | 1,000 | C A N | |
| 42 | Wike, Pat | Water | 12/31/2018 | 159 | 159 | 0 | C A N | |
| | | | | **10,439** | | **9,000** | | |
| **1/3/2019** | | | | | | | | |
| 2 | Murff, Bill | Water | 1/3/2019 | 40 | 40 | 0 | C A N | |
| 3 | Murff, John | Water | 1/3/2019 | 119 | 119 | 0 | C A N | |
| 10 | Stansbury, Larry | Water | 1/3/2019 | 201 | 201 | 0 | C A N | |

2/7/2019 **ACCOUNTS RECEIVABLE** 1

| ACCOUNT | SERVICE LOCATION | OWNER / OCCUPANT | BALANCE |
|---|---|---|---|
| 6 | | Babin James | $35.35 |
| 21 | | Beale Luther Alton | $35.35 |
| 19 | | Brewer Lacey | $106.05 |
| 29 | | Broussard James | $35.35 |
| 11 | | Brown Larry & Kathleen | $35.35 |
| 58 | | Chambers Charles | $35.35 |
| 60 | | Currier Bill | $30.70 |
| 12 | | Damico Tom | $35.35 |
| 13 | | Dorman Louis & Barbara | $35.35 |
| 18 | | Forest David & Jane | $35.35 |
| 9 | | Gentz Fred & Jane | $35.35 |
| 62 | | Graves Charles | $35.35 |
| 16 | | Guin Andrea | $106.05 |
| 31 | | Hamilton Dub | $35.35 |
| 36 | | Harshbarger Tim | ($30.95) |
| 68 | | Howell Micah | $35.35 |
| 52 | | Johson William & Sue | $106.05 |
| 64 | | Kennaugh Chris | $35.35 |
| 23 | | Knowles Chip | $35.35 |
| 15 | | Koehler Joel | $20.35 |
| 45 | | Langford Bric | $35.35 |
| 43 | | Martin Glenn J | $35.35 |
| 59 | | McKeever Rick | $35.35 |
| 61 | | McLamara Jay | $35.35 |
| 22 | | Minaldi Ronnie | $35.35 |
| 33 | | Moore Mark & Lauri | $35.35 |
| 2 | | Murff Bill | $35.35 |
| 3 | | Murff John | $35.35 |
| 41 | | Nicholas Wilson | $35.35 |

2/7/2019 **ACCOUNTS RECEIVABLE** 2

| ACCOUNT | SERVICE LOCATION | OWNER / OCCUPANT | BALANCE |
|---|---|---|---|
| 25 | | Nicklebur Jimmy | $35.35 |
| 55 | | Pratt Bobbie | $35.35 |
| 40 | | Richey Keith & Carolyn | $35.35 |
| 38 | | Seago Vera | $35.35 |
| 50 | | Seymour Ed | $70.70 |
| 4 | | Smits Harry | $35.35 |
| 10 | | Smits Karen | $35.35 |
| | | Smits Karen | |
| 1 | | Stansbury Larry | $35.35 |
| 39 | | Teague Randy & Carrie | $35.35 |
| 65 | | Wesner Ernest | $35.35 |
| 42 | | Wike Pat | $35.35 |
| 40 | ACCOUNTS | TOTAL | $1,375.50 |

2/7/2019 **Miscellaneous Charges** 1

| Charge Code | Standard Amount | Priority | Description | PenPct | GL Account | C | S |
|---|---|---|---|---|---|---|---|
| $Water | | 9 | PUC | 0.00 | | Y | Y |
| %Penalty | | 1 | Penalty | 0.00 | | N | N |
| Adjust | | 1 | Adjustment | 0.00 | | Y | N |
| BadDebt | | 1 | Bad Debt | 0.00 | | Y | N |
| Bal For | | 9 | Balance Forward | 0.00 | | Y | N |
| BalXfer | | 1 | Balance Transfer | 0.00 | | Y | N |
| Credit | | 0 | Credit Balance | 0.00 | | Y | N |
| DepApp | | 9 | Deposit Applied | 0.00 | | Y | N |
| Deposit | $50.00 | 9 | Deposits | 0.00 | | Y | N |
| DepRef | | 9 | Deposit Refund | 0.00 | | Y | N |
| Discon | $50.00 | 9 | Disconnect ustomer Request | 0.00 | | Y | N |
| LateFee | | 1 | Late Fee | 0.00 | | Y | N |
| MtrTst | $25.00 | 9 | Meter Test | 0.00 | | Y | N |
| Penalty | | 1 | Penalty | 0.00 | | N | N |
| PUC | | 9 | PUC | 0.00 | | Y | Y |
| Reconct | $25.00 | 1 | Reconnect Fee | 0.00 | | Y | N |
| Ret Chk | $25.00 | 9 | Return Check Charge | 0.00 | | Y | N |
| Tap Fee | $500.00 | 9 | New Tap Fee | 0.00 | | Y | N |
| Transfr | $25.00 | 9 | Transfer Fee | 0.00 | | Y | N |
| Water | | 1 | Water | 0.00 | | Y | Y |
| WtrAdj | | 1 | Water Adj | 0.00 | | Y | N |

2/7/2019 **MEMBERSHIP LIST** 1

| Last Name | First Name | Address Line 1 | Address Line 2 | City |
|---|---|---|---|---|
| Amy | Becky Ritchie | 401 Timberlane Loop | | Hemphill |
| Arnaud | Sheila | 8540 Thomas Dr. | | Orange |
| Babin | James | 6799 Jefferson St. | | Groves |
| Beale | Luther Alton | 270 Timberlane Loop | | Hemphill |
| Brewer | Lacey | 5027 Fernwood Dr. | | Lake Charles |
| Broussard | James | 340 Timberlane Loop | | Hemphill |
| Brown | Larry & Kathleen | 1024 Hopkins | | Mexia |
| Chambers | Charles | 810 West Lucas Dr. | | Beaumont |
| Currier | Bill | P.O. Box 412 | | Burkeville |
| Damico | Tom | 8031 Null Ct | | Spring |
| Dorman | Louis & Barbara | 1875 Cedar Spur St. | | Tyler |
| Forest | David & Jane | 1712 Live Oak | | Port Neches |
| Gentz | Fred & Jane | 3385 Ward St. | | Vidor |
| Graves | Charles | 1415 Ave C | | Port Neches |
| Guidry | Ray | 3913 18th St. | | Texas City |
| Gulin | Andrea | P.O. Box 35 | | Nederland |
| Hamilton | Dub | 9106 Paseo Lobo | | Texas City |
| Harshbarger | Tim | 688 CR 2786 | | Mineola |
| Howell | Micah | 815 So 13th St | | Nederland |
| Johson | William & Sue | 145 Elm Dr. | | Lumberton |
| Kennaugh | Chris | P.O. Box 938 | | Nederland |
| Knowles | Chip | 2605 Sarasota | | Friendswood |
| Koehler | Joel | 7950 Halliday Ln. | | Beaumont |
| Langford | Bric | 799 West Gibson, STE 700 | | Jasper |
| Martin | Glenn J | 17507 Mallet St. | | Crosby |
| McKeever | Rick | 1316 Marshall | | Nederland |
| McLamara | Jay | 445 Timberlane Loop | | Hemphill |
| Minaldi | Ronnie | 1606 Franklin | | Nederland |
| Moore | Mark & Lauri | 396 Timberlane Loop | | Hemphill |
| Murff | Bill | 11655 Jones Rd. | | Houston |
| Murff | John | 2400 62nd St. | | Port Arthur |
| Nicholas | Wilson | 431 CR 4375 | | Woodville |
| Nicholson | Jimmy | 180 Sterling Ridge Dr. | | Nederland |
| Platt | Bobbie | P.O. Box 627 | | Village Mills |
| Richey | Keith & Carolyn | 3104 Lawrence Ave | | Nederland |
| Roberts | Thomas | P.O. Box 632297 | | Nacogdoches |
| Seago | Vera | 6242 Wood Ridge | | Orange |
| Seymour | Ed | 1828 Franklin Ave | | Nederland |
| Smits | Harry | 29070 E. 160 CT | | Brighton |
| Smits | Karen | 3004 Price St. | | Nederland |
| Stansbury | Larry | 524 Ave D | | Nederland |
| Teague | Randy & Carrie | 7242 Campbell Rd. | | Orange |
| Well | | | | |
| Wesner | Ernest | 347 Timberlane Loop | | Hemphill |
| Wike | Pat | 8675 Lafayette Ln | | Beaumont |

**Part F: TCEQ Public Water System or Sewer (Wastewater) Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

22. A. For Public Water System (PWS):

TCEQ PWS Identification Number: 2020054 (7 digit ID)

Name of PWS: TIMBERLANE WATER SYSTEM

Date of last TCEQ compliance inspection: DEC. 12, 2014 (attach TCEQ letter)

Subdivisions served: TIMBERLANE SUBDIVISION

B. For Sewer service: N/A

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility:

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

23. List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | Sewer | |
|---|---|---|---|---|
| | Non-metered | 2" | | Residential |
| | 5/8" or 3/4" | 3" | | Commercial |
| | 1" | 4" | | Industrial |
| | 1 ½" | Other | | Other |
| Total Water Connections: | | | Total Sewer Connections: | |

24. A. Are any improvements required to meet TCEQ or Commission standards?

☑ No ☐ Yes

B. Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

C. Is there a moratorium on new connections?

☑ No ☐ Yes:

25. Does the system being transferred operate within the corporate boundaries of a municipality?

☑ No ☐ Yes: *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:

**26. A.** Does the system being transferred purchase water or sewer treatment capacity from another source?

☑ No ☐ Yes: If yes, attach a copy of purchase agreement or contract.

Capacity is purchased from: _____

Water: _____

Sewer: _____

**B.** Is the PWS required to purchase water to meet capacity requirements or drinking water standards?

☑ No ☐ Yes

**C.** What is the amount of water supply or sewer treatment purchased, per the agreement or contract? What is the percent of overall demand supplied by purchased water or sewer treatment (if any)?

| | Amount in Gallons | Percent of demand |
|---|---|---|
| Water: | | 0.00% |
| Sewer: | | 0.00% |

**D.** Will the purchase agreement or contract be transferred to the Transferee?

☑ No ☐ Yes:

**27.** Does the PWS or sewer treatment plant have adequate capacity to meet the current and projected demands in the requested area?

☐ No ☑ Yes:

**28.** List the name, class, and TCEQ license number of the operator that will be responsible for the operations of the water or sewer utility service:

| Name (as it appears on license) | Class | License No. | Water or Sewer |
|---|---|---|---|
| CALEB A ROSS | C | WO0038272 | WATER |
| | | | |
| | | | |
| | | | |

**ALL applications require mapping information to be filed in conjunction with the STM application.**
***Read question 29 A and B to determine what information is required for your application.***

**29. A.** For applications requesting to transfer an entire CCN, without a CCN boundary adjustment, provide the following mapping information with each of the seven (7) copies of the application:

1. A general location (small scale) map identifying the requested area in reference to the nearest county boundary, city, or town. The following guidance should be adhered to:
   - **i.** If the application requests to transfer certificated service areas for both water and sewer, separate maps must be provided for each.
   - **ii.** A hand drawn map, graphic, or diagram of the requested area is not considered an acceptable mapping document.



   - **iii.** To maintain the integrity of the scale and quality of the map, copies must be exact duplicates of the original map. Therefore, copies of maps cannot be reduced or enlarged from the original map, or in black and white if the original map is in color.

2. A detailed (large scale) map identifying the requested area in reference to verifiable man-made and natural landmarks such as roads, rivers, and railroads. The Applicant should adhere to the following guidance:
   - **i.** The map must be clearly labeled and the outer boundary of the requested area should be marked in reference to the verifiable man-made or natural landmarks. These verifiable man-made or natural landmarks must be labeled and marked on the map as well.
   - **ii.** If the application requests an amendment for both water and sewer certificated service area, separate maps need to be provided for each.
   - **iii.** To maintain the integrity of the scale and quality of the map, copies must be exact duplicates of the original map. Therefore, copies of maps cannot be reduced or enlarged from the original map, or in black and white if the original map is in color.
   - **iv.** The outer boundary of the requested area should not be covered by any labels, roads, city limits or extraterritorial jurisdiction (ETJ) boundaries.

**B.** For applications that are requesting to include area not currently within a CCN, or for applications that require a CCN amendment (any change in a CCN boundary), such as the transfer of only a portion of a certificated service area, provide the following mapping information with each of the seven (7) copies of the application:

1. A general location (small scale) map identifying the requested area with enough detail to locate the requested area in reference to the nearest county boundary, city, or town. Please refer to the mapping guidance in part A 1 (above).
2. A detailed (large scale) map identifying the requested area with enough detail to accurately locate the requested area in reference to verifiable man-made or natural landmarks such as roads, rivers, or railroads. Please refer to the mapping guidance in part A 2 (above).
3. One of the following identifying the requested area:
   - **i.** A metes and bounds survey sealed or embossed by either a licensed state land surveyor or a registered professional land surveyor. Please refer to the mapping guidance in part A 2 (above);
   - **ii.** A recorded plat. If the plat does not provide sufficient detail, Staff may request additional mapping information. Please refer to the mapping guidance in part A 2 (above); or
   - **iii.** Digital mapping data in a shapefile (SHP) format georeferenced in either NAD 83 Texas State Plane Coordinate System (US Feet) or in NAD 83 Texas Statewide Mapping System (Meters). The digital mapping data shall include a single, continuous polygon record. The following guidance should be adhered to:
     - **a.** The digital mapping data must correspond to the same requested area as shown on the general location and detailed maps. The requested area must be clearly labeled as either the water or sewer requested area.
     - **b.** A shapefile should include six files (.dbf, .shp, .shx, .sbx, .sbn, and the projection (.prj) file).
     - **c.** The digital mapping data shall be filed on a data disk (CD or USB drive), clearly labeled, and filed with Central Records. Seven (7) copies of the digital mapping data is also required.



The following information will be used to generate the proposed notice for the application.
**DO NOT provide notice** of the application until it is found sufficient and the Applicants are ordered to provide notice.

**30.** Complete the following using verifiable man-made or natural landmarks such as roads, rivers, or railroads to describe the requested area (to be stated in the notice documents). Measurements should be approximated from the outermost boundary of the requested area:

The total acreage of the requested area is approximately: 13± ACRES ±

Number of customer connections in the requested area: 47

Affected subdivision: TIMBERLANE SUBDIVISION

The closest city or town: HEMPHILL, TEXAS 75949

Approximate mileage to closest city or town center: 15 MILES

Direction to closest city or town: NORTH ON HIGHWAY 87

The requested area is generally bounded on the North by: _____

on the East by: _____

on the South by: _____

on the West by: _____

**31.** A copy of the proposed map will be available at: _____

**32.** What effect will the proposed transaction have on an average bill to be charged to the affected customers? Take into consideration the average consumption of the requested area, as well as any other factors that would increase or decrease a customer's monthly bill.

☒ All of the customers will be charged the same rates they were charged before the transaction.

☐ All of the customers will be charged different rates than they were charged before the transaction.

☐ higher monthly bill ☐ lower monthly bill

☐ Some customers will be charged different rates than they were charged before (i.e. inside city limit customers)

☐ higher monthly bill ☐ lower monthly bill



## Oath for Transferor (Transferring Entity)

STATE OF Texas

COUNTY OF Newton

I, Beverly Minaldi being duly sworn, file this application for sale, transfer, merger, consolidation, acquisition, lease, or rental, as Timberlane Water System
(owner, member of partnership, title as officer of corporation, or authorized representative)

I attest that, in such capacity, I am qualified and authorized to file and verify such application, am personally familiar with the documents filed with this application, and have complied with all the requirements contained in the application; and, that all such statements made and matters set forth therein with respect to Applicant are true and correct. Statements about other parties are made on information and belief. I further state that the application is made in good faith and that this application does not duplicate any filing presently before the Commission.

I further state that I have provided to the purchaser or transferee a written disclosure statement about any contributed property as required under Texas Water Code § 13.301(f) and copies of any outstanding enforcement Orders of the Texas Commission on Environmental Quality, the Public Utility Commission of Texas, or Attorney General and have also complied with the notice requirements in Texas Water Code § 13.301(k).

Beverly Minaldi
**AFFIANT**
(Utility's Authorized Representative)

If the Affiant to this form is any person other than the sole owner, partner, officer of the Applicant, or its attorney, a properly verified Power of Attorney must be enclosed.

**SUBSCRIBED AND SWORN BEFORE ME**, a Notary Public in and for the State of Texas
**this day the** 2nd **of** November, 2018

SEAL

NANCY FOUNTAIN
Notary Public, State of Texas
Comm. Expires 03-03-2022
Notary ID 125605246

Nancy Fountain
**NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS**

Nancy Fountain
**PRINT OR TYPE NAME OF NOTARY**

**My commission expires:** 03/03/2022

## Oath for Transferee (Acquiring Entity)

STATE OF Texas

COUNTY OF Newton

I, Kevin Hester being duly sworn, file this application for sale, transfer, merger, consolidation, acquisition, lease, or rental, as Simply Aquatics, Inc. - President (owner, member of partnership, title as officer of corporation, or authorized representative)

I attest that, in such capacity, I am qualified and authorized to file and verify such application, am personally familiar with the documents filed with this application, and have complied with all the requirements contained in the application; and, that all such statements made and matters set forth therein with respect to Applicant are true and correct. Statements about other parties are made on information and belief. I further state that the application is made in good faith and that this application does not duplicate any filing presently before the Commission.

I further state that I have been provided with a copy of the 16 TAC § 24.109 Commission rules, I am also authorized to agree and do agree to be bound by and comply with any outstanding enforcement orders of the Texas Commission on Environmental Quality, the Public Utility Commission of Texas or the Attorney General which have been issued to the system or facilities being acquired and recognize that I will be subject to administrative penalties or other enforcement actions if I do not comply.

AFFIANT
(Utility's Authorized Representative)

If the Affiant to this form is any person other than the sole owner, partner, officer of the Applicant, or its attorney, a properly verified Power of Attorney must be enclosed.

**SUBSCRIBED AND SWORN BEFORE ME**, a Notary Public in and for the State of Texas this day the 2nd of November, 2018

SEAL

NANCY FOUNTAIN
Notary Public, State of Texas
Comm. Expires 03-03-2022
Notary ID 125605246

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

Nancy Fountain
PRINT OR TYPE NAME OF NOTARY

My commission expires: 03/03/2022



Control Number: 49231

Item Number: 1

Addendum StartPage: 0

49231

# Application for Sale, Transfer, or Merger of a Retail Public Utility

2019 FEB 15 PM 2:32

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

FILING CLERK

### Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller
***Transferee:*** Purchaser
***CCN:*** Certificate of Convenience and Necessity
***STM:*** Sale, Transfer, or Merger
***IOU:*** Investor Owned Utility

## Application Summary

**Transferor:** Ponder Enterprises, Inc. d/b/a Longhorn Co.
*(selling entity)*
**CCN No.s:** 12810

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** Lone Star Water Company
*(acquiring entity)*
**CCN No.s:** N/A

☒ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Denton

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | |
|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 |
| ☐ List of Customer Deposits | Part B: Question 5 |
| ☐ Partnership Agreement | Part C: Question 7 |
| ☒ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☒ Certificate of Account Status | Part C: Question 7 |
| ☐ Financial Audit | Part C: Question 10 |
| ☒ Application Attachment A & B | Part C: Question 10 |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ Capital Improvement Plan | Part C: Question 10 |
| ☐ List of Assets to be Transferred | Part D: 11.B |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☐ Detailed (large scale) Map | Part G: Question 29 |
| ☒ General Location (small scale) Map | Part G: Question 29 |
| ☐ Digital Mapping Data | Part G: Question 29 |
| ☒ Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

See "Answer to Question 1" on Attachment.

2. The proposed transaction will require (check all applicable):

For **Transferee** (Purchaser) CCN:

☒ Obtaining a NEW CCN for Purchaser
☒ Transfer all CCN into Purchaser's CCN (Merger)
☐ Transfer Portion of CCN into Purchaser's CCN
☐ Transfer all CCN to Purchaser and retain Seller CCN
☐ Uncertificated area added to Purchaser's CCN

For **Transferor** (Seller) CCN:

☐ Cancellation of Seller's CCN
☐ Transfer of a Portion of Seller's CCN to Purchaser
☐ Only Transfer of Facilities, No CCN or Customers
☐ Only Transfer of Customers, No CCN or Facilities
☐ Only Transfer CCN Area, No Customers or Facilities

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Ponder Enterprises, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 5772 Tim Donald Rd., Justin, TX 76247

Phone: 940-648-5263 Email: bill@mgrouptexas.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: David Klein Title: Attorney

Mailing Address: 816 Congress Ave., Suite 1900, Austin, TX 78701

Phone: 940-648-5263 Email: bill@mgrouptexas.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: 03/24/16

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 45664

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred

☒ # of customers without deposits held by the transferor 332

☒ # of customers with deposits held by the transferor* 0

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Lone Star Water Company
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 5910 N. Central Expy., Suite 1580, Dallas, TX 75206

Phone: 214-219-7534 Email: wrighta@railroadmanagement.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Alan Wright Title: Attorney

Address: 5910 N. Central Expy., Suite 1580, Dallas, TX 75206

Phone: 214-219-7534 Email: wrighta@railroadmanagement.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☒ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☒ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 803137555

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: NA

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Paul D Kauffman
Position: President Ownership % (if applicable): 50
Address: 5910 N. Central Expy., Suite 1580, Dallas, TX 75206
Phone: 214-750-8028 Email: kauffmanp@potableproducts.com

Name: Howard L Armistead III
Position: VP & Treasurer Ownership % (if applicable): 25
Address: 5910 N. Central Expy., Suite 1580, Dallas, TX 75206
Phone: 214-750-8028 Email: armisteadh@railroadmanagement.com

Name: Cary S Newman
Position: VP & Secretary Ownership % (if applicable): 25
Address: 5910 N. Central Expy., Suite 1580, Dallas, TX 75206
Phone: 214-750-8028 Email: newmanc@railroadmanagement.com

Name:
Position: Ownership % (if applicable):
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

*Projected Financial Information* may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 1,345,000

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☐ Yes ☒ N/A

Total Original Cost of Plant in Service: $ 2,054,028

Accumulated Depreciation: $ (779,181)

Net Book Value: $ 1,274,847

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $ 0

Accumulated Amortization: $ 0

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $ 0

Accumulated Amortization: $ 0

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☐ No ☒ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

Lone Star intends to purchase a backup diesel powered generator post closing.

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

NA

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ See "Answer to

Accumulated Depreciation of Plant: $ Question 14" on

Cash: $ Attachment

Notes Payable: $

Mortgage Payable: $

(Proposed) Acquisition Adjustment*: $

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

Other (NARUC account name & No.):

Other (NARUC account name & No.):

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

None

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

No



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

See "Answer to Question 16" on Attachment.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

See "Answer to Question 17" on Attachment.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

Lone Star does not believe the environmental integrity of the land will be impacted or disrupted as a result of the transactions contemplated by the APA and LPC.

**20.** How will the proposed transaction serve the public interest?

See "Answer to Question 20" on Attachment.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

North Texas Groundwater Conservation District, Town of Ponder, Town of Northlake, Terra Southwest, Town of Justin, Aqua Texas Inc.



## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 0610217 (7 digit ID)

Name of PWS: Longhorn Meadows Addition

Date of last TCEQ compliance inspection: 10/4/18 (attach TCEQ letter)

Subdivisions served: Longhorn Meadows and Westover Ranch

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility:

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 3" | | Residential |
| 332 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| Total Water Connections: | | 332 | | Total Sewer Connections: | |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☐ No ☒ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| Installation of a backup diesel powered generator | 2019 | $55,000 |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☐ No ☒ Yes: Town of Dish, TX (*name of municipality*)

If yes, indicate the number of customers within the municipal boundary.

Water: 93 Sewer:

# American Water's Arm Acquires Sadsbury Township Sewer System

March 07, 2019, 08:20:00 AM EDT By Zacks Equity Research, Zacks.com



Shutterstock photo

**American Water Works Company** AWK announced that its unit, Pennsylvania American Water, has entered into an agreement to acquire the wastewater assets of the Sadsbury Township in Chester County, for nearly $8.6 million. This acquisition will add nearly 1,000 wastewater customers to its existing customer base. Most of these customers receive water services from Pennsylvania American Water.

Pennsylvania American Water, through its existing distribution network, serves nearly 2.4 million people in Pennsylvania. The said acquisition will expand the existing customer base and allow the company to render quality services to new customers at a reasonable cost.

**Consolidation & Investment is Essential**

Since the existing water and wastewater infrastructure in the United States is aging, proper maintenance and upgradation of the system will require investment of billions of dollars, which becomes difficult for small water utilities to make arrangement for. Per an American Water Works Association ("AWWA") report, the cost of restoring aging underground water pipelines in the United States will be at least $1 trillion in the next 25 years.

Therefore, through the acquisition of small utilities, it becomes easier for large companies to make arrangement for funds to carry out these major overhauls. American Water, which is one of the most active players in the water space, continues to widen its market reach through acquisitions. In 2018, the company added 25,000 new customers in the regulated business through organic growth and acquisitions. It already completed a few acquisitions in 2019 and the pending ones, on completion, are expected to add nearly 61,000 customers to its customer base during the year.

We can also notice that other active water utilities like Global Water Resources, Inc. GWRS and Aqua America WTR have been pursuing acquisitions.

Large water utilities continue to invest in upgrading as well as maintaining their existing water and wastewater infrastructure. The water utilities have been undertaking initiatives to upgrade the systems of the newly-acquired assets and quality of services.





The company aims to invest within $8-$8.6 billion from 2019 through 2023, which will help improve earnings by 7-10% per year in the aforesaid period from a 2017 base. A major chunk of $7.3 billion will be directed to strengthen regulated businesses. Another water utility, Aqua America aims to make capital investment in excess of $1.4 billion over the 2019-2021 time period.

**Price Performance**

Shares of American Water have outperformed the industry in a year's time.




**Zacks Rank & Another Key Pick**

Currently, American Water has a Zacks Rank #2 (Buy). Another top-ranked stock from the same industry is AquaVenture Holdings Ltd. WAAS , sporting a Zacks Rank #1 (Strong Buy). You can see **the complete list of today's Zacks #1 Rank stocks here** .

The Zacks Consensus Estimate for 2019 loss of the company has narrowed 2.9% in the past 60 days. The earnings and revenue estimates reflect year-over-year growth of 26.7% and 16%, respectively.

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American Water Works Company, Inc. (AWK): Free Stock Analysis Report

Global Water Resources, Inc. (GWRS): Free Stock Analysis Report

To read this article on Zacks.com click here.

Zacks Investment Research

*The views and opinions expressed herein are the views and opinions of the author and do not necessarily reflect those of Nasdaq, Inc.*

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This article appears in: Investing , Business , Stocks

Referenced Symbols: WTR , WAAS , AWK , GWRS





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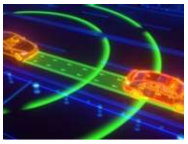

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| Company | Expected Report Date |
|---|---|
| C | Apr 15, 2019 |
| CMA | Apr 16, 2019 |
| PEP | Apr 17, 2019 |
| USB | Apr 17, 2019 |
| TXT | Apr 17, 2019 |
| SLG | Apr 17, 2019 |
| TCBI | Apr 17, 2019 |
| PLXS | Apr 17, 2019 |

Earnings Calendar





Home › News ›
SUEZ completes $9.5 million acquisition of Mahoning Township, PA water and wastewater systems

Water

APRIL.03.2019

# SUEZ completes $9.5 million acquisition of Mahoning Township, PA water and wastewater systems

SUEZ completed a $9.5 million asset purchase agreement today of the water and wastewater systems in Mahoning Township, Pennsylvania, expanding the company's service into Montour County. Prior approval from the Pennsylvania Public Utility Commission (PUC) was granted paving the way for SUEZ to begin operations today.

"We are excited to begin providing water and wastewater service to nearly 1,200 new customers in Mahoning Township," said Eric Gernath, chief executive officer of SUEZ North America. "Our employees have been working diligently to upgrade equipment and establish additional operating systems that will provide the best service possible to our new customers."

Gernath added that SUEZ "provides world class service with a history of innovation in water and wastewater treatment operations and solutions that yield the highest quality of water possible. We use innovative technology for water and wastewater treatment processes that are utilized at many of our facilities across the globe. Our commitment to research and development has also pioneered operating efficiencies utilized throughout the water and wastewater industry."

Mahoning Township Board of Supervisors Vice Chairman T.S. Scott said "We are pleased for the opportunities this transaction presents to our township, the proceeds of which will benefit all residents through funding of infrastructure and water runoff projects. This action removes government from the





business of operating utilities and places it in its proper role of regulation and oversight with ratepayer protections provided by the PUC and Office of Consumer Advocate."

The company has begun construction of an $8.5 million water transmission pipeline project across the six-mile area of US Route 11 between Bloomsburg and Mahoning Township. A letter offering to provide service was recently mailed to potential new customers situated along the route, which includes portions of Cooper and Montour Townships. Support for the project was provided by local and state public officials in advance of SUEZ requesting approval from the PUC to extend service into Montour County.

The company's Pennsylvania Operations provides existing service to over 61,000 customers in portions of the following counties: Columbia, Cumberland, Dauphin, Luzerne, Perry, Schuylkill, Wyoming, York. Today's agreement with Mahoning Township marks the extension of service into Montour County.

New SUEZ customers in Mahoning Township have been switched to monthly billing from quarterly billing to conform with billing for all other customers. They will continue to pay existing rates for service during the first year the company operates the systems.

**About SUEZ in North America**

SUEZ in North America operates across all 50 states and Canada with 3,260 employees dedicated to environmental sustainability and smart and sustainable resource management. The company provides drinking water, wastewater and waste collection service to 6.4 million people on a daily basis; treats over 600 million gallons of water and over 450 million gallons of wastewater each day; delivers water treatment and advanced network solutions to 16,000 industrial and municipal sites; processes 55,000 tons of waste for recycling; rehabilitates and maintains water assets for more than 4,000 municipal and industrial customers; and manages $4.1 billion in total assets. The company posted revenues of $1.064 billion in 2017 and is a subsidiary of Paris-based SUEZ.

**SUEZ**

With 90,000 people on the five continents, SUEZ is a world leader in smart and sustainable resource management. We provide water and waste management solutions that enable cities and industries optimize their resource management and strengthen their environmental and economic performances, in line with regulatory standards. To meet increasing demands to overcome resource quality and scarcity challenges, SUEZ is fully engaged in the resource revolution. With the full potential of digital technologies and innovative solutions, the Group recovers 17 million tons of waste a year, produces 3.9 million tons of secondary raw materials and 7 TWh of local renewable energy. It also secures water resources, delivering wastewater treatment services to 58 million people and reusing 882 million m3 of wastewater. SUEZ generated total revenues of 15.9 billion euros in 2017.

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**Keywords**

#Acquisition #Water #Waste water #United States

← SUEZ'S BOARD OF DIRECTORS...
SUEZ ELECTED WATER COMPANY OF THE... →



S&P Global
Market Intelligence

## New Jersey American Water closes acquisition of wastewater assets

**Wednesday, July 3, 2019 8:38 AM ET**

By Nephele Kirong
*Market Intelligence*

American Water Works Co. Inc. subsidiary New Jersey American Water has completed the acquisition of the wastewater assets of the Borough of Mount Ephraim, N.J., for approximately $1.4 million.

The sewer system serves approximately 1,800 customers, most of whom already receive water service from New Jersey American Water, according to a July 2 news release.

A November 2018 referendum resulted to more than 80% voting in favor of the acquisition. Under the deal, New Jersey American Water agreed to invest more than $4 million in needed improvements, to freeze current rates for two years and to increase rates no more than 3% annually for the three years after that.

The New Jersey Board of Public Utilities cleared the transaction on June 21.

The borough plans to use the sale proceeds to reduce debt. "By selling the system, we are eliminating uncontrollable sewer costs which have been a major uncertainty in our budget," Mount Ephraim Mayor Joseph Wolk said.

*This article was published by S&P Global Market Intelligence and not by S&P Global Ratings, which is a separately managed division of S&P Global.*

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Control Number: 49714

Item Number: 1

Addendum StartPage: 0

49714

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

PUBLIC UTILITY COMMISSION

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**, at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***
Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form?***
A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**
***Transferor:*** Seller
***Transferee:*** Purchaser
***CCN:*** Certificate of Convenience and Necessity
***STM:*** Sale, Transfer, or Merger
***IOU:*** Investor Owned Utility

## Application Summary

**Transferor:** Paul B. Hill (selling entity)
**CCN No.s:** 12677

[X] Sale [ ] Transfer [ ] Merger [ ] Consolidation [ ] Lease Rental

**Transferee:** Megan Estes (acquiring entity)
**CCN No.s:** 12677

[X] Water [ ] Sewer [ ] All CCN [ ] Portion CCN [ ] Facilities transfer

**County(ies):** Limestone

## Table of Contents


Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part E: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18


**Please mark the items included in this filing**

| | | |
|---|---|---|
| [X] | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| [X] | Tariff including Rate Schedule | Part B: Question 4 |
| [ ] | List of Customer Deposits | Part B: Question 5 |
| [ ] | Partnership Agreement | Part C: Question 7 |
| [ ] | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| [ ] | Certificate of Account Status | Part C: Question 7 |
| [ ] | Financial Audit | Part C: Question 10 |
| [X] | Application Attachment A & B | Part C: Question 10 |
| [ ] | Disclosure of Affiliated Interests | Part C: Question 10 |
| [ ] | Capital Improvement Plan | Part C: Question 10 |
| [ ] | List of Assets to be Transferred | Part D: 11.B |
| [ ] | Developer Contribution Contracts or Agreements | Part D: 11.D |
| [ ] | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q17) |
| [ ] | TCEQ Compliance Correspondence | Part E: Question 23 |
| [ ] | TCEQ Engineering Approvals | Part F: Question 24 |
| [ ] | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| [X] | Detailed (large scale) Map | Part G: Question 29 |
| [X] | General Location (small scale) Map | Part G: Question 29 |
| [ ] | Digital Mapping Data | Part G: Question 30 |
| [X] | Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

All existing functions will resume under new owner/operator. No change in land use.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| [X] Obtaining a NEW CCN for Purchaser | [X] Cancellation of Seller's CCN |
| [ ] Transfer all CCN into Purchaser's CCN (Merger) | [ ] Transfer of a Portion of Seller's CCN to Purchaser |
| [ ] Transfer Portion of CCN into Purchaser's CCN | [ ] Only Transfer of Facilities, No CCN or Customers |
| [ ] Transfer all CCN to Purchaser and retain Seller CCN | [ ] Only Transfer of Customers, No CCN or Facilities |
| [ ] Uncertificated area added to Purchaser's CCN | [ ] Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Paul B. Hill (individual, corporation or other legal entity)
[X] Individual [ ] Corporation [ ] WSC [ ] Other:

B. Mailing Address: 141 LCR 908 Jewett TX 75846

Phone: 254-625 1304 Email: paul.bhill592@hotmail.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Paul B. Hill Title: Owner
Mailing Address: 141 LCR 908 Jewett TX 75846
Phone: 254-625-1304 Email: paul.bhill592@hotmail.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: 1/1/07

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

[ ] No [X] Yes Application or Docket Number: 35500-G

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

[ ] There are *no* customers that will be transferred
[X] # of customers without deposits held by the transferor 50
[ ] # of customers with deposits held by the transferor* Ø

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Megan Estes (individual, corporation or other legal entity)
[X] Individual [ ] Corporation [ ] WSC [ ] Other:

B. Mailing Address: 168 LCR 903 Jewett TX 75846

Phone: 228-265-2616 Email: Cedarcreekwatersupply@gmail.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Megan Estes Title: Operator
Address: 168 LCR 903 Jewett TX 75846
Phone: 228-265-2616 Email: Cedarcreekwatersupply@gmail.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

[ ] No [X] Yes [ ] N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

[ ] No [X] Yes [ ] N/A

7. The legal status of the transferee is:

[X] Individual or sole proprietorship
[ ] Partnership or limited partnership (*attach* Partnership agreement)
[ ] Corporation
Charter number (as recorded with the Texas Secretary of State):
[ ] Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
[ ] Articles of Incorporation and By-Laws established (*attach*)
[ ] Municipally-owned utility
[ ] District (MUD, SUD, WCID, FWSD, etc.)



[ ] County
[ ] Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
[ ] Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: Not applicable

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: not applicable
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 112,500

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☑ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 140461

Accumulated Depreciation: $ 20,301

Net Book Value: $ 120,160

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☑ No ☐ Yes

Total Customer CIAC: $ ∅

Accumulated Amortization: $ ∅

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☑ No ☐ Yes

Total developer CIAC: $ ∅

Accumulated Amortization: $ ∅

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☑ No ☐ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

not applicable

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

not applicable

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $ 140,461

Accumulated Depreciation of Plant: $ 20,301

Cash: $ 0

Notes Payable: $ 6,000

Mortgage Payable: $ 0

(Proposed) Acquisition Adjustment*: $ 112,500 (*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(e) and (f).)

Other (NARUC account name & No.): not applicable

Other (NARUC account name & No.): not applicable

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this SPM application. Rates can only be changed through the approval of a rate change application.)

Rate change application - intend to file.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Rate change application will be filed in order to continue to provide adequate services & continue meeting TCEQ requirements. Rate change has not occurred in 12yrs - Significant infrastructure improvements have been made.



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

No change. Quality will remain the same continious service, no negative impact.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

Transferee is Class D Water Operator WO00435946 & has been performing all operations for CCN 12660 and 12677 under licensed owner Paul B. Hill since 2018.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies).

☑ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

Continious existing use. No change.

**20.** How will the proposed transaction serve the public interest?

Continious Service - No change.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Not applicable



## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 1470021 (7 digit ID)

Name of PWS: Cedar Creek Water Supply

Date of last TCEQ compliance inspection: 12/9/16 (attach TCEQ letter)

Subdivisions served: Cedar Creek

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: Not applicable (enter WQ ID)

Name of Wastewater Facility: not applicable

Name of Permitee: not applicable

Date of last TCEQ compliance inspection: Not applicable (attach TCEQ letter)

Subdivisions served: not applicable

Date of application to transfer permit *submitted* to TCEQ: not applicable

**23.** List the number of *existing* connections, by meter connection type, to be affected by the proposed transaction:

| Water | | | Sewer |
|---|---|---|---|
| Non-metered | | 2" | Residential |
| 50 5/8" or 3/4" | | 3" | Commercial |
| 1" | | 4" | Industrial |
| 1 1/2" | | Other | Other |
| Total Water Connections: | 50 | | Total Sewer Connections: |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☑ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| not applicable | | |

**C.** Is there a moratorium on new connections?

☑ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☑ No ☐ Yes: Not Applicable (name of municipality)

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:

Control Number: 49787

Item Number: 1

Addendum StartPage: 0

49787

**Application for Sale of a Retail Public Utility**

Submitted to:

Public Utility Commission of Texas
Attention: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

For:

Stephenville Mobile Home Park, Ltd. WWTP & PWS
5720 LBJ Freeway
Suite 490
Dallas, Texas 75240

Issue Date: July 19, 2019

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**Stephenville Mobile Home Park**
**PWS & WWTP Ownership Transfer**
**Exhibit Cross Reference**

| Exhibit I.D. | Description |
|---|---|
| I | Project Summary |
| II | PUC STM Form |
| III | Maps/Drawings |
| IV | Legal Documents |
| V | Current Tariff |
| VI | TCEQ Correspondence |

**Stephenville Mobile Home Park**
**Project Summary**

consulting environmental engineers, inc.
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## PROJECT SUMMARY

**Stephenville Mobile Home Park, Ltd – Stephenville Mobile Home Park Ownership Transfer**

Stephenville Mobile Home Park WWTP No. WQ0013966001 (CCN No. 20853) and PWS No. TX0720021 (CCN No. 12822) is owned and operated by Stephenville Mobile Home Park, Ltd. Stephenville Mobile Home Park, Ltd. currently provides Stephenville Mobile Home Park with wastewater and water services, and HB Shady Oaks TX, LP plans to provide the same continuous and adequate services after the transfer is approved. All lots inside the park are connected to the system, but not all are occupied, and there is no available growth potential expected based on current property boundaries.

During the first quarter of 2019 Stephenville Mobile Home Park, Ltd and HB Shady Oaks TX, LP entered into a preliminary agreement for the purchase of Stephenville Mobile Home Park WWTP and PWS. Upon approval of the transfer by the PUC, Stephenville Mobile Home Park, Ltd. will deed the Stephenville Mobile Home Park wastewater and water facilities to HB Shady Oaks TX, LP to ensure uninterrupted service to Stephenville Mobile Home Park customers.

**Stephenville Mobile Home Park**
**PUC STM Form**

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.109*

**Sale, Transfer, or Merger (STM) Application Instructions**

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

| FAQ: | Terms |
|---|---|
| ***Who can use this form?*** | ***Transferor***: Seller |
| Any retail public utility that provides water or wastewater service in Texas. | ***Transferee***: Purchaser |
| ***Who is required to use this form?*** | ***CCN***: Certificate of Convenience and Necessity |
| A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area. | ***STM***: Sale, Transfer, or Merger |
| | ***IOU***: Investor Owned Utility |



**Application Summary**

**Transferor**: *(selling entity)* Stephenville Mobile Home Park, Ltd
**CCN No.s**: 12822, 20853

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee**: *(acquiring entity)* HB Shady Oaks TX, LP
**CCN No.s**:

☐ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies)**: Erath

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☒ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☐ | List of Customer Deposits | Part B: Question 5 |
| ☐ | Partnership Agreement | Part C: Question 7 |
| ☐ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ | Certificate of Account Status | Part C: Question 7 |
| ☐ | Financial Audit | Part C: Question 10 |
| ☐ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ | Capital Improvement Plan | Part C: Question 10 |
| ☐ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☐ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |

## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

Upon approval of the transfer by the PUC, Stephenville Mobile Home Park, Ltd will deed the Stephenville Mobile Home Parks water system facilities and wastewater treatment plant to HB Shady Oaks TX. LP to ensure continuous and adequate service to Stephenville Mobile Home Park customers.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☐ Cancellation of Seller's CCN |
| ☐ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☒ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Stephenville Mobile Home Park, Ltd (individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: 5720 LBJ Freeway STE 490 Dallas, TX 75240

Phone: (972) 239-6777 Email: cjohnson@maylor.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Charles P. Gillespie, III Title: Engineer

Mailing Address: 150 N Harbin Drive STE 408, Stephenville, TX 76401

Phone: (254) 968-8130 Email: ceeinc@ceeinc.org

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: August 18, 2009

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 36437-R (Sewer) and 36436-R (Water)

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred
☒ # of customers without deposits held by the transferor
☐ # of customers with deposits held by the transferor*

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: HB Shady Oaks TX, LP (individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☐ WSC ☒ Other: LP

B. Mailing Address: 1400 Belleville Street Richmond, Virginia 23230

Phone: (804) 767-7721 Email: areisinger@ctrecap.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Charles P. Gillespie III Title: Engineer

Address: 150 N Harbin Drive STE 408, Stephenville, TX 76401

Phone: (254) 968-8130 Email: ceeinc@ceeinc.org

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☒ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☒ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship
☒ Partnership or limited partnership (*attach* Partnership agreement)
☐ Corporation
Charter number (as recorded with the Texas Secretary of State):
☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)
☐ Municipally-owned utility
☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County
☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name:

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Haxall Belleville, LLC
Position: Ownership % (if applicable): 99.00%
Address: 1401 East Cary Street Richmond, Virginia 23219
Phone: (804) 783-7543 Email: khill@wtplaw.com

Name: HB Shady Oaks TX, LLC
Position: Ownership % (if applicable): 1.00%
Address: 1400 Belleville Street Richmond, Virginia 23230
Phone: (804) 767-7721 Email: areisinger.com

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

11. A. Proposed Purchase Price: $ 2,000,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

B. Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 439,432.25
Accumulated Depreciation: $ 0.00
Net Book Value: $ 439,432.25

C. **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $
Accumulated Amortization: $

D. **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $
Accumulated Amortization: $

12. A. Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes

**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

N/A

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

N/A

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 439,432.25 |
| Accumulated Depreciation of Plant: | $ 0.00 |
| Cash: | $ 95,623.78 |
| Notes Payable: | $ -55,102.00 |
| Mortgage Payable: | $ 0.00 |
| (Proposed) Acquisition Adjustment*: | $ 0.00 |
| Other (NARUC account name & No.): | |
| Other (NARUC account name & No.): | |

*Acquisition Adjustments will be subject to review under 16 TAC § 24.31(d) and (e)

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

Transferee is an IOU so a change in rates is not applicable.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

A change of rate application is not intended by the transferee.



**Part E: CCN Obtain or Amend Criteria Considerations**

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

The transferee plans to keep providing existing and future customers of Stephenville Mobile Home Park water system facilities and WWTP with continuous and adequate water and wastewater treatment as Stephenville Mobile Home Park, Ltd has in the past.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

The transferee has no relevent qualifications directly related to this situation. However, they are continuing to employ the current operator. In addition, the transferee has operated dozens of manufactured housing communities, some of which have been found in Texas for many years. Lastly, the transferee has the financial resources available to make all needed repairs and to perform regular maintenence.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

No changes.

**20.** How will the proposed transaction serve the public interest?

HB Shady Oaks Tx, LP will provide uninterrupted service to the existing and future customers.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Water: City of Stephenville CCN No. 10463

Sewer: City of Stephenville CCN No. 20169



**Part F: CCN Obtain Water System or Sewer System Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 0720021 (7 digit ID)
Name of PWS: Stephenville Mobile Home Park Water System
Date of last TCEQ compliance inspection: January 16, 2018 (attach TCEQ letter)
Subdivisions served: Stephenville Mobile Home Park

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ 001 - 3966001 (8 digit ID)
Name of Wastewater Facility: Stephenville Mobile Home Park
Name of Permitee: Stephenville Mobile Home Park, Ltd
Date of last TCEQ compliance inspection: January 16, 2018 (attach TCEQ letter)
Subdivisions served: Stephenville Mobile Home Park
Date of application to transfer permit *submitted* to TCEQ: _____

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | 200 | Residential |
| 200 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 200 | | Total Sewer Connections: | 200 |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: _____ *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: _____ Sewer: _____



S&P Global
Market Intelligence

## Pennsylvania American Water acquires water, wastewater assets of Turbotville

**Thursday, July 25, 2019 7:08 AM ET**

By Nephele Kirong
*Market Intelligence*

Pennsylvania American Water Co. acquired the water and wastewater assets of the Borough of Turbotville in Northumberland County, Pa., for $1 million.

"The purchase expands our customer base, which allows us to increase our operational efficiency and capitalize on economies of scale for the benefit of all of our customers," Pennsylvania American Water President Jeffrey McIntyre said.

The water system serves about 320 customers, and the wastewater system serves about 290 customers in Turbotville. The sale allows the borough to pay off all outstanding debt.

As part of the deal, the American Water Works Co. Inc. subsidiary plans to build a new $3.2 million wastewater treatment plant to replace one built in the 1980s. Completion of the new plant is anticipated in 2022. The company will also replace water meters for all customers.

The company has adopted Turbotville's existing water rates, as approved by the state Public Utility Commission.

*This article was published by S&P Global Market Intelligence and not by S&P Global Ratings, which is a separately managed division of S&P Global.*

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# Aqua America's Ohio Subsidiary Reaches Asset Purchase Agreement With City of Campbell to Acquire Water System

August 05, 2019 01:01 PM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America Inc. (NYSE: WTR) announced today its Ohio subsidiary has signed an agreement with the City of Campbell, Mahoning County, to purchase the city's water treatment plant and distribution system for $7.5 million. The system serves approximately 3,200 connections.

Closing of the sale is anticipated in late 2019 upon approval by the Public Utilities Commission of Ohio.

"This purchase will enable Aqua to bring benefits to the Campbell community by leveraging expertise in compliance, large-scale purchasing power and other efficiencies that can be realized with a larger, combined regional operation," said Aqua America Chairman and CEO Christopher Franklin. "Purchasing private and municipally owned systems is about more than growth. It allows us to do our part to strengthen water and wastewater infrastructure in the communities we serve, something that's vitally important for the future. At the same time, proceeds from the sale of a water or wastewater system can enable municipal leaders to pursue other important initiatives in their communities."

Aqua Ohio President Ed Kolodziej said Aqua will invest an estimated $4.3 million in the water system to enhance water quality, reliability, and regulatory and environmental standards. "I commend the City of Campbell's mayor and council members for administering an open and transparent evaluation process," said Kolodziej. "Campbell's officials remained focused on making sure any resolution would offer the best solution for the community, and we look forward to serving our new customers."

Last year, Aqua completed municipal acquisitions in the Village of Manteno, Illinois; Limerick Township, Pennsylvania; the Village of Peotone, Illinois; East Bradford Township, Pennsylvania; and the Tredyffrin Township Municipal Authority's Valley Creek Trunk Sewer System in Pennsylvania. Including Campbell, Ohio, Aqua now has eight pending water and wastewater acquisitions under agreement totaling about 22,600 customer connections, which are expected to close in 2019 or 2020. Additionally, Aqua has signed a letter of intent with the Delaware County Regional Water Quality Control Authority, the large wastewater system that serves approximately 500,000 people in 42 municipalities in Delaware and Chester counties, Pennsylvania.

Aqua also announced on Oct. 23, 2018 an agreement to acquire Pittsburgh-based natural gas company Peoples for $4.275 billion. Expected to close in 2019, Aqua will add 740,000 customers in Western Pennsylvania, Kentucky and West Virginia, while continuing to improve infrastructure reliability, quality of life and economic prosperity in these regions.

Aqua America is the second-largest publicly traded water utility based in the U.S., and serves more than 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: the company's ability to invest capital, receive governmental approval of the transition and to successfully close the acquisition, and its ability bring efficiencies to the City of Campbell community. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions; the receipt of governmental approvals; the successful closing of the acquisition; the successful integration of the customers and the facility; and other factors discussed in our Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Aqua America's business, please refer to Aqua America's annual, quarterly and other SEC filings. Aqua America is not under any obligation — and expressly disclaims any such obligation — to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

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WTRF

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https://www.wvgazettemail.com/business/american-water-finalizes-takeover-of-boone-raleigh-psd-water-service/article_95a5c271-f526-585b-ae04-67c151580ced.html

# American Water finalizes takeover of Boone-Raleigh PSD water service

By Caity Coyne Staff writer
Aug 8, 2019

Customers who once relied on the Boone-Raleigh Public Service District for water service are now officially customers of West Virginia America Water, after the company's acquisition of the PSD was finalized Thursday, according to a news release.

Boone-Raleigh PSD served about 470 water customers in Sylvester and Whitesville. Now, WVAW will serve those customers through an interconnection constructed between its existing lines in the area and the PSD's lines.

WVAW will only provide water service to the PSD's customers. Those who receive sewage service from the PSD will soon see a 16 percent increase (about $6 per 3,000 gallons of water) to their bill due to the decrease in revenue from losing its water customers, according to a filing with the state Public Service Commission.

Water customers will also see an increase in their bills as the water rates raise to meet WVAW's rates — a $19.18, or 57.8 percent, increase.

Per the joint stipulation agreement between the PSD and WVAW, which was approved earlier this year by the PSC, WVAW will pay $115,000 to acquire the water system and its facilities.

Over the past few years, the PSC approached WVAW several times about the possibility of taking over water operations for Boone-Raleigh, especially as its service deteriorated. Earlier this year, John Lipford, chairman of the Boone-Raleigh PSD, said he was confident that this time, the deal would come to fruition, and he was right.

The hope, Lipford said, is that WVAW can provide safer, more reliable water service to those who depend on it.

Boone-Raleigh experiences an unaccounted water loss rate of 69 percent, according to its 2017 annual report filed to the PSC. That's the fourth-highest rate of any water system in the state.





The Environmental Protection Agency classifies Boone-Raleigh as being in "significant noncompliance" for drinking water standards. The PSD has been cited for violations in 11 of the last 12 quarters on record with the EPA.

Now that the acquisition is complete, WVAW is the sole water provider in Boone County, according to testimony given by WVAW representatives to the PSC.

For the past few years, WVAW has been stepping in regularly to offer emergency help to Boone-Raleigh when lines break or water stops flowing, and now, that service will be permanent.

"Once the takeover is finished, the customers will have better water quality and it will be more consistent," Lipford said earlier this year. "This is a good thing for everyone involved. It really is."

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Caity Coyne is a corps member with Report for America, an initiative of The GroundTruth Project.

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@CaityCoyne on Twitter.

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Caity Coyne

https://www.wvgazettemail.com/business/wv-american-water-to-acquire-glasgow-water-system/article_88521a6b-18f5-56ec-9fc0-af036d40c66f.html

# WV American Water to acquire Glasgow water system

By Caity Coyne Staff writer
Sep 6, 2019

A deal approved Friday between West Virginia American Water Company and the Town of Glasgow means that more than 300 customers who rely on the town's municipal water service will soon be transferred to the state's largest water provider.

According to a purchasing agreement filed with the West Virginia Public Service Commission on Friday, the Glasgow water system is deteriorating after years without maintenance, and the town can't financially support it anymore.

"[Glasgow] simply cannot invest quickly enough or efficiently enough to fix the water system, and we are at risk of being unable to continue providing adequate water service," said Glasgow Mayor Donald Fannin, in testimony given to the PSC. "I am concerned that if the Town continues to operate the system the service to our citizens will continue to suffer and degrade."

With the acquisition, only three public water districts remain in Kanawha County, according to the PSC: St. Albans, Cedar Grove and East Bank.

WVAW will pay the town $200,000 to buy its water distribution facilities, including its lines and pump stations. Glasgow does not operate a water treatment plant, and instead buys its water from nearby Cedar Grove through an agreement that expired years ago. Cedar Grove, according to inspection records, has 11 violations on the books for drinking water standards over the past three years.

The $200,000 paid to Glasgow will be used to make any immediate repayments on loans or grants for the water system. If that's not enough, WVAW will take on the remaining debt, according to the purchasing agreement.

Glasgow Town Council passed an ordinance in April approving WVAW's takeover of the system. Rates for the 309 customers who receive water from the town will increase in phases, going up a small percentage at the end of each year until 2023, when they will pay the rates set for the rest of WVAW's Kanawha Valley customers.





Currently, Glasgow customers pay $33.77 per 3,400 gallons of water used, according to the PSC. Those rates were set last May, when customers on the system experienced a 32 percent rate increase, according to a tariff filing with the PSC. WVAW customers in Kanawha County currently pay $57.94 per 3,400 gallons used. There is no way to tell what WVAW rates could look like in 2023.

Fannin, speaking to the PSC, said there have been several instances that reinforced the importance of giving the system up to WVAW, which he said has more financial stability and resources to improve the dilapidated system.

The most recent example was in February, when Fannin said customers experienced numerous water outages and 90 residents at Beverly Healthcare Center, a nursing home in the town, were left without water.

While the system is stable at the moment, town officials worry that another system failure is "possible or even likely in the near future," according to the purchase agreement.

When problems have occurred in the past, WVAW stepped in to assist the town with leak detection and rehabilitate immediate issues, Fannin said in his testimony. He said he's confident that residents will receive higher quality, more reliable service under the system's helm.

Per its annual report, Glasgow Municipal Water Department experiences an unaccounted water loss rate of 66 percent, meaning 66 percent of the water it pumps never makes it to a faucet. That is the fifth highest rate of unaccounted water loss among public water systems in the state.

With its takeover, WVAW will begin looking at upgrading the systems infrastructure and replacing parts of the distribution system that lead to unreliable, potentially unsafe water, according to a Friday news release.

Fannin said that while town officials are aware of the issues facing the water system, they don't have the money to do anything about it. Since Glasgow lost a coal-fired power plant operated by Appalachian Electric Power in 2015, the town has receives less business and occupation taxes that could help upkeep town facilities.

This year, Glasgow laid off a majority of its public works department, leaving just one employee, and officials are "scrutinizing every single town expense," according to Fannin. Hard decisions like this, he said, are ones that officials must make to keep Glasgow from ceasing to exist as a municipality.

"The entire Town government has forgone wages to keep this town afloat. This is one sign of our commitment to doing our best to provide the needed services to our residents," Fannin told the PSC. "By selling this water system to WVAW, we are able to obtain a fair value that will allow the government to focus on other needs of the Town while assuring our residents have excellent water service."





Caity Coyne is a corps member with Report for America, an initiative of The GroundTruth Project. Reach Caity Coyne at caity.coyne@wvgazettemail.com, 304-348-7939 or follow @CaityCoyne on Twitter.

Caity Coyne

businesswire
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AQUA

## Aqua America's Pennsylvania Subsidiary Reaches Agreement with DELCORA to Purchase Municipal Wastewater System Serving Approximately 500,000 People

*Acquisition will be the largest municipal transaction for Aqua America and the largest water/wastewater municipal transaction in Pennsylvania's history*

September 17, 2019 04:50 PM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America Inc. (NYSE: WTR) announced today its Pennsylvania subsidiary, Aqua Pennsylvania Wastewater (Aqua), has signed an asset purchase agreement with the Delaware County Regional Water Quality Control Authority (DELCORA) to acquire the municipal authority's wastewater assets for $276.5 million. The pending transaction is subject to Pennsylvania Public Utility Commission approval.

DELCORA serves a population of approximately 500,000 people in 42 municipalities in Southeast Pennsylvania. Aqua estimates that this represents the equivalent of 165,000 retail customers. The customer base consists of retail, commercial, and industrial customers and large wholesale agreements with municipal authorities. Its assets include 168 miles of combined and separate sewer mains, 14 miles of large-diameter force mains, and a 50-million gallon-per-day wastewater treatment plant that serves the western part of its service territory. Wastewater from the eastern part of the territory is treated by Philadelphia Water Department.

"We are proud to announce that DELCORA will become the largest municipal transaction in our 133-year company history," said Aqua America Chairman and CEO Christopher Franklin. "Our long track record of delivering reliable water and wastewater services, and investing in infrastructure across the United States, has positioned Aqua well for this opportunity. Since 2016, Aqua America has acquired more than 30 water and wastewater systems and integrated them into our existing operations, and I'm looking forward to welcoming DELCORA's employees and customers into our company."

Prior to the agreement, DELCORA faced substantial capital investment costs to comply with U.S. Environmental Protection Agency mandates to resolve combined sewer overflow problems. The cost of these projects, and other capital investments, is estimated to be approximately $1.2 billion through 2041.

"Rather than stay the course and undertake significant projects that are expected to have high costs and dramatically increase customer rates, DELCORA decided to partner with Aqua to address these challenges," said Aqua President Marc Lucca. "Because of our economies of scale, technical expertise, and long-standing commitment to southeastern Pennsylvania, this partnership will benefit our current and future customers along with the region's environment."

Following closing, Aqua will hire all 136 current DELCORA employees, honor all DELCORA union contracts, and offer expanded professional opportunities in water and wastewater to these employees.

In 2018, Aqua America completed municipal acquisitions in the Village of Manteno, Illinois; Limerick Township, Pennsylvania; the Village of Peotone, Illinois; East Bradford Township, Pennsylvania; and the Tredyffrin Township Municipal Authority's Valley Creek Trunk Sewer System in Pennsylvania. In addition to DELCORA, Aqua America currently has seven pending water and wastewater acquisitions under agreement, which represent close to 23,000 customer connections and are expected to close in 2019 or 2020.

In October 2018, Aqua America also announced an agreement to acquire Pittsburgh-based natural gas company Peoples for $4.275 billion. This transaction, which is expected to close in 2019, will add 740,000 customers in Western Pennsylvania, Kentucky and West Virginia, and enable Aqua to expand its ongoing efforts to improve infrastructure reliability, quality of life and economic prosperity in these regions.

Aqua America is the second-largest publicly traded water utility based in the U.S., and serves more than 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: the company's ability to invest capital efficiently, and its ability to receive governmental approval of the transition and to successfully close the acquisition. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions; the receipt of governmental approvals; the receipt of the closing conditions to the agreement of sale; the successful closing of the acquisition; the successful integration of the customers and the facility; and other factors discussed in our Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Aqua America's business, please refer to Aqua America's annual, quarterly and other SEC filings. Aqua America is not under any obligation — and expressly disclaims any such obligation — to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

WTRF

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# Illinois American Water Acquires Village of Glasford Water and Wastewater Systems

September 19, 2019 04:26 PM Eastern Daylight Time

GLASFORD, Ill.--(BUSINESS WIRE)--Illinois American Water President Bruce Hauk today announced the Company's acquisition of the Village of Glasford water and wastewater systems. The purchase adds approximately 492 water customers and 482 wastewater customers to the Central Illinois service area.

The Village of Glasford voted in favor of the sale in August 2018. The Illinois Commerce Commission (ICC) approved the sale for $1.9 million on Sept. 18, 2019. The sale was completed today.

"We have a long history – 130 years – of providing quality water service in Central Illinois. We look forward to serving our new customers in Glasford," said Hauk.

Glasford Mayor Jack Rudd, Jr. said the sale of the water and wastewater systems to Illinois American Water is, "in the Village's best interest." He went on to say, "Residents will not only have better quality water and sanitary service, but needed critical investments will also be made under Illinois American Water ownership. The partnership also provides significant net proceeds to help fund other village needs and priorities. We welcome Illinois American Water to our community."

Illinois American Water is committed to upgrading the Glasford water and wastewater systems, including construction of a transmission water main from Timber-Logan Rural Water District to the Village of Glasford. This work will provide customers with water treated and produced by Illinois American Water's water quality experts. A re-chloramination station will also be installed to ensure adequate disinfection for high-quality water service which meets EPA requirements. Security improvements, water main installations and upgrades to the sanitary sewer system will also be completed.

Roger Goodson, sr. manager for Illinois American Water's Eastern and Western Divisions, said, "We are excited to become a member of this vibrant community, not only as the water and wastewater service provider, but as a good neighbor."

New customers will receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more. The Village of Glasford will be incorporated into the company's Peoria District which serves Peoria, West Peoria, Farmington, Bartonville, Bellevue, Rome, Mapleton and parts of surrounding areas including Washington and East Peoria. Dunlap, Hanna City and the Timber-Logan Rural Water District are sale for resale (wholesale) customers.

The appraisal process used for the Glasford water and wastewater systems was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. According to Hauk, this law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility.

To learn more about Illinois American Water and hear testimonials from communities the company has partnered with, please visit the Doing Business with Us page under About Us at www.illinoisamwater.com.

**About Illinois American Water** - Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville.

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

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12/30/2019 Illinois American Water Acquires Village of Godfrey Wastewater System; Adds 6,200 Wastewater Customers to Southern Illinois Service...

American Water Websites | Contact Us (/amwater.com/ilaw/contact-us) | Log in to MyWater | Search...

ILLINOIS AMERICAN WATER (https://amwater.com/ilaw/)

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## Illinois American Water Acquires Village of Godfrey Wastewater System; Adds 6,200 Wastewater Customers to Southern Illinois Service Area

Dateline City:
GODFREY, Ill.

GODFREY, Ill.--(BUSINESS WIRE (http://www.businesswire.com))--Illinois American Water President Bruce Hauk today announced the Company's acquisition of the Village of Godfrey wastewater system. The purchase adds approximately 6,200 wastewater customers to the Southern Illinois service area. The system serves customers in Godfrey and nearby communities of Brighton and Fosterburg.

The Village of Godfrey voted in favor of the sale in October 2018. The Illinois Commerce Commission (ICC) approved the sale for $13.55 million on Oct. 2, 2019. The sale was completed today.

"We are excited to expand our services in the River Bend area where we've provided quality, reliable water service for over 140 years. Our team of wastewater experts are ready to serve our new customers and they are looking forward to making critical improvements to ensure reliable service for public health," said Hauk.

Village of Godfrey Mayor Mike McCormick said the sale of the wastewater system to Illinois American Water will "serve residents well today and in the future." He went on to say, "Illinois American Water will not only make the EPA mandated improvements to bring the system up to compliance, but their team of experts will ensure reliable service for years to come. This partnership also provides significant net proceeds to help fund other village needs and priorities. We welcome this expanded partnership with Illinois American Water in our community."

In addition to completing requirements under the Amended Consent Order, Illinois American Water expects to invest on average about $2 million per year for routine capital improvements for the first 10 years of ownership.

Karen Cooper, senior manager for Illinois American Water's Southern Division, said, "Many communities are looking for new and innovative ways to deal with challenges they're facing while controlling expenses. There's nothing more important to our team than ensuring our customers receive the best service possible at a good value. This partnership is a great solution for residents."

New customers will receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more.

The appraisal process used for the Godfrey wastewater system was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. According to Hauk, this law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility. To learn more about Illinois American Water and hear testimonials from communities the company has partnered with, please visit the Doing Business with Us page under About Us at www.illinoisamwater.com (https://amwater.com/ilaw/).

**About Illinois American Water** - Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com (https://amwater.com/) and follow American Water on Twitter (https://twitter.com/amwater), Facebook (https://www.facebook.com/weareamericanwater/) and LinkedIn (https://www.linkedin.com/company/american-water/).

Language:
English
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(https://amwater.com/corp/careers)

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PENNSYLVANIA AMERICAN WATER

## Pennsylvania American Water Expands Footprint with Acquisition of Steelton Borough Authority Water System

October 09, 2019 04:30 PM Eastern Daylight Time

MECHANICSBURG, Pa.--(BUSINESS WIRE)--Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced today that it has acquired the water assets of the Steelton Borough Authority in Dauphin County. The purchase price for the system, which serves nearly 2,400 customers, was $21.75 million.

"We welcome our new Steelton customers and look forward to working with the community on long-term water infrastructure solutions for this area," said Pennsylvania American Water President Mike Doran. "The purchase not only provides financial benefits and rate stability for Steelton, but it also aligns perfectly with our existing water service territory here in the midstate."

The sale of the water system is expected to allow the borough to eliminate its existing water debt, build up budget reserves, and invest in capital projects. Effective today, all seven of Steelton's employees, represented by AFSCME District Council 90, are now employees of Pennsylvania American Water.

"We are proud of the hard work and rich history of the Steelton Water System and, today, leave it in more than capable hands," said Allan Ausman, chair of the Steelton Water Authority. "Pennsylvania American Water's investment in our system brings Steelton into the 21st century and ensures customers will have reliable, high-quality water service into the future."

As approved by the Pennsylvania Public Utility Commission (PUC), the company has adopted Steelton's existing water rates, which will now be billed monthly. The company's rates and rules of service are regulated by the PUC and are posted on the company's website.

This sale was executed under Pennsylvania's Act 12 statute, which allows municipalities to sell water and wastewater systems for a price based on the fair market value of the facilities. Prior to the passage of Act 12, the valuation process was based on assessing the system's original cost at the time of construction – which may be 50 years old or more – less depreciation and contributed property. "Act 12 allows municipalities the opportunity to receive a purchase price that is more in line with the current value of its system assets," said Doran.

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

*This release contains forward looking statements, including, among others, our plan to continue our long-term strategy of capital investment in our systems. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, unfavorable weather conditions, changes in regulations or regulatory treatment and availability and the cost of capital. We undertake no obligation to publicly update or revise any forward-looking statement.*

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Tweets by @paamwater

**Pennsylvania American Water**
@paamwater

WASHINGTON COUNTY CUSTOMERS: For your convenience, a water buffalo is available at the North Strabane fire station for customers in the Route 19 repair area. Please bring your own container to fill.




Jan 4, 2020

**Pennsylvania American Water**
@paamwater

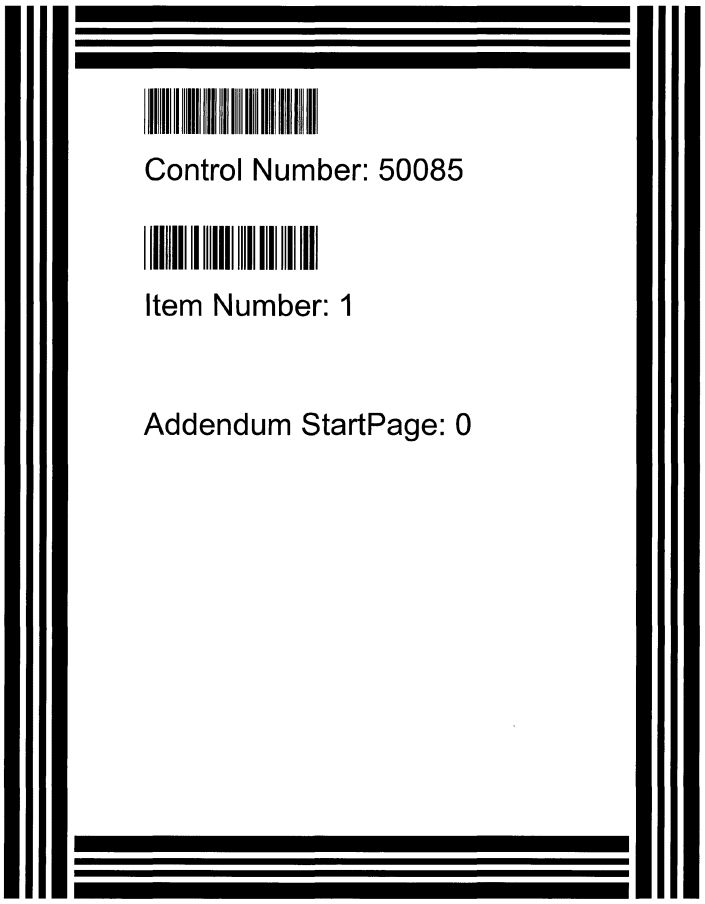
LIMERICK CUSTOMERS: The Boil Water Advisory for your area has been lifted. You may resume your normal water usage. We thank our customers for their patience and cooperation during this event. For more information, contact Customer Service at (800) 565-7292.




Jan 4, 2020

**Pennsylvania American Water**
@paamwater

LIMERICK TWP CUSTOMERS: The Boil Water Advisory for some customers in your area remains in effect. Map of area: arcg.is/08Wbe. We will update here when the advisory is lifted.




50085

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.239*

RECEIVED
2019 OCT 10 PM 3:37
PUBLIC UTILITY COMMISSION
FILING CLERK

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT (Administratively Incomplete)***: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing.***
   ii. ***SUFFICIENT (Administratively Complete)***: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

| FAQ: | Terms |
|---|---|
| ***Who can use this form?*** Any retail public utility that provides water or wastewater service in Texas. | ***Transferor:*** Seller |
| ***Who is required to use this form?*** A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area. | ***Transferee:*** Purchaser |
| | ***CCN:*** Certificate of Convenience and Necessity |
| | ***STM:*** Sale, Transfer, or Merger |
| | ***IOU:*** Investor Owned Utility |



**Transferor:** Castle Water Inc., d/b/a Horseshoe Bend Water System
*(selling entity)*
**CCN No.:** 10263

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** Horseshoe Bend Water Company LLC
*(acquiring entity)*
**CCN No.:** N/A

☒ Water ☐ Sewer ☐ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Parker

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☒ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☒ | List of Customer Deposits | Part B: Question 5 |
| ☐ | *Partnership Agreement* | *Part C: Question 7* |
| ☒ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☒ | Certificate of Account Status | Part C: Question 7 |
| ☐ | Financial Audit | Part C: Question 10 |
| ☒ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ | Capital Improvement Plan | Part C: Question 10 |
| ☐ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☒ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☐ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☐ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |



1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

See "Answer to Question 1" on Attachment 1.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☒ Obtaining a NEW CCN for Purchaser | ☐ Cancellation of Seller's CCN |
| ☒ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Castle Water Inc. *(individual, corporation, or other legal entity)*
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: PO Box 613, Mansfield, TX 76063

Phone: (512) 474-9100 Email: gkirshbaum@terrillwaldrop.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Geoff Kirshbaum Title: Attorney

Mailing Address: 810 West 10th St., Austin, TX 78701

Phone: (512) 474-9100 Email: gkirshbaum@terrillwaldrop.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: January 1, 2015

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: 42942

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**

5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred

☒ # of customers without deposits held by the transferor 214

☒ # of customers with deposits held by the transferor* 293

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Horseshoe Bend Water Company LLC
(individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☐ WSC ☒ Other: Limited Liability Company

B. Mailing Address: 5910 N. Central Expy., Suite 1580 Dallas, TX 75206

Phone: (214) 219-7534 Email: wrighta@railroadmanagement.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Alan Wright Title: Attorney

Address: 5910 N. Central Expy., Suite 1580 Dallas, TX 75206

Phone: (214) 219-7534 Email: wrighta@railroadmanagement.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☒ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☒ N/A

7. The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 803436754

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: NA

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Paul D Kauffman
Position: President Ownership % (if applicable): 50.00%
Address: 5910 N. Central Expy., Suite 1580 Dallas, TX 75206
Phone: (214) 750-2808 Email: kauffmanp@potableproducts.com

Name: Howard L Armistead III
Position: VP, Treasurer Ownership % (if applicable): 25.00%
Address: 5910 N. Central Expy., Suite 1580 Dallas, TX 75206
Phone: (214) 750-8028 Email: armisteadh@railroadmanagement.com

Name: Cary S Newman
Position: VP, Secretary Ownership % (if applicable): 25.00%
Address: 5910 N. Central Expy., Suite 1580 Dallas, TX 75206
Phone: (214) 750-8028 Email: newmanc@railroadmanagement.com

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information**
The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

11. A. Proposed Purchase Price: $ 500,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

B. Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☐ Yes ☒ N/A

Total Original Cost of Plant in Service: $ 1,276,492.00
Accumulated Depreciation: $ -1,183,571.00
Net Book Value: $ 92,920.00

C. **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $
Accumulated Amortization: $

D. **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $
Accumulated Amortization: $

12. A. Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☐ No ☒ Yes



B. If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

The APA includes a holdback in the amount of $120,000. This amount will be available to address necessary repairs, construction and improvements identified in that certain TCEQ Docket No. 2019-0923-UCR-E (the "Emergency Order"). The Applicant currently anticipates that all repairs and improvements identified in the Emergency Order shall be completed within nine months of closing.

13. Provide any other information concerning the nature of the transaction you believe should be given consideration:

HBWC is owned by Potable Products Incorporated ("Potable"). Potable and its affiliates have significant experience operating both water and wastewater systems in Arizona and believe they have the financial and operational resources to address the needs of the system and its customers.

14. Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 1,276,492.00 |
| Accumulated Depreciation of Plant: | $ -1,183,572.00 |
| Cash: | $ 20,000.00 |
| Notes Payable: | $ 275,000.00 |
| Mortgage Payable: | $ 0.00 |
| (Proposed) Acquisition Adjustment*: | $ 0.00 |
| Other (NARUC account name & No.): | |
| Other (NARUC account name & No.): | |

* Acquisition Adjustments will be subject to review under 16 TAC § 24.41(d) and (e)

15. A. Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

None

B. If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Applicant does not intend to file an application to change rates within the next twelve months as a result of the transaction.

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

See "Answer to Question 16" on Attachment 1.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

See "Answer to Question 17" on Attachment 1.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

HBWC does not believe the environmental integrity of the land will be impacted or disrupted as a result of the transaction contemplated by the APA.

**20.** *How will the proposed transaction serve the public interest?*

See "Answer to Question 20" on Attachment 1.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Parker County SUD - CCN 12313
Monarch Utilities - CCN 12983



**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22.** **A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 1640002 (7 digit ID)
Name of PWS: Horseshoe Bend Water System
Date of last TCEQ compliance inspection: December 28, 2016 (attach TCEQ letter)
Subdivisions served: Horseshoe Bend

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ (8 digit ID)
Name of Wastewater Facility:
Name of Permitee:
Date of last TCEQ compliance inspection: (attach TCEQ letter)
Subdivisions served:
Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | Sewer |
|---|---|---|---|
| | Non-metered | 2" | Residential |
| 508 | 5/8" or 3/4" | 3" | Commercial |
| | 1" | 4" | Industrial |
| | 1 ½" | Other | Other |
| | Total Water Connections: 557 | | Total Sewer Connections: |

**24.** **A.** Are any improvements required to meet TCEQ or Commission standards?

☐ No ☒ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| See "Answer to Question 24B" on Attachment 1. | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the *corporate boundaries of a municipality*?

☒ No ☐ Yes: _____ *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: _____ Sewer: _____



joe.loughmiller@amwater.com

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## Indiana American Water Acquires Lake Station Water System in Northwest Indiana

October 22, 2019 05:19 PM Eastern Daylight Time

GREENWOOD, Ind.--(BUSINESS WIRE)--Indiana American Water President Matt Prine today announced the company's acquisition of the City of Lake Station's water system in northwest Indiana. The purchase of the system adds more than 3,270 water customers, representing a population of more than 8,800 residents, to the company's customer base.

"Indiana American Water already provides water service to much of northwest Indiana, so this is a good fit for us," said Prine. "The acquisition provides access to operations and customer service professionals for Lake Station residents and broadens the footprint of Indiana American, allowing existing customers to benefit from efficiencies in delivering service and the ability to attract capital for investment in the system."

"Communities are looking for new and innovative ways to deal with challenges they're facing and hold the bottom-line on expenses," Prine continued. "This acquisition is a great solution for the City and its customers."

Lake Station Mayor Christopher Anderson also expressed his support of the acquisition.

"The acquisition of our water system by Indiana American Water has several benefits to our community, including additional local and property tax revenues, the expertise and resources to address system and aging infrastructure issues, and significant proceeds from the sale to help us address financial challenges and other pressing community needs," said Anderson. "This sale will position our community for continued growth and prosperity well into the future."

The acquisition of the Lake Station water system for approximately $20.68 million was approved by the Indiana Utility Regulatory Commission in August 2018 and closed by Indiana American Water and the City of Lake Station on Tuesday, October 22, 2019. The closing was delayed by appeals which have now been resolved. The Lake Station system will be incorporated into the company's Northwest Indiana Operations, which currently serves more than 250,000 residents.

**About Indiana American Water**

Indiana American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to more than 1.3 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Contacts
Joe Loughmiller
Office 317-885-2434
Cell 317-903-7431

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PENNSYLVANIA AMERICAN WATER

# Pennsylvania American Water Expands Footprint with Acquisition of Township of Exeter Wastewater System in Berks County

***Transaction secures long-term wastewater solution for Exeter Township***

October 24, 2019 04:30 PM Eastern Daylight Time

MECHANICSBURG, Pa.--(BUSINESS WIRE)--Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced today that it has acquired the wastewater assets from the Township of Exeter in Berks County. The purchase price for the system, which serves more than 9,000 customers, is $93.5 million and marks Pennsylvania American Water's fifth acquisition in 2019.

"We welcome this opportunity to provide our new customers the same high level of quality wastewater service that our current Exeter Township water customers have come to expect from our company," said Pennsylvania American Water President Mike Doran. "We will now commit our resources to the wastewater system improving environmental compliance and dependability."

"The sale of the wastewater treatment plant and collection system to Pennsylvania American Water is a great benefit to current and future residents of Exeter," said John Granger, township manager. "The plant and system were becoming an increasing burden on the township as federal and state regulations were becoming too difficult for the township to manage."

"The sale presents a unique opportunity to secure the finances of the township for residents who presently live here, while also planning for those who come later," Granger continued. "We intend to use proceeds from the sale to eliminate all wastewater debt, make deposits into pension funds, and implement new tax exemptions – providing tax savings for all eligible residents."

As approved by the Pennsylvania Public Utility Commission (PUC), Pennsylvania American Water has adopted Exeter's existing sewer rates, which will now be billed monthly. The company's rates and rules of service are regulated by the PUC and are posted on the company's website.

Over the next three years, Pennsylvania American Water plans to invest $3 million in water and wastewater infrastructure improvements within Exeter Township.

This sale was executed under Pennsylvania's Act 12 statute, which allows municipalities to sell water and wastewater systems for a price based on the fair market value of the facilities. Prior to the passage of Act 12, the valuation process was based on assessing the system's original cost at the time of construction – which may be 50 years old or more – less depreciation and contributed property.

"Act 12 allows municipalities the opportunity to receive a purchase price that is more in line with the current value of its system assets," explained Doran.

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water and wastewater utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water and wastewater services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

*This release contains forward looking statements, including, among others, our plan to continue our long-term strategy of capital investment in our systems. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, unfavorable weather conditions, changes in regulations or regulatory treatment and availability and the cost of capital. We undertake no obligation to publicly update or revise any forward-looking statement.*

Contacts
Maggie Sheely
Pennsylvania American Water
717-550-1616
M: 717-317-3762
Maggie.sheely@amwater.com

Tweets by @paamwater

**Pennsylvania American Water**
@paamwater

WASHINGTON COUNTY CUSTOMERS: For your convenience, a water buffalo is available at the North Strabane fire station for customers in the Route 19 repair area. Please bring your own container to fill.






PENNSYLVANIA AMERICAN WATER

Jan 4, 2020

**Pennsylvania American Water**
@paamwater

LIMERICK CUSTOMERS: The Boil Water Advisory for your area has been lifted. You may resume your normal water usage. We thank our customers for their patience and cooperation during this event. For more information, contact Customer Service at (800) 565-7292.




Jan 4, 2020

**Pennsylvania American Water**
@paamwater

LIMERICK TWP CUSTOMERS: The Boil Water Advisory for some customers in your area remains in effect. Map of area: arcg.is/08Wbe. We will update here when the advisory is lifted.



## Aqua Completes purchase of Cheltenham Township Wastewater System

*Posted on Thursday December 19, 2019*

Sewer sale is complete. All sewer calls should go to Aqua PA local office (610) 792-2112 from 8:30 A.M to 4:30 P.M. and the call (877) 987-2782 (for off hours and emergencies).

**Aqua America's Pennsylvania subsidiary completes purchase of Cheltenham Township wastewater syste**
**Acquisition is Aqua's fourth in 4Q; eighth for 2019**

**BRYN MAWR, Pa. –** Aqua America (NYSE:WTR) announced today that its Pennsylvania subsidiary has completed the purchase of the Cheltenham Township wastewater system, which serves approximately 10,200 connections in Montgomery County, for $50.25 million.

"This is an exciting time in the water industry, and we are pleased to offer a compelling set of solutions for municipal leaders who are considering the sale of their utilities. We have forged a strong partnership with leaders Cheltenham to bring significant investment to improve sewer pipes and provide high quality service to residents the township," said Aqua America Chairman and CEO Christopher Franklin.

"We are proud that the Board of Commissioners of Cheltenham Township, where we've provided drinking wate for decades, chose to have us provide their wastewater service as well and entrusted us to be stewards of those assets," said Aqua Pennsylvania President Marc Lucca.

"Cheltenham Township is pleased to close on the sale of the sewer system to Aqua because it's truly a win-win f all parties. The multi-year collection system re-lining and replacement work needed for the *90-year-old sewer system* would have cost $10 million per neighborhood at a total cost of $50 million, which the township couldn't cover without assuming loans and significant tax increases," said Cheltenham Township Manager Bryan Havir. "This sale allows Aqua and the Pennsylvania Department of Environmental Protection to address needed collecti system and lateral repairs without the township having to saddle residents with increased taxes and costly repairs

The Cheltenham wastewater acquisition is the third municipal transaction completed by Aqua Pennsylvania usin the Commonwealth's fair market value legislation, Act 12, since the law was enacted in 2016. Collectively, those transactions have yielded an additional 16,901 wastewater customers.

Earlier this month, Aqua Pennsylvania completed the purchase of three municipal water systems previously serv by the Phoenixville Borough water system, totaling 535 customer connections in Chester and Montgomery counties, for $3.5 million. This was not a fair market value transaction.

Currently, Aqua Pennsylvania has two transactions under review by the Pennsylvania Public Utility Commissior and recently announced an asset purchase agreement with DELCORA, which if approved would be the largest municipal transaction for Aqua America and the largest water/wastewater municipal transaction in Pennsylvania' history, yielding Aqua Pennsylvania the equivalent of 165,000 wastewater customers.

"Representatives from the Aqua team and Cheltenham Township have worked cooperatively for several months i anticipation of this acquisition. We are now ready to initiate the necessary improvements required by infiltration and inflow issues, that resulted in the township receiving a DEP consent order," said Lucca. "I believe our longstanding relationship with the township, its residents as well as the regulatory community will make for a smooth transition."

In total, Aqua has plans to spend more than $50 million over the next 10 years to improve Cheltenham's wastewater system.

Aqua's Illinois subsidiary acquired the Skyline water and wastewater systems in November from the Fox River Water Reclamation District, located in South Elgin, IL for $3.5 million. Each system serves 376 customer connections in the Skyline and Valley View communities of Saint Charles Township, Illinois. Earlier this month, Aqua Illinois acquired the Village of Grant Park's wastewater system, which serves more than 1,200 people through approximately 540 connections for $2.3 million. The Public Utilities Commission of Ohio yesterday approved Aqua Ohio's agreement with the City of Campbell to purchase the city's water treatment plant and distribution system, which serves 3,200 customer connections.





In total, Aqua America subsidiaries completed eight acquisitions in 2019, adding a total of 1,495 new water customer connections and 11,130 new wastewater customer connections.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

# # #

**SEWER MAINTENANCE CALL INFORMATION -- residents should no longer call Cheltenham Township**

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PENNSYLVANIA AMERICAN WATER

## Pennsylvania American Water Signs Agreement to Acquire Borough of Kane Authority's Wastewater System

November 14, 2019 04:45 PM Eastern Standard Time

KANE, Pa.--(BUSINESS WIRE)--Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced that it has signed an agreement to acquire the wastewater assets of the Borough of Kane Authority in McKean County for approximately $17.5 million. The Authority's wastewater system serves nearly 2,100 customers in Kane Borough and Wetmore Township.

"We have been providing reliable water service to this area for more than 100 years and are deeply rooted in these communities," said Pennsylvania American Water President Mike Doran. "The proceeds of the sale will support local infrastructure improvements and economic development activities that will be vital to supporting a high quality of living for residents."

Pennsylvania American Water and the Authority will seek approval of the acquisition from the Pennsylvania Public Utility Commission (PUC) and other necessary approvals from the Pennsylvania Department of Environmental Protection.

"We look forward to bringing our operational and engineering expertise, as well as our commitment to make necessary capital investments, to improve the wastewater system and ensure its compliance with environmental regulations," Doran added. "We also plan to welcome Kane's four wastewater treatment plant operators to the Pennsylvania American Water family."

The signing of the purchase agreement is the culmination of several years of negotiations between Pennsylvania American Water, the Authority, Kane Borough, and Wetmore Township officials. The company expects to close the transaction in the later part of 2020, pending regulatory approvals.

The pending transaction will be executed under Pennsylvania's Act 12 statute, which allows municipalities to sell water and wastewater systems for a price based on the fair market value of the facilities. Prior to the passage of Act 12, the valuation process was based on assessing the system's original cost at the time of construction -- which may be 50 years old or more -- less depreciation and contributed property.

"The law enacted in 2016 now provides municipalities the opportunity to receive a purchase price that is more reflective of the current value of the system assets," Doran explained.

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

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Tweets by @paamwater

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@paamwater

#Saveyourdrains

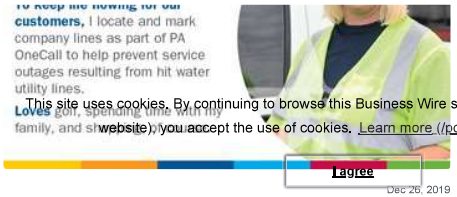



Dec 27, 2019

**Pennsylvania American Water**
@paamwater

Every employee at Pennsylvania American Water touches our customers in one way or another. We are featuring a new employee from around the Commonwealth every week to highlight their roles in delivering customer service excellence.



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Pennsylvania American Water
@pawaterco

# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.239*

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing***.
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form***?

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller

***Transferee:*** Purchaser

***CCN:*** Certificate of Convenience and Necessity

***STM***: Sale, Transfer, or Merger

***IOU***: Investor Owned Utility



## Application Summary

**Transferor**: (*selling entity*) Clear Water Estates Water System, LLC
**CCN No.s**: 11884

☒ Sale ☒ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee**: (*acquiring entity*) SJWTX, Inc.
**CCN No.s**: 10692

☒ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies)**: Comal, Texas

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | | Exhibit | Page number |
|---|---|---|---|
| ☒ Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 | Exhibit A | 15 |
| ☒ Tariff including Rate Schedule | Part B: Question 4 | Exhibit B | 67 |
| ☐ List of Customer Deposits | Part B: Question 5 | | |
| ☐ Partnership Agreement | Part C: Question 7 | | |
| ☐ Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 | | |
| ☒ Certificate of Account Status | Part C: Question 7 | Exhibit D | 94 |
| ☒ Financial Audit | Part C: Question 10 | Exhibit E | 96 |
| ☐ Application Attachment A & B | Part C: Question 10 | | |
| ☐ Disclosure of Affiliated Interests | Part C: Question 10 | | |
| ☐ Capital Improvement Plan | Part C: Question 10 | | |
| ☒ List of Assets to be Transferred | Part D: 11.B | Exhibit F | 97 |
| ☐ Developer Contribution Contracts or Agreements | Part D: 11.D | | |
| ☒ Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) | Exhibit K | 109 |
| ☒ TCEQ Compliance Correspondence | Part F: Question 22 | Exhibit M | 162 |
| ☐ TCEQ Engineering Approvals | Part F: Question 24 | | |
| ☐ Purchased Water Supply or Treatment Agreement | Part F: Question 26 | | |
| ☒ Detailed (large scale) Map | Part G: Question 29 | Exhibit O-2 | 168 |
| ☒ General Location (small scale) Map | Part G: Question 29 | Exhibit O-1 | 166 |
| ☐ Digital Mapping Data | Part G: Question 29 | | |
| ☒ Signed & Notarized Oath | Page 13-14 | Included | 13 & 14 |



## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements: NOVEMBER 15, 2019, ASSET PURCHASE AGREEMENT ATTACHED HERETO AS EXHIBIT A

November 15, 2019 Asset Purchase Agreement is attached at EXHIBIT A. Per the terms of that agreement, Transferee is to acquire all of the Transferor's assets utilitized in its water system, including the transfer of the Transferor's CCN service area to the Transferee's CCN; after which, Tranferor's CCN shall be cancelled. The proposed transaction shall have no impact on existing or proposed land use in the area.

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☒ Cancellation of Seller's CCN |
| ☒ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☐ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Clear Water Estates Water System LLC (individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☐ WSC ☒ Other: LLC

B. Mailing Address: W2991 Herbie Lane, Random Lake, WI 53075

Phone: (920) 747-0269 Email: del9622@yahoo.com

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Mr. Del Schlamp Title: Owner

Mailing Address: W2991 Herbie Lane, Random Lake, WI 53004

Phone: (920) 747-0269 Email: del9622@yahoo.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B: CURRENT TARIFF ATTACHED HERETO AS EXHIBIT B

A. Effective date for most recent rates: September 1, 2012

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: TCEQ Docket No. 37327-R

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**

**5.** For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

- ☐ There are *no* customers that will be transferred
- ☒ # of customers without deposits held by the transferor: 230
- ☒ # of customers with deposits held by the transferor*: 0 — All refunded

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

**6. A.** Name: SJWTX, Inc. (individual, corporation, or other legal entity)

☐ Individual ☒ Corporation ☐ WSC ☐ Other:

**B.** Mailing Address: P.O. Box 1742, Canyon Lake, TX 78133

Phone: (830) 312-4600 Email: tom.hodge@clwsc.com

**C.** Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Thomas A. Hodge Title: President

Address: P.O. Box 1742, Canyon Lake, TX 78133

Phone: (830) 312-4600 Email: tom.hodge@clwsc.com

**D.** If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

**E.** If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A FOR SUMMARY OF ANNUAL REPORT FILINGS, PLEASE SEE EXHIBIT C

**7.** The legal status of the transferee is:

- ☐ Individual or sole proprietorship
- ☐ Partnership or limited partnership (*attach* Partnership agreement)
- ☒ Corporation | CERTIFICATE OF ACCOUNT STATUS ATTACHED HERETO AS EXHIBIT D
  Charter number (as recorded with the Texas Secretary of State): Charter # 0800542934
- ☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
  Charter number (as recorded with the Texas Secretary of State):
  ☐ Articles of Incorporation and By-Laws established (*attach*)
- ☐ Municipally-owned utility
- ☐ District (MUD, SUD, WCID, FWSD, etc.)



- ☐ County
- ☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
- ☐ Other (please explain):

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: Canyon Lake Water Service Company

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: Eric W. Thornburg
Position: Chairman and Chief Executive Officer Ownership % (if applicable): 0.00%
Address: 110 W Taylor St., San Jose, CA 95110
Phone: (830) 312-4600 Email: Eric.Thornburg@sjwater.com

Name: Willie Brown
Position: Corporate Secretary Ownership % (if applicable): 0.00%
Address: 110 W Taylor St., San Jose, CA 95110
Phone: (830) 312-4600 Email: Willie.Brown@sjwater.com

Name: Thomas A. Hodge
Position: President Ownership % (if applicable): 0.00%
Address: 1399 Sattler Rd, New Braunfels, TX 78132
Phone: (830) 312-4600 Email: Tom.Hodge@clwsc.com

Name: James P. Lynch
Position: Treasurer and Chief Financial Officer Ownership % (if applicable): 0.00%
Address: 110 W Taylor St., San Jose, CA 95110
Phone: (830) 312-4600 Email: James.Lynch@sjwater.com

**10.** **Financial Information** QUESTION 10: PLEASE SEE EXHIBIT E

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 1,500,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*): SEE EXHIBIT F

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $ 980,474.00
Accumulated Depreciation: $ 711,876.00
Net Book Value: $ 268,598.00

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets. SEE EXHIBIT G

☐ No ☒ Yes

Total Customer CIAC: $ 169,000.00
Accumulated Amortization: $ 119,330.00

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☒ No ☐ Yes

Total developer CIAC: $
Accumulated Amortization: $

**12. A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes



**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

n/a

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration: MORE FAIR MARKET VALUE DETERMINATION INFORMATION ATTACHED HERETO AS EXHIBIT H

SJWTX, Inc., has filed notice with the Commission of its intent to use Fair Market Value ("FMV") for determination of tHe rate base of the acquired water system assets (Docket No. 49859_3) in accordance with TWC 13.305(c)(1). The Commission appointed three appraisers in the letter filed under Docket No. 49859_8 and SJWTX, Inc., has included copies of the three appraisal reports with this Application in accordance with TWC 13.305(h)(1). PLEASE SEE EXHIBIT H FOR MORE INFORMATION.

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

QUESTION 14 RESPONSE, PLEASE SEE EXHIBIT I

Utility Plant in Service: $
Accumulated Depreciation of Plant: $
Cash: $
Notes Payable: $
Mortgage Payable: $
(Proposed) Acquisition Adjustment*: $

* Acquisition Adjustments will be subject to review under 16 TAC § 24.41(d) and (e)

Other (NARUC account name & No.):
Other (NARUC account name & No.):

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

Existing rates will remain in effect until SJWTX, Inc. files a rate application which includes this system with the PUC.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

SJWTX, Inc. does not intend to file an application to change rates as a result of acquiring this water system within twelve months of the date of this application.

**Part E: CCN Obtain or Amend Criteria Considerations**

16. Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

SEE EXHIBIT J

17. Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

SEE EXHIBIT J

18. Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☐ No ☒ Yes SEE EXHIBIT K

19. Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

SEE EXHIBIT L

20. How will the proposed transaction serve the public interest?

SEE EXHIBIT L

21. List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

CCN 10692 SJWTX, Inc. dba Canyon Lake Water Service Company, transferee
CCN N0005 Arroyo Bravo Water Supply LLC
CCN 13131 Liberty Utilities (Silverleaf, LLC)
CCN 12264 Jonas Drive WSC
CCN 12812 Eagles Peak Ranch WSC



**Part F: TCEQ Public Water System or Sewer (Wastewater) Information**

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

22. A. For Public Water System (PWS):

TCEQ PWS Identification Number: 0460153 (7 digit ID)
Name of PWS: Clear Water Estates Water System
Date of last TCEQ compliance inspection: April 24, 2018 (attach TCEQ letter) SEE EXHIBIT M
Subdivisions served: Clear Water Estates

B. For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)
Name of Wastewater Facility:
Name of Permitee:
Date of last TCEQ compliance inspection: (attach TCEQ letter)
Subdivisions served:
Date of application to transfer permit *submitted* to TCEQ:

23. List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | | Residential |
| 230 | 5/8" or 3/4" | | 3" | | Commercial |
| | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| Total Water Connections: | | 230 | | Total Sewer Connections: | |

24. A. Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

B. Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| N/A | | |
| | | |
| | | |

C. Is there a moratorium on new connections?

☒ No ☐ Yes:

25. Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: Sewer:



# Liberty Utilities Co. Expands Water Utility Presence with an Agreement to Acquire American Water's Regulated Operations in New York

NEWS PROVIDED BY
**Algonquin Power & Utilities Corp.** →
Nov 20, 2019, 16:05 ET

*Transaction represents execution on Liberty Utilities' strategy to expand its regulated utility business in high-quality jurisdictions*

This news release constitutes a "designated news release" for the purposes of Algonquin Power & Utilities Corp.'s prospectus supplement dated February 28, 2019 to its short form base shelf prospectus dated September 18, 2018.

**Highlights:**

- **Liberty Utilities Co., the regulated utility operating subsidiary of Algonquin Power & Utilities Corp., has entered into a stock purchase agreement to acquire American Water's regulated operations in the State of New York ("New York American Water").**
- **New York American Water is a regulated water and wastewater utility serving over 125,000 customer connections across seven counties in southeastern New York.**
- **New York American Water's customer rates are not expected to be affected by the acquisition.**
- **Existing local management and operations teams will be maintained and empowered to continue to deliver the safe and reliable water utility services that customers expect, with a commitment by Liberty Utilities to maintain at least existing employment terms for two years following the closing.**
- **Closing of the transaction remains subject to regulatory approval and other typical closing conditions.**

OAKVILLE, ON, Nov. 20, 2019 /PRNewswire/ - Algonquin Power & Utilities Corp. (TSX/NYSE:AQN) ("Algonquin") today announced that Liberty Utilities Co. ("Liberty Utilities"), Algonquin's regulated utility operating subsidiary, has entered into a stock purchase agreement with American Water Works Company, Inc. (NYSE: AWK) ("American Water"), to purchase American Water's regulated operations in the State of New York ("New York American Water") for a purchase price of US$608 million, subject to customary adjustments.

Headquartered in Merrick, NY, New York American Water is a regulated water and wastewater utility serving over 125,000 customer connections across seven counties in southeastern New York. Operations include approximately 1,270 miles of water mains and distribution lines with 98% of customers in Nassau County on Long Island.

"We are thrilled to expand our customer base in the great state of New York," said Ian Robertson, Chief Executive Officer of Algonquin. "New York State has demonstrated a commitment to ensuring regulated utilities put their customers first. We believe the state's vision aligns with our customer-driven focus. We have experience in multiple states as a water utility operator and are known for our commitment to excellence. We are committed to partnering with our regulator and other state officials to support the affordability of water services, including reducing the burden of local taxes on New York American Water's customers, which can account for more than half of their monthly bills. We are also excited to welcome New York American Water's employees to our Liberty Utilities team."

**Continuing Commitment to Our Communities, Customers and Employees**

Liberty Utilities will work closely with American Water, New York American Water, and the New York Public Service Commission to ensure a smooth transition. Under Liberty Utilities' local and responsive operating model, existing local management and operations teams will be maintained and empowered to continue to deliver the safe and reliable service that customers expect, with a commitment by Liberty Utilities to maintain at least existing employment terms for two years following the closing. Customers should not expect any impact on rates as a result of the acquisition. Liberty Utilities is committed to continuing to invest in the water system to improve water quality, customer education on conservation and community outreach.

"This was a very difficult decision for American Water, as we have had the privilege of serving customers and communities in New York for more than 130 years," said Susan Story, president and CEO of American Water. "After careful and comprehensive analysis, we believe it is in the best interest of our customers in New York to sell to Liberty Utilities, which already has utility operations in the state of New York and will have a larger presence once the transaction closes. We are committed to working together to ensure that the transition is unnoticeable to our customers and that safe and reliable water service continues throughout the transition and beyond."

***Investment Grade Financing Plan and Transaction Details***

The financing for the transaction will be consistent with Algonquin's current investment grade credit profile. Closing of the transaction is subject to the satisfaction or waiver of various customary conditions including regulatory approval by the New York Public Service Commission and review and clearance under U.S. antitrust laws.

For more transaction details, see the fact sheet located at http://investors.algonquinpower.com/MNA and filed with securities regulatory authorities at www.sedar.com and www.sec.gov. The fact sheet is incorporated by reference herein.

Algonquin's management team will provide further insights on the transaction at its upcoming Analyst & Investor Days in Toronto on December 3, 2019 and New York on December 6, 2019.

not all forward-looking statements contain these identifying words. Specific forward-looking statements contained in this news release include, but are not limited to: statements regarding expected financing plans and impact on credit metrics, expectations regarding current New York American Water customers, rates and employees, Liberty Utilities' future investments and community engagement, the completion and benefits of the proposed transaction, and New York American Water's continuing operations. These statements are based on factors or assumptions that were applied in drawing a conclusion or making a forecast or projection, including assumptions based on historical trends, current conditions and expected future developments. Since forward-looking statements relate to future events and conditions, by their nature they rely upon assumptions and involve inherent risks and uncertainties. Algonquin cautions that although it is believed that the assumptions are reasonable in the circumstances, actual results may differ materially from the expectations set out in the forward-looking statements. Material risk factors include those set out in Algonquin's most recent annual and interim Management's Discussion and Analysis and most recent Annual Information Form, filed with securities regulatory authorities in Canada and the United States. Given these risks, undue reliance should not be placed on these forward-looking statements, which apply only as of their dates. Other than as specifically required by law, Algonquin undertakes no obligation to update any forward-looking statements to reflect new information, subsequent or otherwise.

SOURCE Algonquin Power & Utilities Corp.

Related Links

http://www.algonquinpower.com

***Advisors***

CIBC Capital Markets acted as Financial Advisor to Liberty/Algonquin and Husch Blackwell LLP served as transaction legal counsel to Liberty/Algonquin.

***About Algonquin Power & Utilities Corp.***

Algonquin is a diversified international generation, transmission and distribution utility with approximately U.S. $11 billion of total assets. Through its two business groups, Algonquin is committed to providing safe, reliable and cost effective rate-regulated natural gas, water, and electricity generation, transmission and distribution utility services to over 800,000 connections in the United States and Canada, and is a global leader in renewable energy through its portfolio of long-term contracted wind, solar and hydroelectric generating facilities representing over 2,500 megawatts of net installed capacity and more than 1,400 megawatts of additional renewable energy capacity under construction. Algonquin delivers continuing growth through an expanding global pipeline of renewable energy, electric transmission, and water infrastructure development projects, organic growth within its rate-regulated generation, distribution and transmission businesses, and the pursuit of accretive acquisitions. Algonquin's common shares, Series A preferred shares, and Series D preferred shares are listed on the Toronto Stock Exchange under the symbols AQN, AQN.PR.A, and AQN.PR.D. Algonquin's common shares, Series 2018-A subordinated notes and Series 2019-A subordinated notes are listed on the New York Stock Exchange under the symbols AQN, AQNA and AQNB.

Visit Algonquin at www.algonquinpowerandutilities.com and follow us on Twitter @AQN_Utilities.

***Caution Regarding Forward-Looking Information***

Certain statements included in this news release constitute "forward-looking information" within the meaning of applicable securities laws in each of the provinces of Canada and the respective policies, regulations and rules under such laws and "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"). The words "will", "expects", "intends", "should" and similar expressions are often intended to identify forward-looking statements, although





## Aqua Completes purchase of Cheltenham Township Wastewater System

*Posted on Thursday December 19, 2019*

Sewer sale is complete. All sewer calls should go to Aqua PA local office (610) 792-2112 from 8:30 A.M to 4:30 P.M. and the call (877) 987-2782 (for off hours and emergencies).

**Aqua America's Pennsylvania subsidiary completes purchase of Cheltenham Township wastewater syste**
**Acquisition is Aqua's fourth in 4Q; eighth for 2019**

**BRYN MAWR, Pa. –** Aqua America (NYSE:WTR) announced today that its Pennsylvania subsidiary has completed the purchase of the Cheltenham Township wastewater system, which serves approximately 10,200 connections in Montgomery County, for $50.25 million.

"This is an exciting time in the water industry, and we are pleased to offer a compelling set of solutions for municipal leaders who are considering the sale of their utilities. We have forged a strong partnership with leaders Cheltenham to bring significant investment to improve sewer pipes and provide high quality service to residents the township," said Aqua America Chairman and CEO Christopher Franklin.

"We are proud that the Board of Commissioners of Cheltenham Township, where we've provided drinking wate for decades, chose to have us provide their wastewater service as well and entrusted us to be stewards of those assets," said Aqua Pennsylvania President Marc Lucca.

"Cheltenham Township is pleased to close on the sale of the sewer system to Aqua because it's truly a win-win f all parties. The multi-year collection system re-lining and replacement work needed for the *90-year-old sewer system* would have cost $10 million per neighborhood at a total cost of $50 million, which the township couldn't cover without assuming loans and significant tax increases," said Cheltenham Township Manager Bryan Havir. "This sale allows Aqua and the Pennsylvania Department of Environmental Protection to address needed collecti system and lateral repairs without the township having to saddle residents with increased taxes and costly repairs

The Cheltenham wastewater acquisition is the third municipal transaction completed by Aqua Pennsylvania usin the Commonwealth's fair market value legislation, Act 12, since the law was enacted in 2016. Collectively, those transactions have yielded an additional 16,901 wastewater customers.

Earlier this month, Aqua Pennsylvania completed the purchase of three municipal water systems previously serv by the Phoenixville Borough water system, totaling 535 customer connections in Chester and Montgomery counties, for $3.5 million. This was not a fair market value transaction.

Currently, Aqua Pennsylvania has two transactions under review by the Pennsylvania Public Utility Commissior and recently announced an asset purchase agreement with DELCORA, which if approved would be the largest municipal transaction for Aqua America and the largest water/wastewater municipal transaction in Pennsylvania' history, yielding Aqua Pennsylvania the equivalent of 165,000 wastewater customers.

"Representatives from the Aqua team and Cheltenham Township have worked cooperatively for several months i anticipation of this acquisition. We are now ready to initiate the necessary improvements required by infiltration and inflow issues, that resulted in the township receiving a DEP consent order," said Lucca. "I believe our longstanding relationship with the township, its residents as well as the regulatory community will make for a smooth transition."

In total, Aqua has plans to spend more than $50 million over the next 10 years to improve Cheltenham's wastewater system.

Aqua's Illinois subsidiary acquired the Skyline water and wastewater systems in November from the Fox River Water Reclamation District, located in South Elgin, IL for $3.5 million. Each system serves 376 customer connections in the Skyline and Valley View communities of Saint Charles Township, Illinois. Earlier this month, Aqua Illinois acquired the Village of Grant Park's wastewater system, which serves more than 1,200 people through approximately 540 connections for $2.3 million. The Public Utilities Commission of Ohio yesterday approved Aqua Ohio's agreement with the City of Campbell to purchase the city's water treatment plant and distribution system, which serves 3,200 customer connections.





In total, Aqua America subsidiaries completed eight acquisitions in 2019, adding a total of 1,495 new water customer connections and 11,130 new wastewater customer connections.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

# # #

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https://www.pottsmerc.com/news/local/phoenixville-area-water-systems-sold-for-m-to-aqua-pennsylvania/article_22b2f848-16dd-11ea-99d4-2beb7441921c.html

FEATURED

# Phoenixville-area water systems sold for $3.5M to Aqua Pennsylvania

MediaNews Group
Dec 5, 2019




Crews work to replace aging cast iron pipes as part Aqua Pennsylvania's $323 million water and wastewater infrastructure upgrades in Pennsylvania.

Submitted Photo

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BRYN MAWR — Aqua America announced Wednesday that its Pennsylvania subsidiary has completed the purchase of three municipal water systems previously served by the Phoenixville Borough water system, totaling 535 customer connections in Chester and Montgomery counties, for $3.5 million.

The water systems serve customers in East Pikeland, Schuylkill and Upper Providence townships.

"We are excited to expand our services in an area where we serve water to an adjacent municipality, which is also home to our largest surface water plant," said Aqua Pennsylvania President Marc Lucca.

The Phoenixville-area acquisition is expected to be followed by the acquisition of the Cheltenham Township wastewater system in Montgomery County, which has 10,200 customer connections, and was recently approved by the Pennsylvania Public Utility Commission.

"We have worked with Phoenixville Borough in the past and have a longstanding relationship with them that will make for a smooth transition and integration. We look forward to serving these new customers with the same outstanding service that all of our other customers enjoy," said Lucca.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia.

Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR.

Visit AquaAmerica.com for more information.

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businesswire

PENNSYLVANIA AMERICAN WATER

## Pennsylvania American Water Completes Acquisition of Royersford Borough Wastewater System

*Company welcomes system's employees and plans to invest $1.6 million to improve system's reliability, safety and environmental compliance; Announcement follows company's recent acquisition of Delaware Sewer Company*

May 25, 2021 04:30 PM Eastern Daylight Time

MECHANICSBURG, Pa.--(BUSINESS WIRE)--Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced today that it has completed the acquisition of the wastewater system assets of Royersford Borough, Montgomery County. The newly acquired system provides wastewater service to nearly 1,600 customers in Royersford and a portion of Upper Providence Township. Pennsylvania American Water already provides water service to residents and businesses in those communities.

"Our employees have been providing water service to the residents of Royersford for many years, and we are pleased to now be their wastewater provider as well," said Pennsylvania American Water President Mike Doran. "Expanding our services in this area is a natural fit, allowing us to provide greater efficiencies for our customers while making much needed long-term investments."

Pennsylvania American Water plans to invest approximately $1.6 million in Royersford wastewater system improvements over the next five years. This includes replacing aging sewer mains, improving chemical feed systems, upgrading technology, telemetry and system controls, and improving site security. The company has a long and successful track record of acquiring wastewater systems facing significant capital investment needs and making the necessary investments to meet environmental regulations.

The $13 million purchase was approved by the Pennsylvania Public Utility Commission (PA PUC) and other state agencies. As part of the PA PUC's approval, Pennsylvania American Water agreed to adopt the existing wastewater rates for customers served by the borough, although service will now be billed on a monthly rather than a quarterly basis. The PA PUC regulates the company's rates, rules and regulations of service, so any future rate change will need to be reviewed and approved by the PA PUC.

Borough Council pursued selling the system in December 2019 after conducting a complete evaluation of the Borough's long-term needs and concluding that the sale was in the best interest of its residents. The Borough cited the potential for increased operating costs, maintenance and major capital improvement needs as reasons to seek a long-term wastewater solution. Today, the company welcomed the Borough's two employees as employees of Pennsylvania American Water.

"Today, Royersford Borough residents became part of a larger scale, efficiently operated wastewater utility that brings expertise to our aging sewer system," said Royersford Borough Council President Anil Dham. "We will use the proceeds of this sale to take on other important capital projects, pay off all municipal debt, and potentially lower the cost of living here in Royersford by further stabilizing our tax base."

Earlier this month, the company also completed the acquisition of the 38-customer Delaware Sewer Company in Delaware Township, Pike County. The transaction occurred after a PA PUC investigation found that the system suffered from a lack of investment and proper maintenance. As part of the investigation, Pennsylvania American Water was determined to be the capable utility that could provide the necessary immediate and long-term wastewater system upgrades to serve this community.

"We appreciate that the Commission recognized our track record in taking over troubled systems and committing the technical expertise and resources needed to bring these operations into regulatory compliance," Doran stated.

Pennsylvania American Water recognizes that some customers face circumstances that stretch their financial resources and offers financial assistance through the company's H2O Help to Others program. For wastewater customers who qualify, the company offers grants of up to $500 per year and a 30 percent discount on the total wastewater charges.

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,000 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to help make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Contacts

**Media:**
Laura Martin
Director, Communications & External Affairs
C: 304-932-7158
E: laura.martin@amwater.com

Tweets by @paamwater

**Pennsylvania American Water**
@paamwater

We're proud of our incredible team of expert scientists, treatment plant operators and engineers. This impressive award demonstrates their dedication and commitment to protecting the health and safety of our customers over the past 20 years and beyond.









Nov 21, 2021

**Pennsylvania American Water**
@paamwater

We're pleased to share that we've completed the acquisition of Valley Township's (Chester County) water and wastewater systems. We welcome our new customers and look forward to serving them! Read more: ow.ly/puJ850GSfVU




Nov 20, 2021

**Pennsylvania American Water**
@paamwater

Today is #WorldToiletDay! Be kind to your pipes today by only flushing a moderate amount of toilet paper down. Did you know that 3.6 billion people are still living without access to safely managed sanitation? Learn more at worldtoiletday.com #worldtoiletday

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#Hashtags

#wastewater #sewer #acquisition

## Pennsylvania-American Water Company, Inc. | Key Development Details

(MI KEY: 6932043; SPCIQ KEY: 781681)

### Pennsylvania American Water Signs Agreements to Purchase Valley Township Water and Wastewater Systems

Pennsylvania American Water announced that it has signed agreements to purchase the water and wastewater system assets of Valley Township in Chester County for approximately $21.275 million. The Township's water system serves nearly 1,700 customers and its wastewater system serves nearly 3,100 customers in Valley Township. Pennsylvania American Water already provides a majority of Township's water through a bulk municipal agreement and is the sole provider of wastewater treatment for the Township's wastewater system. Pennsylvania American Water will seek approval of the acquisition from the Pennsylvania Public Utility Commission (PUC) and other necessary approvals from the Pennsylvania Department of Environmental Protection. Pennsylvania American Water plans to make necessary investments in water and wastewater improvements to improve the reliability and compliance of the systems. The company expects to close the transaction in late 2020 or early 2021, pending regulatory approvals. The purchase agreement between Pennsylvania American and the Township was executed under Act 12, which allows municipalities to sell their water and wastewater systems for a price based on the fair market value of the facilities. Enacted in 2016, this statute gives municipalities the opportunity to receive a purchase price that is more reflective of the current value of their system assets.

| | |
|---|---|
| Announcement Date | 12/18/2019 |
| Company Name | Pennsylvania-American Water Company, Inc. |
| Source | Business Wire |
| Development Type | Client Announcement |
| Advisors | NA |

### Business Description

**Pennsylvania-American Water Company, Inc.**

Pennsylvania-American Water Company, Inc. operates as a regulated water utility company in the state of Pennsylvania. It distributes water to households and provides wastewater and related services. The company was founded in 1989 and is based in Hershey, Pennsylvania. Pennsylvania-American Water Company, Inc. operates as a subsidiary of American Water Works Company, Inc.

**Primary Industry:** Water Utilities

Historical Equity Pricing Data provided by Interactive Data Pricing and Reference Data LLC

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Contacts
**Media Contact:**
Karen Cotton, External Affairs Manager
309.566.4126 or karen.cotton@amwater.com

## Illinois American Water Signs Agreement to Acquire City of Jerseyville Water and Wastewater Systems

December 20, 2019 12:22 PM Eastern Standard Time

BELLEVILLE, Ill.–(BUSINESS WIRE)–Illinois American Water, a subsidiary of American Water (NYSE: AWK), signed an agreement yesterday, Dec. 19, 2019, to acquire the City of Jerseyville's water and wastewater systems. The agreement for the sale of the systems, which each serve about 4,100 customer connections for a total of 8,200 customers, is for $43.25 million.

"Illinois American Water is proud of our over 140-year history of providing safe, reliable service to our customers. Our team of wastewater and water service experts are looking forward to serving our new customers and making critical improvements to ensure reliable service for public health," said Bruce Hauk, Illinois American Water President. "Many communities are looking for new and innovative ways to deal with challenges they're facing while controlling expenses. There's nothing more important to our team than ensuring our customers receive the best service possible at a good value. These partnerships are a great solution for residents."

Illinois American Water will seek approval of the acquisition from the Illinois Commerce Commission. The transaction is expected to close in late 2020, pending regulatory approval.

Approval for the pending transaction will be sought under the Illinois Systems Viability Act, which allows municipalities in Illinois to sell water and wastewater systems for a price based on fair market value. According to Hauk, "Prior law only allowed the investor-owned water or sewer utility to pay the original cost minus depreciation to acquire a system, public or private. Because of this, systems were previously deprived of receiving adequate value for their system."

In 2019, Illinois American Water acquired the Alton Regional Wastewater System and the Village of Godfrey's wastewater system, also located in Southern Illinois. The Village of Glasford's water and wastewater systems, located in Central Illinois, were also acquired. These acquisitions added a total of 30,174 new Illinois American Water customer connections.

**About Illinois American Water -** Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit www.amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

## Illinois American Water Signs Agreement to Acquire Granite City Wastewater Collection System

December 26, 2019 10:43 AM Eastern Standard Time

BELLEVILLE, Ill.–(BUSINESS WIRE)–Illinois American Water, a subsidiary of American Water (NYSE: AWK), has entered into an agreement with Granite City to acquire the City's wastewater collection assets. The agreement for the sale of the wastewater collection system, which serves 12,500 customer connections, is for $18 million.

"Since 1885, Illinois American Water has delivered safe, reliable drinking water to Granite City. We enjoy being a part of the community and are excited to own and manage the wastewater collection for our valued customers in Granite City," said Bruce Hauk, Illinois American Water President. "Our team's expertise is a benefit to communities looking to sell their water and/or wastewater assets to Illinois American Water. We are proud of these partnerships."

Illinois American Water will seek approval of the acquisition from the Illinois Commerce Commission. The company expects to close the transaction in late 2020, pending regulatory approval.

Approval for the pending transaction will be sought under the Illinois Systems Viability Act, which allows municipalities in Illinois to sell water and wastewater systems for a price based on fair market value. Prior to the Systems Viability Act, the valuation process was based on assessing the system's original cost at the time of construction – which may be 50 years old or more – less depreciation and contributed property.

The company has also signed purchase agreements with the Villages of Andalusia, Leonore, Shiloh and Sydney as well as the Cities of Rosiclare and Jerseyville. To learn more about Illinois American Water and hear testimonials from communities the company has partnered with, please visit the Doing Business with Us page under About Us at www.illinoisamwater.com.

**About Illinois American Water**

Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit www.amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Contacts
**Media Contact:**
Karen Cotton, External Affairs Manager
309.566.4126 or karen.cotton@amwater.com

The company will coordinate sewer and water pipeline replacements with Long Hill's road paving schedule to



David Hutter

David Hutter grew up in Darien, Conn., and covers higher education, trai
manufacturing for NJBIZ. He can be reached at: dhutter@njbiz.com.



Log In
TECHNOLOGY
Trending: Water Supply Technology

5 FEBRUARY 2020 NEWS

## California American Water acquires Fruitridge Vista's operating assets

US-based California American Water has acquired the operating assets of Fruitridge Vista Water Company, a Class B water utility in South Sacrament, for $20.75m.

Following the acquisition, California American Water has now become the new water provider to approximately 4,800 customers of Fruitridge Vista which is regulated by the California Public Utilities Commission.





In December last year, the company secured approval from the California Public Utilities Commission for its acquisition.



An expert set of water treatment and distribution operators, certified through the California State Water Resources Control Board's Division of Drinking Water, will serve the new customers of California American Water.

Other professionals from the company's water quality, finance and engineering group will also lend their expertise.

Apart from billing and operational services, the








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replace 14,000 linear feet of water main in Edison, with an investment of $6.7m from mid-February, and around 10,200 linear feet of water main in South Amboy, for $4.5m, from next month.

The company will also upgrade service lines, valves and fire hydrants.

Under the RENEW programme, the company will responsible for installation of exterior below ground meter pits to eventually house water meters at each customer's premise.



solid and strategic asset management helps us to better preserve water resources and maintain overall service quality."

RENEW is part of the company's Water for Tomorrow Program, which is a $295m infrastructure initiative planned through 2021. It consists of various projects to bolster strengthen the firm's water distribution infrastructure.

Among the other projects underway include construction of a large diameter transmission main through parts of






2/14/2020 California American Water acquires Fruitridge Vista's operating assets

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2/14/2020 California American Water acquires Fruitridge Vista's operating assets

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**WATERENGINEERS, INC.**
*WATER & WASTEWATER TREATMENT CONSULTANTS*
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

April 3, 2020

Public Utility Commission of Texas
Central Records
1701 N. Congress, Suite 8-100
Austin, TX 78701

Re: Application for a Sale, Transfer or Merger of a Retail Public Utility
Water Certificate of Convenience and Necessity No. 12965
Sewer Certificate of Convenience and Necessity No. 20886
Transferor – Hammond Mound Utility Company, Inc.
Transferee – Rosehill Utilities, Inc.
in Waller County, Texas

Dear Public Utility Commission of Texas:

Please find attached a copy of an Application for a Sale, Transfer or Merger of a Retail Public Utility to address the sale of the Hammond Mound Water and Sewer Systems by Hammond Mound Utility Company, Inc. to Rosehill Utilities, Inc. Also attached are files containing digital map data in .pdf, .dwg and .shp files.

We appreciate your earliest review and issuance of a letter indicating administrative completeness. Please feel free to email me at svoung@waterengineers.com or call at 281-373-0500 if you have any questions regarding the information contained in this submittal.

Thank you for your assistance in this review process.

Sincerely,
WATERENGINEERS, INC.

Shelley Young, P.E.
Project Engineer

1

**APPLICATION FOR A SALE, TRANSFER, OR MERGER OF A RETAIL PUBLIC UTILITY**

**HAMMOND MOUND UTILITIES, INC.-TRANSFEROR**

**ROSEHILL UTILITIES, INC.-TRANSFEREE**

FOR

**ROSEHILL UTILITIES, INC.**
**P.O. BOX 1945**
**CYPRESS, TX 77410-1945**

PREPARED BY:

**WATERENGINEERS, INC.**
WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD CYPRESS, TEXAS 77429
TEL: 281-373-0500 FAX: 281-373-1113

APRIL 2020

2

APPLICATION FOR A SALE, TRANSFER, OR MERGER OF A RETAIL PUBLIC

HAMMOND MOUND UTILITIES, INC.-TRANSFEROR
ROSEHILL UTLITIES, INC.-TRANSFEREE

## TABLE OF CONTENTS

DESCRIPTION

Application for a Sale, Transfer, or Merger of a Retail Public utility

Attachment "A"- Sales Agreement

Attachment "B"- Water & Sewer Tariffs

Attachment "C"- Secretary of State Certificate of Account Status

Attachment "D"- Financial Information

Attachment "E"- Asset Inventory List

Attachment "F"- CIAC Developer Agreement

Attachment "G"- Information Concerning the Nature of the Transaction

Attachment "H"- TCEQ Inspection Letters

Attachment "I"- General Location Maps

Attachment "J"- Requested Service Area Maps

3

**Application Summary**

**Transferor:** (selling entity) Hammond Mound Utilities, Inc.
**CCN No.s:** 12965 and 20886

☒ Sale ☐ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee:** (acquiring entity) Rosehill Utilities, Inc.
**CCN No.s:** 12663

☐ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☐ Facilities transfer

**County(ies):** Waller

Table of Contents

Sale, Transfer, or Merger (STM) Application Instructions ..... 1
Part A: General Information ..... 3
Part B: Transferor Information ..... 3
Part C: Transferee Information ..... 4
Part D: Proposed Transaction Details ..... 6
Part F: CCN Obtain or Amend Criteria Considerations ..... 8
Part F: TCEQ Public Water System or Sewer (Wastewater) Information ..... 9
Part G: Mapping & Affidavits ..... 10
Part H: Notice Information ..... 12
Appendix A: Historical Financial Information (Balance Sheet and Income Schedule) ..... 15
Appendix B: Projected Information ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☒ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☐ | List of Customer Deposits | Part B: Question 5 |
| ☐ | Partnership Agreement | Part C: Question 7 |
| ☐ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☒ | Certificate of Account Status | Part C: Question 7 |
| ☐ | Financial Audit | Part C: Question 10 |
| ☐ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ | Capital Improvement Plan | Part C: Question 10 |
| ☒ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☐ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☐ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☒ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |



4

## Part A: General Information

1. Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

Rosehill Utilities, Inc. (RUI) proposes to purchase the CCNs and assets of Hammond Mound Utilities, Inc. (HMU) The effect on the CCNs involved would be to transfer the HMU CCN service area to RUI, along with the assets in order for HMU to be dissolved and RUI to take over ownership, operations and maintenance of assets of HMU. See Attachment A - Agreement

2. The proposed transaction will require (check all applicable):

| For **Transferee** (Purchaser) CCN: | For **Transferor** (Seller) CCN: |
|---|---|
| ☐ Obtaining a NEW CCN for Purchaser | ☐ Cancellation of Seller's CCN |
| ☐ Transfer all CCN into Purchaser's CCN (Merger) | ☐ Transfer of a Portion of Seller's CCN to Purchaser |
| ☐ Transfer Portion of CCN into Purchaser's CCN | ☐ Only Transfer of Facilities, No CCN or Customers |
| ☒ Transfer all CCN to Purchaser and retain Seller CCN | ☐ Only Transfer of Customers, No CCN or Facilities |
| ☐ Uncertificated area added to Purchaser's CCN | ☐ Only Transfer CCN Area, No Customers or Facilities |

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

3. A. Name: Hammond Mound Utilities, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O. Box 111637, Houston, Texas 77293-1637

Phone: (281) 442-2858 Email: jane@siteconservices.net

C. Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Shelley Young, P.E. Title: Engineer/Owner

Mailing Address: 17230 Huffmeister Road, Suite A, Cypress, Texas 77429

Phone: (281) 373 0500 Email: syoung@waterengineers.com

4. If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:

A. Effective date for most recent rates: October 17, 2000

B. Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number:

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**
See Attachment B- Water and Sewer Tariff



5. For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred
☒ # of customers without deposits held by the transferor 15
☐ # of customers with deposits held by the transferor*

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

6. A. Name: Rosehill Utilities, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

B. Mailing Address: P.O. Box 1945, Cypress, Texas 77410-1945

Phone: (281) 373-4401 Email: syoung@waterengineers.com

C. Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Shelley Young Title: Engineer/Owner

Address: 17230 Huffmeister Road, Suite A, Cypress, Texas 77429

Phone: (281) 373 0500 Email: syoung@waterengineers.com

D. If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☒ Yes ☐ N/A

E. If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☒ Yes ☐ N/A

7. The legal status of the transferee is.

☐ Individual or sole proprietorship
☐ Partnership or limited partnership (*attach* Partnership agreement)
☒ Corporation
Charter number (as recorded with the Texas Secretary of State): 0156726700 See Attachment C-Certificate of Account Status
☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)
☐ Municipally-owned utility
☐ District (MUD, SUD, WCID, FWSD, etc.)



☐ County
☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)
☐ Other (please explain):

8. If the transferee operates under any d/b/a, provide the name below:

Name: N/A

9. If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: D. Ray Young
Position: President Ownership % (if applicable): 50.00%
Address: P.O. Box 1945, Cypress, Texas 77410-1945
Phone: (281) 373-4401 Email: d.ray@waterengineers.com

Name: Shelley Young
Position: Vice President Ownership % (if applicable): 50.00%
Address: P.O. Box 1945, Cypress, Texas 77410-1945
Phone: (281) 373-4401 Email: syoung@waterengineers.com

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

10. **Financial Information** See Attachment D-Financial Information
The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.



***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysts of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

## Part D: Proposed Transaction Details

11. A. Proposed Purchase Price: $ 70,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

B. Transferee has a copy of an inventory list of assets to be transferred (*attach*): See Attachment E - Asset Inventory List

☐ No ☒ Yes ☐ N/A

| | Water | Wastewater | Total |
|---|---|---|---|
| Total Original Cost of Plant in Service: | $ 691,490.00 | $1,282,005 | $1,973,495 |
| Accumulated Depreciation: | $ 231,862.00 | $ 451,408 | $ 683,270 |
| Net Book Value: | $ 459,628.00 | $ 830,597 | $1,290,225 |

C. **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☒ No ☐ Yes

Total Customer CIAC: $
Accumulated Amortization: $

D. **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements. Capacity charges in the water and wastewater plants as well as Lift Station No. 2 - See Agreement in Attachment F and CIAC accounted for in Depreciation Schedules in Attachment D

☐ No ☒ Yes

Total developer CIAC: $ 87,500.00
Accumulated Amortization: $ 31,220.00

12. A. Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes

**B.** If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

N/A

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

See Attachment G - Information Concerning the Nature of the Transaction

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

| | |
|---|---|
| Utility Plant in Service: | $ 1,973,495.00 |
| Accumulated Depreciation of Plant: | $ -683,270.00 |
| Cash: | $ 0.00 |
| Notes Payable: | $ -89,136.00 |
| Mortgage Payable: | $ 0.00 |
| (Proposed) Acquisition Adjustment*: | $ -1,290,225.00 |
| Other (NARUC account name & No.): | |
| Other (NARUC account name & No.): | |

* Acquisition Adjustments will be subject to review under 16 TAC § 24.41(d) and (e)

**15. A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

None

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Rates have not been changed since 2001 and are in need of increasing. Additionally, transferee wishes to add additional meter sizes.



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

No negative impact or change in the quality of retail public utility service in the requested area is anticipated.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

Rosehill Utilities has successfully been in the water utility business since January 2000 (CCN No. 12663). Additionally, D. Ray Young, P.E. and Shelley Young, P.E., owners of Rosehill Utilities are engineers practicing specifically in water and wastewater design for over 40 years and 30 years, respectively. Further, Mr. Young holds water and wastewater operator licenses and is part owner of FloWatch, Inc., a water and wastewater operations company since 2004.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☒ No ☐ Yes

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

There will be no impact on the environmental integrity of the land as a result of the proposed transaction.

**20.** How will the proposed transaction serve the public interest?

The transferor no longer desires to be in the utility business. Approving the transaction would allow for continuous and adequate utility service to the current customers of Hammond Mound Utilities.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Beacon Estates WSC - CCN Nos. 11854 and 20727
Pattison WSC - CCN No. 10331
Waller County MUD 1
Waller County
Bluebonnet Groundwater Conservation District



## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: 2370074 (7 digit ID)
Name of PWS: Hammond Mound Utilities Water Supply
Date of last TCEQ compliance inspection: July 7, 2016 (attach TCEQ letter) See Attachment H-TCEQ Inspection Letters
Subdivisions served: Hammond Mound Commercial Subdivision

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ 0013984 - 001 (8 digit ID)
Name of Wastewater Facility: Hammond Mound WWTP
Name of Permitee: Hammond Mound Utilities, Inc.
Date of last TCEQ compliance inspection: April 7, 2016 (attach TCEQ letter) See Attachment H-TCEQ Inspection Letters
Subdivisions served: Quixote Commercial Subdivision
Date of application to transfer permit *submitted* to TCEQ: March 23, 2020

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | 3 | 2" | | Residential |
| 5 | 5/8" or 3/4" | 1 | 3" | 15 | Commercial |
| 9 | 1" | | 4" | | Industrial |
| | 1 ½" | | Other | | Other |
| | Total Water Connections: | 18 | | Total Sewer Connections: | 15 |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☒ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☒ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☒ No ☐ Yes: _____ *(name of municipality)*

If yes, indicate the number of customers within the municipal boundary.

Water: _____ Sewer: _____



2/15/22, 10:26 AM Artesian buys Frankford's water system for $3.6M - Delaware Business Times

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# Artesian buys Frankford's water system for $3.6M



Jacob Owens (https://delawarebusinesstimes.com/author/jacob-owens/) • April 14, 2020

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Artesian Water Co. has acquired the Frankford municipal water system in a $3.6 million deal. | PHOTO COURTESY OF ARTESIAN

FRANKFORD – Artesian Water Co. has officially acquired the water system of the Sussex County town of Frankford in a $3.6 million deal.

The town council of Frankford, located about 5 miles from the Maryland border off Route 113, approved the deal in March, but closing





of the sale agreement was delayed until April 2 due to the coronavirus's impact. The water system serves about 350 town customers.

As part of the sale agreement, **Artesian (http://www.artesianwater.com/)** will invest an estimated $6 million in regional water mains, construct a new regional water plant, and expand its main renewal program to incorporate Frankford while spending about $1 million on renewal projects in Frankford over the next five years.

The publicly traded company will also upgrade the communications systems at the Frankford water treatment plant at an estimated cost of $70,000 and replace all town water meters at an estimated cost of $500,000.

Artesian has invested about $44 million over the past three years in water and wastewater infrastructure in Sussex County, which the company views as a growth area as it competes with four other private utilities. It plans on creating a regional water system served by four treatment plants, including a 2-million-gallon-a-day Greater Dagsboro Water Treatment Plant currently under construction.

Over 7 miles of new water main will be constructed in the regional system, interconnecting the towns of South Bethany, Frankford and Dagsboro, covering 20 square miles of service territory and serving nearly 6,000 customers.

"Artesian's investments in Sussex County and securing this latest acquisition has positioned us to continue to expand our service territory, interconnecting this larger regional area with high quality and reliable water service," said Dian C. Taylor, president and CEO of Artesian Resources Co., said in a statement announcing the acquisition.

The 115-year-old Artesian supplies 8.3 billion gallons of water per year through 1,331 miles of water main to nearly a third of Delaware residents. It hasn't only targeted Sussex County in recent years, but also expanded in southern New Castle County and neighboring Cecil County, Md.








(https://delawarebusinesstimes.com/90-ideas-90-minutes-event/)

On Monday, Artesian's stock rose 2% as news of the acquisition spread, but it shed those gains during a market slump Tuesday.

*By Jacob Owens*

*jowens@delawarebusinesstimes.com* (mailto:jowens@delawarebusinesstimes.com)

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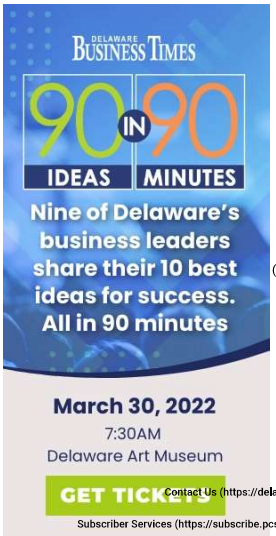

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ILLINOIS AMERICAN WATER

## Illinois American Water Acquires Village of Sidney Water System

April 17, 2020 02:43 PM Eastern Daylight Time

URBANA, Ill.--(BUSINESS WIRE)--Illinois American Water President Justin Ladner today announced the Company's acquisition of the Village of Sidney water system. The purchase adds approximately 560 water customers to the Champaign County service area.

The Village of Sidney voted in favor of the sale in April 2019. Illinois American Water began operating the water system on a contract basis in October 2019. Today the sale was completed for $2.3 million as approved by the Illinois Commerce Commission (ICC).

According to Ladner, the Company has a history of providing award-winning drinking water to Champaign County residents, placing first in the 15-County Water Supply Operator Association's water taste test competition in 2019 and 2020. He said, "We understand the critical role we play in our customers' daily lives and appreciate the trust the Village has placed in our team. We look forward to continuing our partnership with the community to ensure residents have quality drinking water today and in the future."

Village President Jason Arrasmith said the sale of the water system to Illinois American Water "offers many community benefits, including a reduction to household water bills." He went on to say, "Not only do we have trust in Illinois American Water to ensure quality drinking water, but they are able to decrease local water bills by almost $15 a month. We are pleased about the value they bring to our community."

Illinois American Water is committed to upgrading the Sidney water system, beginning with the replacement of water meters. Meter replacements are expected to begin in May.

Matthew White, operations superintendent for Illinois American Water's Champaign County District, said, "Our local team takes a lot of pride in what we do every day. We are honored to serve Sidney and look forward to expanding our involvement in the community."

New customers will receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more. The Village of Sidney will be incorporated into the company's Champaign County District which serves Champaign, Urbana, Savoy, St. Joseph, Sadorus, Pesotum, Bondville and Fisher.

The appraisal process used for the Sidney water system was conducted under the supervision of the ICC and established under the Illinois Water Systems Viability Act. This law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility. To learn more about Illinois American Water and hear testimonials from communities the company has partnered, please visit the Doing Business with Us page at www.illinoisamwater.com.





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# Illinois American Water acquires Village of Leonore Water System

The purchase adds approximately 68 water customers to the Streator District service area.

Apr 22nd, 2020

Illinois American Water acquires Village of Leonore Water System | WaterWorld

Photo by Daniel Rose on Unsplash

**STREATOR, IL, APRIL 22, 2020 --** Illinois American Water President Justin Ladner this month announced the Company's acquisition of the Village of Leonore water system. The purchase adds approximately 68 water customers to the Streator District service area.

The Village of Leonore voted in favor of the sale November 2018. The Illinois Commerce Commission (ICC) approved the sale for $100,000.


https://www.waterworld.com/water-utility-management/article/14174544/illinois-american-water-acquires-village-of-leonore-water-system[9/2/2020 4:22:34 PM]

"We have a long history – over 145 years – of providing quality water service in Illinois. We are proud of our track record and look forward to serving our new customers in Leonore," said Ladner.

Village President Mike Zimmerman said the sale of the water system to Illinois American Water will, "allow the Village to focus on other community needs." He went on to say, "Not only will residents have better quality water service from a company that has served this region well for many years, but the Village will be able to focus on other priorities."

Illinois American Water is committed to upgrading the Leonore water system, beginning with the replacement of water meters. Customers received a communication about this work, which is expected to begin in May.

Jon Mase, operations superintendent for Illinois American Water's Streator District, said, "We are excited to serve Leonore. We are familiar with the community and have had the opportunity to partner with the local fire department. We look forward to continuing our involvement and being a good neighbor."

New customers will receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more. The Village of Leonore will be incorporated into the company's Streator District which serves Streator, Dana, Longpoint, Ancona, Reading and Ransom.

The appraisal process used for the Leonore water system was conducted under the supervision of the ICC and established as part of the Illinois Water Systems Viability Act. This law gives communities an alternative to value their water and/or wastewater system when considering being acquired by an investor-owned water utility.

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Welcome to the August issue of WaterWorld magazine.

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Bruce Chatterley

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To improve the water utility workforce picture we may pursue several sensible approaches.

Dennis R. Wanless

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The Utility Network: Preparing for the Future

The San Juan Water District chose Esri's ArcGIS platform: ArcGIS Enterprise, ArcGIS Pro, and the Utility Network framework to upgrade its legacy CAD-based GIS

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Illinois American Water acquires Village of Leonore Water System | WaterWorld

system.

Esri

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Kamstrup's new flowIQ 2200 water meter, leak detection,

revenue water loss.

Kamstrup

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Water Utility Management

Weathering the Pandemic with Patience and Kindness

Small actions, if done carefully and diligently, have the potential to make a significant impact on how the virus spreads and how we weather the coming months. Making a real effort to give everyone you encounter patience and kindness goes a long way to he

Henk-Jan van Ettekoven

Aug 13th, 2020

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AMERICAN WATER

NewsRoom

★ / Upper Pottsgrove Wastewater System Purchase Agreement Signed

April 28, 2020 | American Water (NYSE: AWK) |

PDF

# Upper Pottsgrove Wastewater System Purchase Agreement Signed

**MECHANICSBURG, Pa.**–(BUSINESS WIRE)– Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), announced that it has signed an agreement to purchase the wastewater system assets of Upper Pottsgrove Township in Montgomery County for $13.75 million. The Township's wastewater system serves nearly 1,600 customers.

"As the water provider for the neighboring Glen Alsace and Royersford areas, we are well positioned to serve Upper Pottsgrove Township through experienced, professional employees that can leverage the resources of our other local operations," said Pennsylvania American Water President Mike Doran. "In fact, some of our employees live in the Upper Pottsgrove area, so this acquisition is a natural fit, and



11/22/21, 10:53 AM Press Release Details

we are glad to welcome Upper Pottsgrove to the Pennsylvania American Water family."

The agreement was approved by the Upper Pottsgrove Township Board of Commissioners on April 20. Township officials acknowledged that the age and maintenance needs of the system would otherwise lead to significantly higher sewer rates. During public meetings, Township officials cited retiring debt, replenishing unfunded pension liabilities, and providing funding for other Township infrastructure needs as reasons for the sale.

Pennsylvania American Water plans to make necessary wastewater infrastructure upgrades to improve and sustain the reliability and compliance of the system. The company will also assume three public sewer service extension projects under the Township's current Act 537 plan.

Pennsylvania American Water will seek approval of the acquisition from the Pennsylvania Public Utility Commission (PUC) and other necessary approvals from the Pennsylvania Department of Environmental Protection. The company expects to close the transaction in the first half of 2021, pending regulatory approvals.

The purchase agreement between Pennsylvania American and the Township was executed under Act 12, which allows municipalities to sell their water and wastewater systems for a price based on the fair market value of the facilities. Enacted in 2016, this statute gives municipalities the opportunity to receive a purchase price that is more reflective of the current value of their system assets.

In 2019, Pennsylvania American Water acquired the wastewater and/or water assets of Exeter Township, Berks County; Steelton Borough Authority, Dauphin County; Sadsbury Township, Chester County and the Borough of Turbotville, Northumberland County, adding over 12,000 new wastewater and water customers to the company's customer base. The company also recently signed purchase agreements with Royersford Borough, Montgomery County (1,600 wastewater customers), Valley Township, Chester County (1,700

water and 3,100 wastewater customers) and the Borough of Kane Authority, McKean County (2,100 wastewater customers).

About Pennsylvania American Water

Pennsylvania American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

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Pennsylvania American Water to acquire Upper Pottsgrove Township wastewater assets

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**Press Release**

# Illinois American Water Acquires Village of Shiloh Wastewater System

Published: May 15, 2020 at 6:57 p.m. ET

*The MarketWatch News Department was not involved in the creation of this content.*

Illinois American Water President Justin Ladner today announced the company's acquisition of the Village of Shiloh wastewater system. The purchase adds approximately 1,515 wastewater customers to the company's southern Illinois service area. This includes customers directly served by Illinois American Water as well as customers served through a mobile home park account.

The Village of Shiloh voted in favor of the sale last year. The Illinois Commerce Commission (ICC) recently approved the sale for $3.6 million. The sale was completed today and represents the third acquisition by Illinois American Water this year.

"Over the last two years, we've added more than 35,000 new customers through system acquisitions. Some of the communities were facing EPA consent decrees or water quality issues. Other systems had varying priorities or fiscal challenges and wanted to turn over operations to the experts. Every community is unique and we're proud to partner with them," said Ladner.

According to Village Mayor James Vernier, the sale of the wastewater system to Illinois American Water "allows the Village to focus on other priorities." He went on to say, "Illinois American Water has provided excellent water service to our residents for many decades; we look forward to expanding our partnership."

Illinois American Water plans to invest in the Village of Shiloh wastewater system. Work will include improvements to both the Church and Archview lift stations.

Karen Cooper, Director of Operations for Illinois American Water, said, "We are excited to expand our service in Shiloh. Providing quality, reliable service and doing so safely is our priority. We appreciate the Village's trust and confidence in our team."

New Shiloh customers will receive an Illinois American Water welcome packet in the mail. This packet includes information about online account management, billing and more.

To learn more about Illinois American Water and hear testimonials from communities the company has





To learn more about Illinois American Water and hear testimonials from communities the company has partnered, please visit the Doing Business with Us page under About Us at www.illinoisamwater.com.

**About Illinois American Water -** Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.3 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

View source version on businesswire.com:
https://www.businesswire.com/news/home/20200515005596/en/

SOURCE: Illinois American Water

**Media Contact:** Karen Cotton, External Affairs Manager
309.566.4126 or karen.cotton@amwater.com

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## Illinois American Water acquires village's water, wastewater systems

**Wednesday, May 27, 2020 5:00 PM ET**

By Nephele Kirong
*Market Intelligence*

Illinois American Water Co. has completed the $3.3 million acquisition of the water and wastewater systems of the village of Andalusia, Ill., expanding its footprint in the state.

The deal adds approximately 480 water and 480 wastewater customers to its northwest service area, Illinois American said in a May 27 news release.

The American Water Works Co. Inc. subsidiary plans to invest $2 million in the first five years of its ownership to upgrade Andalusia's water and wastewater systems. It will also implement automation to improve operational efficiency.

*This article was published by S&P Global Market Intelligence and not by S&P Global Ratings, which is a separately managed division of S&P Global.*

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Market Intelligence

## Illinois American Water acquires Illinois city's wastewater system

**Monday, June 1, 2020 2:29 PM ET**

By Nephele Kirong
*Market Intelligence*

Illinois American Water Co. completed the acquisition of the wastewater system and drinking water production system of Rosiclare, Ill., for $600,000.

State regulators recently approved the deal, which adds 377 wastewater customers to Illinois American Water's Southern Illinois service area, the company said in a May 29 news release.

"Our systems are facing significant investments, which we are not equipped to address," Rosiclare Mayor Roy Tolbert said. The company expects to spend about $5 million to upgrade critical infrastructure.

As a result of the deal, Rosiclare will become a sale-for-resale water service customer. The American Water Works Co. Inc. subsidiary will own the water distribution system but will operate it on a contract basis under the guidance of the city.

*This article was published by S&P Global Market Intelligence and not by S&P Global Ratings, which is a separately managed division of S&P Global.*

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Tampa Bay Times

## Pasco commission approves $29.3 million purchase of Aqua Utility System

By Barbara Behrendt, Tampa Bay Times 6/29/2020

NEW PORT RICHEY — Pasco county commissioners approved a $29.3 million bond issue Monday that will allow the county to acquire the Pasco Aqua Utility System bringing it under the county's water and sewer system.

The move will mean customers of the old Aqua system should see breaks in their utility bills, although other county utility users are expected to see slight increases in what they pay for their water and sewer services to offset the purchase.

County officials had been examining the acquisition since February 2019 with commissioners voting to move forward with purchasing Aqua from the Florida Government Utility Agency in December. The authority had bought the properties from Aqua Utilities several years ago to try to stem customer complaints about the quality and cost of the service.

The county staff sought proposals, ultimately settling on BB&T Company, now Truist Bank, to provide the loan.

The decision will allow the county to purchase the utility system, serving 3,600 water and 3,100 sewer customers in Jasmine Lakes and Palm Terrace in west Pasco and Zephyr Shores near Zephyrhills.

With the county assuming control of the property, current Aqua customers should see a significant drop in their monthly water bills, according to previous estimates. But the county's existing 120,000 customers will see an increase of 2 percent to help finance the acquisition.

Commissioners on Monday also voted to contract with U.S. Water Services Corporation for $154,000 for the continued operation of water and wastewater facilities and to provide customer service and billing through 2022. According to the memo to the commission, the decision to stick with the company was designed "to

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# Application for Sale, Transfer, or Merger of a Retail Public Utility

*Pursuant to Texas Water Code § 13.301 and 16 Texas Administrative Code § 24.239*

## Sale, Transfer, or Merger (STM) Application Instructions

I. **COMPLETE**: In order for the Commission to find the application sufficient for filing, the Applicant should:
   i. Provide an answer to every question and submit any required attachment applicable to the STM request (i.e., agreements or contracts).
   ii. Use attachments or additional pages to answer questions as necessary. If you use attachments or additional pages, reference their inclusion in the form.
   iii. Provide all mapping information as detailed in Part G: Mapping & Affidavits.

II. **FILE**: Seven (7) copies of the completed application with numbered attachments. One copy should be filed with no permanent binding, staples, tabs, or separators; and 7 copies of the portable electronic storage medium containing the digital mapping data.
   i. ***SEND TO***: Public Utility Commission of Texas, Attention: Filing Clerk, 1701 N. Congress Avenue, P.O. Box 13326, Austin, Texas 78711-3326 (NOTE: Electronic documents may be sent in advance of the paper copy, however they will not be processed and added to the Commission's on-line Interchange until the paper copy is received and file-stamped in Central Records).

III. The application will be assigned a docket number, and an administrative law judge (ALJ) will issue an order requiring Commission Staff to file a recommendation on whether the application is sufficient. The ALJ will issue an order after Staff's recommendation has been filed:
   i. ***DEFICIENT*** *(Administratively Incomplete)*: Applicants will be ordered to provide information to cure the deficiencies by a certain date, usually 30 days from ALJ's order. ***Application is not accepted for filing***.
   ii. ***SUFFICIENT*** *(Administratively Complete)*: Applicants will be ordered by the ALJ to give appropriate notice of the application using the notice prepared by Commission Staff. ***Application is accepted for filing.***

IV. Once the Applicants issue notice, a copy of the actual notice sent and an affidavit attesting to notice should be filed in the docket assigned to the application. Recipients of notice may request a hearing on the merits.
   ***HEARING ON THE MERITS***: An affected party may request a hearing within 30 days of notice. In this event, the application may be referred to the State Office of Administrative Hearings (SOAH) to complete this request.

V. **TRANSACTION TO PROCEED**: at any time following the provision of notice, or prior to 120 days from the last date that proper notice was given, Commission Staff will file a recommendation for the transaction to proceed as proposed or recommend that the STM be referred to SOAH for further investigation. The Applicants will be required to file an update in the docket to the ALJ every 30 days following the approval of the transaction. The transaction must be completed within six (6) months from the ALJ's order (Note: The Applicants may request an extension to the 6 month provision for good cause).

VI. **FILE**: Seven (7) copies of completed transaction documents and documentation addressing the transfer or disposition of any outstanding deposits. After receiving all required documents from the Applicants, the application will be granted a procedural schedule for final processing. The Applicants are requested to consent in writing to the proposed maps and certificates, or tariff if applicable.

VII. **FINAL ORDER:** The ALJ will issue a final order issuing or amending the applicable CCNs.

**FAQ:**

***Who can use this form?***

Any retail public utility that provides water or wastewater service in Texas.

***Who is required to use this form***?

A retail public utility that is an investor owned utility (IOU) or a water supply corporation (WSC) prior to any STM of a water or sewer system, or utility, or prior to the transfer of a portion of a certificated service area.

**Terms**

***Transferor:*** Seller
***Transferee:*** Purchaser
***CCN:*** Certificate of Convenience and Necessity
***STM***: Sale, Transfer, or Merger
***IOU***: Investor Owned Utility



001

## Application Summary

**Transferor**: The Commons Water Supply, Inc.
(*selling entity*)
**CCN No.s**: 12781

☒ Sale ☒ Transfer ☐ Merger ☐ Consolidation ☐ Lease/Rental

**Transferee**: Aqua Texas, Inc.
(*acquiring entity*)
**CCN No.s**: 13203

☒ Water ☐ Sewer ☒ All CCN ☐ Portion CCN ☒ Facilities transfer

**County(ies):** Harris

## Table of Contents

**Sale, Transfer, or Merger (STM) Application Instructions** ..... 1
**Part A: General Information** ..... 3
**Part B: Transferor Information** ..... 3
**Part C: Transferee Information** ..... 4
**Part D: Proposed Transaction Details** ..... 6
**Part E: CCN Obtain or Amend Criteria Considerations** ..... 8
**Part F: TCEQ Public Water System or Sewer (Wastewater) Information** ..... 9
**Part G: Mapping & Affidavits** ..... 10
**Part H: Notice Information** ..... 12
**Appendix A: Historical Financial Information (Balance Sheet and Income Schedule)** ..... 15
**Appendix B: Projected Information** ..... 18

**Please mark the items included in this filing**

| | | |
|---|---|---|
| ☒ | Contract, Lease, Purchase, or Sale Agreement | Part A: Question 1 |
| ☒ | Tariff including Rate Schedule | Part B: Question 4 |
| ☐ | List of Customer Deposits | Part B: Question 5 |
| ☐ | Partnership Agreement | Part C: Question 7 |
| ☐ | Articles of Incorporation and By-Laws (WSC) | Part C: Question 7 |
| ☐ | Certificate of Account Status | Part C: Question 7 |
| ☒ | Financial Audit | Part C: Question 10 |
| ☐ | Application Attachment A & B | Part C: Question 10 |
| ☐ | Disclosure of Affiliated Interests | Part C: Question 10 |
| ☐ | Capital Improvement Plan | Part C: Question 10 |
| ☒ | List of Assets to be Transferred | Part D: 11.B |
| ☐ | Developer Contribution Contracts or Agreements | Part D: 11.D |
| ☒ | Enforcement Action Correspondence | Part E: Question 18 (Part D: Q12) |
| ☒ | TCEQ Compliance Correspondence | Part F: Question 22 |
| ☐ | TCEQ Engineering Approvals | Part F: Question 24 |
| ☐ | Purchased Water Supply or Treatment Agreement | Part F: Question 26 |
| ☒ | Detailed (large scale) Map | Part G: Question 29 |
| ☒ | General Location (small scale) Map | Part G: Question 29 |
| ☒ | Digital Mapping Data | Part G: Question 29 |
| ☒ | Signed & Notarized Oath | Page 13-14 |



## Part A: General Information

**1.** Describe the proposed transaction, including the effect on all CCNs involved, and provide details on the existing or expected land use in the area affected by the proposed transaction. Attach all supporting documentation, such as a contract, a lease, or proposed purchase agreements:

This application requests approval for the sale/transfer of all assets used and useful for The Commons Water Supply, Inc. public drinking water system (PWS ID No. 1012978) and its CCN No. 12781 service area in Harris County, Texas to Aqua Texas, Inc., CCN NO. 13203.

See Attachment 1 - Overview and Attachment 3 - Asset Purchase Agreement.

**2.** The proposed transaction will require (check all applicable):

For **Transferee** (Purchaser) CCN:

- ☐ Obtaining a NEW CCN for Purchaser
- ☒ Transfer all CCN into Purchaser's CCN (Merger)
- ☐ Transfer Portion of CCN into Purchaser's CCN
- ☐ Transfer all CCN to Purchaser and retain Seller CCN
- ☐ Uncertificated area added to Purchaser's CCN

For **Transferor** (Seller) CCN:

- ☒ Cancellation of Seller's CCN
- ☐ Transfer of a Portion of Seller's CCN to Purchaser
- ☐ Only Transfer of Facilities, No CCN or Customers
- ☐ Only Transfer of Customers, No CCN or Facilities
- ☐ Only Transfer CCN Area, No Customers or Facilities

## Part B: Transferor Information

**Questions 3 through 5 apply only to the *transferor* (current service provider or seller)**

**3. A.** Name: The Commons Water Supply, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☒ Corporation ☐ WSC ☐ Other:

**B.** Mailing Address: 1401 Woodlands Parkway, The Woodlands, TX 77380

Phone: (713) 452-1700 Email: Not applicable

**C.** Contact Person. Please provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Jeff Dewese Title: Vice President

Mailing Address: 1401 Parkway, The Woodlands, TX 77380

Phone: (713) 452-1725 Email: jdewese@signoreillycompany.com

**4.** If the utility to be transferred is an Investor Owned Utility (IOU), for the most recent rate change, attach a copy of the current tariff and complete A through B:
See Attachment 5.

**A.** Effective date for most recent rates: February 5, 2011

**B.** Was notice of this increase provided to the Public Utility Commission of Texas (Commission) or a predecessor regulatory authority?

☐ No ☒ Yes Application or Docket Number: TCEQ Application No. 36897-R

**If the transferor is a Water Supply or Sewer Service Corporation, provide a copy of the current tariff.**



**5.** For the customers that will be transferred following the approval of the proposed transaction, check all that apply:

☐ There are *no* customers that will be transferred — All deposits held by The Commons Water Supply, Inc., if any, will be refunded prior to closing. Applicants request a waiver of production for this item.

☐ # of customers without deposits held by the transferor

☒ # of customers with deposits held by the transferor* 992 — See Attachment 15.

*Attach a list of all customers affected by the proposed transaction that have deposits held, and include a customer indicator (name or account number), date of each deposit, amount of each deposit, and any unpaid interest on each deposit.

## Part C: Transferee Information

**Questions 6 through 10 apply only to the *transferee* (purchaser or proposed service provider)**

**6. A.** Name: Aqua Texas, Inc.
(individual, corporation, or other legal entity)
☐ Individual ☐ Corporation ☐ WSC ☐ Other:

**B.** Mailing Address: 1106 Clayton Lane, Suite 400W, Austin, Texas 78723

Phone: (512) 990-4400 Email: Not applicable.

**C.** Contact Person. Provide information about the person to be contacted regarding this application. Indicate if this person is the owner, operator, engineer, attorney, accountant, or other title.

Name: Geoffrey P. Krishbaum Title: Attorney

Address: Terrill & Waldrop, 810 West 10th Street, Austin, Texas 78701

Phone: Email: gkirshbaum@terrillwaldrop.com

**D.** If the transferee is someone other than a municipality, is the transferee current on the Regulatory Assessment Fees (RAF) with the Texas Commission on Environmental Quality (TCEQ)?

☐ No ☐ Yes ☐ N/A

**E.** If the transferee is an IOU, is the transferee current on the Annual Report filings with the Commission?

☐ No ☐ Yes ☐ N/A

**7.** The legal status of the transferee is:

☐ Individual or sole proprietorship

☐ Partnership or limited partnership (*attach* Partnership agreement)

☐ Corporation
Charter number (as recorded with the Texas Secretary of State): Texas Taxpayer Number: 32014405503; Texas SOS File Number

☐ Non-profit, member-owned, member controlled Cooperative Corporation [Article 1434(a) Water Supply or Sewer Service Corporation, incorporated under TWC Chapter 67]
Charter number (as recorded with the Texas Secretary of State):
☐ Articles of Incorporation and By-Laws established (*attach*)

☐ Municipally-owned utility

☐ District (MUD, SUD, WCID, FWSD, etc.)

☐ County

☐ Affected County (a county to which Subchapter B, Chapter 232, Local Government Code, applies)

☐ Other (please explain):

**8.** If the transferee operates under any d/b/a, provide the name below:

Name: Aqua Texas

**9.** If the transferee's legal status is anything other than an individual, provide the following information regarding the officers, members, or partners of the legal entity applying for the transfer:

Name: See Attachment 7.
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

Name:
Position: Ownership % (if applicable): 0.00%
Address:
Phone: Email:

**10.** **Financial Information**

The transferee Applicant must provide accounting information typically included within a balance sheet, income statement, and statement of cash flows. If the Applicant is an existing retail public utility, this must include historical financial information and projected financial information. However, projected financial information is only required if the Applicant proposes new service connections and new investment in plant, or if requested by Staff. If the Applicant is a new market entrant and does not have its own historical balance sheet, income statement, and statement of cash flows information, then the Applicant should establish a five-year projection taking the historical information of the transferor Applicant into consideration when establishing the projections.

***Historical Financial Information*** may be shown by providing any combination of the following that includes necessary information found in a balance sheet, income statement, and statement of cash flows:

1. Completed Appendix A;
2. Documentation that includes all of the information required in Appendix A in a concise format; or
3. Audited financial statements issued within 18 months of the application filing date. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal.

Please see Aqua America (n/k/a Essential Utilities, Inc.) 2019 Annual Report excerpts at Attachment 8.





***Projected Financial Information*** may be shown by providing any of the following:

1. Completed Appendix B;
2. Documentation that includes all of the information required in Appendix B in a concise format;
3. A detailed budget or capital improvement plan, which indicates sources and uses of funds required, including improvements to the system being transferred; or
4. A recent budget and capital improvements plan that includes information needed for analysis of the operations test (16 Tex. Admin. Code § 24.11(e)(3)) for the system being transferred and any operations combined with the system. This may be provided electronically by providing a uniform resource locator (URL) or a link to a website portal. N/A – While investment in plant and connection additions may occur after the transaction just as before, the proposed transaction that is the subject of this application will have no impact on whether such investment or connections occur.

## Part D: Proposed Transaction Details

**11. A.** Proposed Purchase Price: $ 4,000,000.00

If the transferee Applicant is an investor owned utility (IOU) provide answers to B through D.

**B.** Transferee has a copy of an inventory list of assets to be transferred (*attach*):

☐ No ☒ Yes ☐ N/A

Total Original Cost of Plant in Service: $
Accumulated Depreciation: $
Net Book Value: $

Please see Att. 3 - Asset Purchase Agreement at Sch. 1.1 List of Assets and Attachment 2 at pp. 79-90 (CP&Y Report, Appendix 1).

**C.** **Customer contributions in aid of construction (CIAC):** Have the customers been billed for any surcharges approved by the Commission or TCEQ to fund any assets currently used and useful in providing utility service? Identify which assets were funded, or are being funded, by surcharges on the list of assets.

☐ No ☐ Yes Not applicable.

Total Customer CIAC: $
Accumulated Amortization: $

**D.** **Developer CIAC:** Did the transferor receive any developer contributions to pay for the assets proposed to be transferred in this application? If so, identify which assets were funded by developer contributions on the list of assets and provide any applicable developer agreements.

☐ No ☐ Yes Not applicable.

Total developer CIAC: $
Accumulated Amortization: $

**12.** **A.** Are any improvements or construction required to meet the minimum requirements of the TCEQ or Commission and to ensure continuous and adequate service to the requested area to be transferred plus any area currently certificated to the transferee Applicant? Attach supporting documentation and any necessary TCEQ approvals, if applicable.

☒ No ☐ Yes



**B**. If yes, describe the source and availability of funds and provide an estimated timeline for the construction of any planned or required improvements:

Not applicable.

**13.** Provide any other information concerning the nature of the transaction you believe should be given consideration:

See Attachment 1. As discussed therein, the Applicants have utilized the Commission's new fair market value process authorized by TWC § 13.305 and 16 TAC 24.238 in connection with this Application. Aqua received appraisal reports valuing the System at $3,638,100, $4,000,000, and $7,283,000, making the average of the three fair market valuations $4,973,700. The purchase price the Applicants have agreed on is $4,000,000. Therefore, per 16 TAC § 24.238(b)(4), Aqua requests the Commission approve $4,000,000 as the "Ratemaking rate base" in this proceeding, which is the lesser of the two amounts. See Attachments 2 and 3.

**14.** Complete the following proposed entries (listed below) as shown in the books of the Transferee (purchaser) after the acquisition. Debits (positive numbers) should equal credits (negative numbers) so that all line items added together equal zero. Additional entries may be made; the following are suggested only, and not intended to pose descriptive limitations:

Utility Plant in Service: $
Accumulated Depreciation of Plant: $
Cash: $
Notes Payable: $
Mortgage Payable: $
(Proposed) Acquisition Adjustment*: $

See Attachment 4 - UPIS Booking Process.

* Acquisition Adjustments will be subject to review under 16 TAC § 24.41(d) and (e)

Other (NARUC account name & No.):
Other (NARUC account name & No.):

**15.** **A.** Explain any proposed billing change (NOTE: If the acquiring entity is an IOU, the IOU may not change the rates charged to the customers through this STM application. Rates can only be changed through the approval of a rate change application.)

Not applicable.

**B.** If transferee is an IOU, state whether or not the transferee intends to file with the Commission, or an applicable municipal regulatory authority, an application to change rates for some or all of its customers as a result of the transaction within the next twelve months. If so, provide details below:

Transferee does not intend to file an application to change rates for any customers as a result of the proposed transaction. Other factors would drive any decision regarding rate changes.



## Part E: CCN Obtain or Amend Criteria Considerations

**16.** Describe, in detail, the anticipated impact or changes in the quality of retail public utility service in the requested area as a result of the proposed transaction:

Aqua is a subsidiary of Essential Utilities, Inc., one of the largest publicly traded water utilities in America. Aqua currently operates more than 375 water systems in Texas. Aqua has the financial ability to make all necessary repairs and improvements to The Commons Water Supply, Inc. water system to keep it in full compliance with all TCEQ and PUC regulations. Aqua's experienced operators are thoroughly knowledgeable about water operations, as well as the requirements for continuous and adequate service. The quality of service will remain at a high level due to the experienced operators employed by Aqua. The quality of service will meet or exceed current levels. Aqua will deal promptly with any service issues which may arise.

**17.** Describe the transferee's experience and qualifications in providing continuous and adequate service. This should include, but is not limited to: other CCN numbers, water and wastewater systems details, and any corresponding compliance history for all operations.

See Attachment 1. A TCEQ Compliance History Report for Aqua Texas, Inc. is included as Attachment 11. Aqua Texas, Inc. will provide additional system detail information to the Commission upon request. See also Attachment 12.

**18.** Has the transferee been under an enforcement action by the Commission, TCEQ, Texas Department of Health (TDH), the Office of the Attorney General (OAG), or the Environmental Protection Agency (EPA) in the past five (5) years for non-compliance with rules, orders, or state statutes? Attach copies of any correspondence with the applicable regulatory agency(ies)

☐ No ☒ Yes See Attachment 12.

**19.** Explain how the environmental integrity or the land will be impacted or disrupted as a result of the proposed transaction:

There will be no change with respect to environmental integrity or land impact/disruption as a result of the proposed transaction.

**20.** How will the proposed transaction serve the public interest?

Aqua owns several water systems near The Commons Water Supply, Inc. water system to be acquired in the proposed transaction. This transaction is in the public interest because it will allow for regional service by Aqua to transferred customers connected to The Commons Water Supply, Inc. water system. Transferred customers will benefit from economies of scale provided by Aqua's larger customer base located throughout its Southeast Region.

**21.** List all neighboring water or sewer utilities, cities, districts (including ground water conservation districts), counties, or other political subdivisions (including river authorities) providing the same service within two (2) miles from the outer boundary of the requested area affected by the proposed transaction:

Please see Attachment 10.

## Part F: TCEQ Public Water System or Sewer (Wastewater) Information

**Complete Part F for EACH Public Water or Sewer system to be transferred subject to approval of the transaction. Attach a separate sheet with this information if you need more space for additional systems being transferred.**

**22. A.** For Public Water System (PWS):

TCEQ PWS Identification Number: PWS 1012978 (7 digit ID)

Name of PWS: The Commons Water Supply, Inc.

Date of last TCEQ compliance inspection: September 14, 2018 (attach TCEQ letter)

Subdivisions served: The Commons of Lake Houston See attachment 14 for TCEQ letter.

**B.** For Sewer service:

TCEQ Water Quality (WQ) Discharge Permit Number: WQ - (8 digit ID)

Name of Wastewater Facility: Not applicable.

Name of Permitee:

Date of last TCEQ compliance inspection: (attach TCEQ letter)

Subdivisions served:

Date of application to transfer permit *submitted* to TCEQ:

**23.** List the number of *existing* connections, by meter/connection type, to be affected by the proposed transaction:

| Water | | | | Sewer | |
|---|---|---|---|---|---|
| | Non-metered | | 2" | 0 | Residential |
| 967 | 5/8" or 3/4" | | 3" | 0 | Commercial |
| 23 | 1" | | 4" | 0 | Industrial |
| 2 | 1 ½" | | Other | | Other |
| | Total Water Connections: | | 992 | Total Sewer Connections: | 0 |

**24. A.** Are any improvements required to meet TCEQ or Commission standards?

☐ No ☐ Yes

**B.** Provide details on each required major capital improvement necessary to correct deficiencies to meet the TCEQ or Commission standards (attach any engineering reports or TCEQ approval letters):

| Description of the Capital Improvement: | Estimated Completion Date: | Estimated Cost: |
|---|---|---|
| | | |
| | | |
| | | |

**C.** Is there a moratorium on new connections?

☐ No ☐ Yes:

**25.** Does the system being transferred operate within the corporate boundaries of a municipality?

☐ No ☐ Yes: City of Houston *(name of municipality)*

*See* Attachment 6.

If yes, indicate the number of customers within the municipal boundary.

Water: 30 Sewer: 0

PUCT Sale, Transfer, Merger
Page **9** of **20** (September 2019)

009

## Section 1: 10-K (ARTESIAN RESOURCES CORP FILE 10-K)

Table of Contents

**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

**FORM 10-K**

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2020
OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 000-18516

**ARTESIAN RESOURCES CORPORATION**

(Exact name of registrant as specified in its charter)

| **Delaware** | 51-0002090 |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification Number) |

**664 Churchmans Road, Newark, Delaware 19702**

Address of principal executive offices

**(302) 453 – 6900**

Registrant's telephone number, including area code

Securities registered pursuant to Section 12(b) of the Act:

| **Title of each class** | **Trading Symbol (s)** | **Name of each exchange on which registered** |
|---|---|---|
| Common Stock | ARTNA | The Nasdaq Stock Market |

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☐Yes ☑No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

☐Yes ☑No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☑Yes ☐No

Table of Contents

***NOTE 16***

***RELATED PARTY TRANSACTIONS***

Mr. Michael Houghton currently serves as a director through the remainder of the three year term class that expires at the Annual Meeting of the Class B Stock shareholders to be held in 2021 and until his respective successor shall be elected and qualified. Mr. Houghton is a Partner in the law firm of Morris Nichols Arsht & Tunnell, or MNAT, in Wilmington, Delaware. In the normal course of business, the Company utilizes the services of MNAT for various regulatory, real estate and public policy matters. Approximately $386,000, $253,000 and $524,000 was paid to MNAT during the years ended December 31, 2020, December 31, 2019 and December 31, 2018, respectively, for legal and director related services. As of December 31, 2020, the Company had a $2,000 accounts payable balance due to MNAT.

As set forth in the Charter of the Audit Committee of the Board, the Audit Committee is responsible for reviewing and, if appropriate, approving all related party transactions between us and any officer, any director, any person known to be the beneficial owner of more than 5% of any class of the Company's voting securities or any other related person that would potentially require disclosure. In its review and approval of the related party transactions with MNAT, the Audit Committee considered the nature of the related person's interest in the transactions; the satisfactory performance of work contracted with the related party prior to the election of Mr. Houghton as a director; and the material terms of the transactions, including, without limitation, the amount and type of transactions, the importance of the transactions to the related person, the importance of the transactions to the Company and whether the transactions would impair the judgment of a director or officer to act in the best interest of the Company. The Audit Committee approves only those related person transactions that are in, or are consistent with, the best interests of the Company and its stockholders.

***NOTE 17***

***BUSINESS COMBINATIONS***

As part of the Company's growth strategy, on April 2, 2020, Artesian Water purchased substantially all of the water system operating assets from the Town of Frankford, or Frankford, a Delaware municipality located in Sussex County, Delaware, including the right to provide water service to Frankford's existing customers, or the Frankford Water System. The Frankford Water System serves approximately 360 customers. The total purchase price was $3.6 million. The acquisition was accounted for as a business combination under ASC Topic 805, "Business Combinations". The purchase price allocation is primarily attributed to utility plant assets. The Company utilized a combination of three methods to determine the reasonableness of the purchase price: the cost approach, market approach and income approach. Given the majority of the assets acquired were tangible utility plant, the Company utilized the cost approach to record the fair value of the assets. The cost approach values the underlying assets to derive market value based on the estimated current new replacement cost, less the loss in value caused by physical deterioration, and functional and economic obsolescence of the assets. Goodwill was recognized primarily as a result of expected synergies of operations and interconnections to our existing utility plant infrastructure.

Additionally, as part of the Company's growth strategy, on August 3, 2020, Artesian Water completed its purchase of substantially all of the water system operating assets from the City of Delaware City, or Delaware City, a Delaware municipality located in New Castle County, Delaware, including the right to provide water service to Delaware City's existing customers, or the Delaware City Water System. The Delaware City Water System currently serves approximately 800 customers. The total purchase price was $2.1 million. The acquisition was accounted for as a business combination under ASC Topic 805. The preliminary purchase price allocation is primarily attributed to utility plant assets and will be finalized in the first quarter of 2021, once the valuation of assets acquired has been completed. Management does not anticipate any material changes in the allocation.

A summary of the allocation of purchase price to the assets acquired is presented in the table below and is recorded in the accompanying Consolidated Balance Sheet.

| (In thousands) | |
|---|---|
| Utility plant | |
| Source of supply plant | $ 201 |
| Pumping and water treatment plant | 1,455 |
| Transmission and distribution plant | 3,462 |
| Other deferred assets | |
| Goodwill | 623 |
| **Purchase Price** | **$ 5,741** |

The Frankford Water System acquisition and the Delaware City Water System acquisition were approved by the DEPSC on March 18, 2020 and July 15, 2020, respectively, subject to the DEPSC determining the appropriate ratemaking treatment of the acquisition price and the assets acquired in Artesian Water's next base rate case. The pro forma effects of the businesses acquired, individually and in the aggregate, are not material to the Company's financial position or results of operations.

***NOTE 18***

CITY OF BEAVER FALLS
RESOLUTION NO. 1506

A RESOLUTION OF THE COUNCIL OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, DETERMINING THE MINIMUM WATER CONSUMPTION USAGE FOR THE RESIDENTS OF THE CITY OF BEAVER FALLS AND ESTABLISHING QUARTERLY FEES FOR SUCH USAGE, ESTABLISHING THE CITY SEWER USER'S CHARGE AND INCREASING THE RATES FOR SOLID WASTE COLLECTION AND FIRE HYDRANT FEES.

This Resolution provides that the Council of the City of Beaver Falls will annually compute the sewer rental charge payable by the owner and/or occupier of premises served by the Beaver Falls Sanitary Sewer System.

Now therefore, be it resolved by the Council of the City of Beaver Falls, Beaver County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

2021
$39.94

1. The minimum City residents sewer charge is established at $38.78 per quarter for use of 3,000 gallons or less of water consumption.

$7.97

2. For use above the minimum 3,000 gallons per quarter, the City residents sewer charge shall be $7.74 per 1,000 gallons of water consumption.

3. The charge for Solid Waste shall be $56.00 per quarter.

4. The charge for Fire Hydrant fee shall be $4.00 per quarter.

5. These rates will take effect January 1, 2019 based on actual metered water usage.

6. The City shall, effective January 1, 2021, and every year thereafter, increase the City residents sewer charge by 3%.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 27th day of December, 2018.

ATTEST:

Paula J. Durish, City Clerk

CITY OF BEAVER FALLS:

George S. Quay III, Mayor

CITY OF BEAVER FALLS
RESOLUTION NO. 1576

A RESOLUTION OF THE CITY OF BEAVER FALLS, BEAVER COUNTY, PENNSYLVANIA, AMENDING RESOLUTION 1423 DETERMINING THE JOINT SEWER USER'S CHARGE RATE COMMENCING JANUARY 1, 2021 AND TO RE-IMPLEMENT THE AUTOMATIC JOINT SEWER USER'S CHARGE BY 3% ANNUALLY.

WHEREAS, the City desires to amend provisions contained in Resolution 1423 which assessed a suspension in the automatic annual increase in the JSU's charge per 1,000 gallons of water consumption and the JSU's charge;

BE IT RESOLVED by the Council of the City of Beaver Falls, it is hereby resolved by virtue of the authority of the same as follows:

1. That Paragraph 1 of Resolution 1423 shall reflect the 3% increase (beginning January 1, 2021) and is now $4.28 per 1,000 gallons of water consumption.

2. That the Council of the City of Beaver Falls, hereby re-implements Paragraph 4 of Resolution 1256 which reads: The City shall, effective January 1, 2021, and every year thereafter, increase the Joint Sewer User's charge by 3%.

All other provisions of Resolution No. 1256 and Resolution No. 1423 shall remain in full force and effect.

The City may, from time to time, amend this resolution as deemed necessary and appropriate by Council.

Any and all ordinances, parts of ordinances, resolution or p arts of resolutions in conflict with the terms, conditions and provisions of this Resolution are hereby repealed to the extent of such conflict.

That this Resolution shall take effect immediately upon its passage.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls this 8th day of December, 2020.

ATTEST:

Paula J. Durish – City Clerk

CITY OF BEAVER FALLS:

George S. Quay III - Mayor

City of Beaver Falls
Recommended Capital Structure and Cost Rates

| Type Of Capital | Ratios (1) | Cost Rate | | Weighted Cost Rate |
|---|---|---|---|---|
| Long-Term Debt | 50.00% | 3.04% | (2) | 1.52% |
| Common Equity | 50.00% | 10.19% | (3) | 5.10% |
| Total | 100.00% | | | 6.62% |

Notes:

(1) From page 4 of this Appendix.
(2) From page 2 of this Appendix.
(3) From page 3 of this Appendix.

City of Beaver Falls
Calculation of Average Yields for
Moody's A2-Rated Utility Bonds

| Date | Moody's A2-Rated Utility Bond Yields |
|---|---|
| 11/30/2021 | 2.99% |
| 11/29/2021 | 3.07% |
| 11/26/2021 | 3.03% |
| 11/24/2021 | 3.08% |
| 11/23/2021 | 3.13% |
| 11/22/2021 | 3.08% |
| 11/19/2021 | 3.01% |
| 11/18/2021 | 3.06% |
| 11/17/2021 | 3.08% |
| 11/16/2021 | 3.09% |
| 11/15/2021 | 3.07% |
| 11/12/2021 | 3.01% |
| 11/10/2021 | 2.97% |
| 11/9/2021 | 2.86% |
| 11/8/2021 | 2.93% |
| 11/5/2021 | 2.92% |
| 11/4/2021 | 3.00% |
| 11/3/2021 | 3.02% |
| 11/2/2021 | 2.99% |
| 11/1/2021 | 3.00% |
| 10/29/2021 | 2.98% |
| 10/28/2021 | 2.99% |
| 10/27/2021 | 2.96% |
| 10/26/2021 | 3.07% |
| 10/25/2021 | 3.10% |
| 10/22/2021 | 3.11% |
| 10/21/2021 | 3.15% |
| 10/20/2021 | 3.13% |
| 10/19/2021 | 3.12% |
| 10/18/2021 | 3.05% |
| Average | 3.04% |

Source of Information:
Bloomberg Professional Services

City of Beaver Falls
Brief Summary of Common Equity Cost Rate

| Line No. | Principal Methods | Proxy Group of Seven Water Companies |
|---|---|---|
| 1. | Discounted Cash Flow Model (DCF) (1) | 9.33% |
| 2. | Risk Premium Model (RPM) (2) | 11.17% |
| 3. | Capital Asset Pricing Model (CAPM) (3) | 11.66% |
| 4. | Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4) | 12.05% |
| 5. | Recommended Common Equity Cost Rate | 10.19% |

Notes: (1) From Page 5 of this Appendix.
(2) From Page 13 of this Appendix.
(3) From Page 25 of this Appendix.
(4) From Page 30 of this Appendix.

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Seven Water Companies
City of Beaver Falls

| | 2020 | 2019 | 2018 | 2017 | 2016 | 5 YEAR AVERAGE |
|---|---|---|---|---|---|---|
| American States Water Company | | | | | | |
| Long-Term Debt | 40.72 % | 31.87 % | 36.54 % | 37.75 % | 39.40 % | 37.26 % |
| Preferred Stock | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Common Equity | 59.28 | 68.13 | 63.46 | 62.25 | 60.60 | 62.74 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| American Water Works Company, Inc. | | | | | | |
| Long-Term Debt | 59.93 % | 58.59 % | 56.55 % | 55.81 % | 54.74 % | 57.12 % |
| Preferred Stock | 0.02 | 0.03 | 0.05 | 0.07 | 0.09 | 0.05 |
| Common Equity | 40.05 | 41.38 | 43.40 | 44.12 | 45.17 | 42.83 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| California Water Service Group | | | | | | |
| Long-Term Debt | 46.04 % | 50.90 % | 52.74 % | 43.40 % | 45.83 % | 47.78 % |
| Preferred Stock | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Common Equity | 53.96 | 49.10 | 47.26 | 56.60 | 54.17 | 52.22 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| Essential Utilities Inc. | | | | | | |
| Long-Term Debt | 54.42 % | 44.23 % | 56.06 % | 52.26 % | 50.81 % | 51.56 % |
| Preferred Stock | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Common Equity | 45.58 | 55.77 | 43.94 | 47.74 | 49.19 | 48.44 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| Middlesex Water Company | | | | | | |
| Long-Term Debt | 44.61 % | 42.20 % | 38.94 % | 38.65 % | 38.91 % | 40.66 % |
| Preferred Stock | 0.33 | 0.37 | 0.59 | 0.64 | 0.67 | 0.52 |
| Common Equity | 55.06 | 57.43 | 60.47 | 60.71 | 60.42 | 58.82 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| SJW Group | | | | | | |
| Long-Term Debt | 59.79 % | 59.05 % | 32.67 % | 48.20 % | 50.69 % | 50.08 % |
| Preferred Stock | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Common Equity | 40.21 | 40.95 | 67.33 | 51.80 | 49.31 | 49.92 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| The York Water Company | | | | | | |
| Long-Term Debt | 46.31 % | 42.95 % | 42.52 % | 43.02 % | 42.60 % | 43.48 % |
| Preferred Stock | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Common Equity | 53.69 | 57.05 | 57.48 | 56.98 | 57.40 | 56.52 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| Proxy Group of Seven Water Companies | | | | | | |
| Long-Term Debt | 50.26 % | 47.11 % | 45.15 % | 45.58 % | 46.14 % | 46.85 % |
| Preferred Stock | 0.05 | 0.06 | 0.09 | 0.10 | 0.11 | 0.08 |
| Common Equity | 49.69 | 52.83 | 54.76 | 54.31 | 53.75 | 53.07 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 99.99 % | 100.00 % | 100.00 % |

Source of Information
Annual Forms 10-K

City of Beaver Falls
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Group of Seven Water Companies

| Proxy Group of Seven Water Companies | [1] Average Dividend Yield (1) | [2] Value Line Projected Five Year Growth in EPS (2) | [3] Zack's Five Year Projected Growth Rate in EPS | [4] Yahoo! Finance Projected Five Year Growth in EPS | [5] Average Projected Five Year Growth in EPS (3) | [6] Adjusted Dividend Yield (4) | [7] Indicated Common Equity Cost Rate (5) |
|---|---|---|---|---|---|---|---|
| American States Water Company | 1.61 % | 6.50 % | NA % | 6.70 % | 6.60 % | 1.66 % | 8.26 % |
| American Water Works Company, Inc. | 1.38 | 8.50 | 8.10 | 8.20 | 8.27 | 1.44 | 9.71 |
| California Water Service Group | 1.50 | 7.00 | NA | 11.70 | 9.35 | 1.57 | 10.92 |
| Essential Utilities Inc. | 2.27 | 10.00 | 6.20 | 6.40 | 7.53 | 2.36 | 9.89 |
| Middlesex Water Company | 1.09 | 5.00 | NA | 2.70 | 3.85 | 1.11 | 4.96 |
| SJW Group | 1.99 | 13.00 | NA | 5.70 | 9.35 | 2.08 | 11.43 |
| The York Water Company | 1.66 | 6.50 | NA | 4.90 | 5.70 | 1.71 | 7.41 |
| | | | | | | Average | 8.94 % |
| | | | | | | Median | 9.71 % |
| | | | | | Average of Mean and Median | | 9.33 % |

NA= Not Available

Notes:

(1) Indicated dividend at 11/30/2021 divided by the average closing price of the last 60 trading days ending 11/30/2021 for each company.

(2) From pages 6 through 12 of this Appendix.

(3) Average of columns 2 through 4 excluding negative growth rates.

(4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Company, 1.61% x (1+( 1/2 x 6.60%) ) = 1.66%.

(5) Column 5 + column 6.

Source of Information:

Value Line Investment Survey
www.zacks.com Downloaded on 11/30/2021
www.yahoo.com Downloaded on 11/30/2021
Bloomberg Professional Services

# AMER. STATES WATER NYSE-AWR

RECENT PRICE 86.71 | P/E RATIO 35.7 (Trailing: 34.7 Median: 24.0) | RELATIVE P/E RATIO 1.89 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Raised 3/5/21
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 10/8/21
BETA .65 (1.00 = Market)

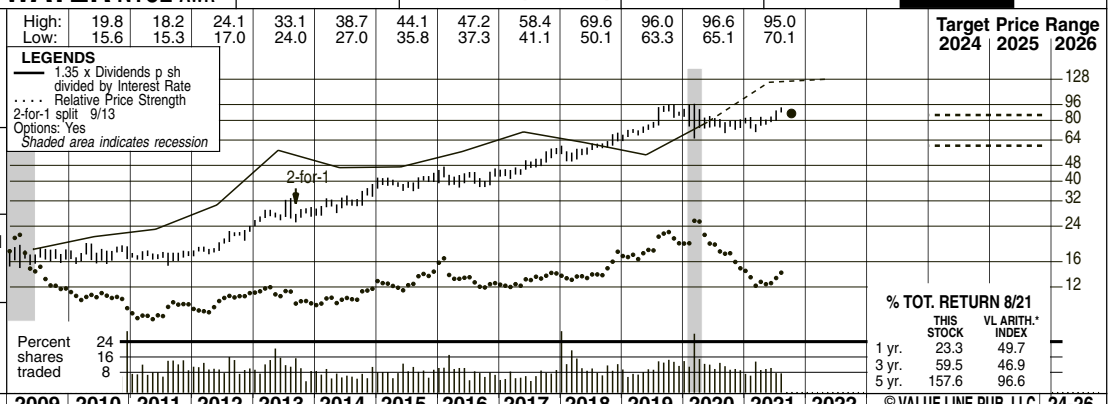
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$75-$118 $97 (10%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 85 | (Nil) | *2%* |
| Low | 60 | (-30%) | *-6%* |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 121 | 120 | 126 |
| to Sell | 142 | 128 | 117 |
| Hld's(000) | 25483 | 25737 | 25636 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.03 | 7.88 | 8.75 | 9.21 | 9.74 | 10.71 | 11.12 | 12.12 | 12.19 | 12.17 | 12.56 | 11.92 | 12.01 | 11.88 | 12.86 | 13.24 | *13.55* | *13.75* | Revenues per sh | *17.20* |
| 1.32 | 1.45 | 1.65 | 1.69 | 1.70 | 2.11 | 2.13 | 2.48 | 2.65 | 2.67 | 2.81 | 2.70 | 2.96 | 2.84 | 3.26 | 3.34 | *3.50* | *3.75* | "Cash Flow" per sh | *4.80* |
| .66 | .67 | .81 | .78 | .81 | 1.11 | 1.12 | 1.41 | 1.61 | 1.57 | 1.61 | 1.62 | 1.88 | 1.72 | 2.28 | 2.33 | *2.45* | *2.60* | Earnings per sh A | *3.05* |
| .45 | .46 | .48 | .50 | .51 | .52 | .55 | .64 | .76 | .83 | .87 | .91 | .99 | 1.06 | 1.16 | 1.28 | *1.40* | *1.52* | Div'd Decl'd per sh B■ | *2.00* |
| 2.12 | 1.95 | 1.45 | 2.23 | 2.09 | 2.12 | 2.13 | 1.77 | 2.52 | 1.89 | 2.39 | 3.55 | 3.08 | 3.44 | 4.12 | 3.54 | *4.05* | *4.20* | Cap'l Spending per sh | *4.25* |
| 7.86 | 8.32 | 8.77 | 8.97 | 9.70 | 10.13 | 10.84 | 11.80 | 12.72 | 13.24 | 12.77 | 13.52 | 14.45 | 15.19 | 16.33 | 17.39 | *17.45* | *20.00* | Book Value per sh D | *23.20* |
| 33.60 | 34.10 | 34.46 | 34.60 | 37.06 | 37.26 | 37.70 | 38.53 | 38.72 | 38.29 | 36.50 | 36.57 | 36.68 | 36.76 | 36.85 | 36.89 | *37.25* | *37.50* | Common Shs Outst'g C | *37.50* |
| 21.9 | 27.7 | 24.0 | 22.6 | 21.2 | 15.7 | 15.4 | 14.3 | 17.2 | 20.1 | 24.6 | 25.6 | 25.7 | 34.0 | 34.4 | 34.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *24.0* |
| 1.17 | 1.50 | 1.27 | 1.36 | 1.41 | 1.00 | .97 | .91 | .97 | 1.06 | 1.24 | 1.34 | 1.29 | 1.84 | 1.83 | 1.78 | | | Relative P/E Ratio | *1.35* |
| 3.1% | 2.5% | 2.5% | 2.9% | 2.9% | 3.0% | 3.2% | 3.1% | 2.7% | 2.6% | 2.2% | 2.2% | 2.0% | 1.8% | 1.5% | 1.6% | | | Avg Ann'l Div'd Yield | *2.8%* |
| 419.3 | 466.9 | 472.1 | 465.8 | 458.6 | 436.1 | 440.6 | 436.8 | 473.9 | 488.2 | *510* | *525* | Revenues ($mill) | *645* |
| 42.0 | 54.1 | 62.7 | 61.1 | 60.5 | 59.7 | 69.4 | 63.9 | 84.3 | 86.4 | *90.0* | *95.0* | Net Profit ($mill) | *115* |
| 41.7% | 39.9% | 36.3% | 38.4% | 38.4% | 36.8% | 36.0% | 22.0% | 22.6% | 24.6% | *23.5%* | *24.0%* | Income Tax Rate | *23.0%* |
| 2.0% | 2.5% | -- | -- | -- | -- | -- | -- | -- | -- | *1.0%* | *1.0%* | AFUDC % to Net Profit | *1.0%* |
| 45.4% | 42.2% | 39.8% | 39.1% | 41.1% | 39.4% | 38.0% | 40.5% | 44.4% | 47.2% | *45.5%* | *48.5%* | Long-Term Debt Ratio | *53.5%* |
| 54.6% | 57.8% | 60.2% | 60.9% | 58.9% | 60.6% | 62.0% | 59.5% | 55.6% | 52.8% | *54.5%* | *51.5%* | Common Equity Ratio | *46.5%* |
| 749.1 | 787.0 | 818.4 | 832.6 | 791.5 | 815.3 | 854.9 | 938.4 | 1082.5 | 1216.2 | *1260* | *1390* | Total Capital ($mill) | *1620* |
| 896.5 | 917.8 | 981.5 | 1003.5 | 1060.8 | 1150.9 | 1205.0 | 1296.3 | 1415.7 | 1512.0 | *1600* | *1700* | Net Plant ($mill) | *1925* |
| 7.1% | 8.3% | 8.9% | 8.6% | 9.0% | 8.6% | 9.3% | 7.9% | 8.9% | 8.0% | *8.0%* | *8.0%* | Return on Total Cap'l | *8.5%* |
| 10.3% | 11.9% | 12.7% | 12.0% | 13.0% | 12.1% | 13.1% | 11.4% | 14.0% | 13.5% | *13.5%* | *13.5%* | Return on Shr. Equity | *13.0%* |
| 10.3% | 11.9% | 12.7% | 12.0% | 13.0% | 12.1% | 13.1% | 11.4% | 14.0% | 13.5% | *13.5%* | *13.5%* | Return on Com Equity | *13.0%* |
| 5.3% | 6.6% | 6.8% | 5.7% | 6.0% | 5.3% | 6.2% | 4.5% | 6.9% | 6.1% | *6.0%* | *5.5%* | Retained to Com Eq | *4.5%* |
| 49% | 45% | 47% | 53% | 54% | 56% | 52% | 61% | 51% | 55% | *57%* | *60%* | All Div'ds to Net Prof | *66%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $412.7 mill. **Due in 5 Yrs** $136.0 mill.
**LT Debt** $412.3mill. **LT Interest** $24.0 mill. (38% of Cap'l)

**Leases, Uncapitalized:** Annual rentals $2.6 mill.
**Pension Assets-12/20** $213.1 mill. **Oblig.** $272.8 mill.
**Pfd Stock** None

**Common Stock** 36,931,771 shs. as of 7/30/21

**MARKET CAP: $3.2 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 1.3 | 36.7 | 5.4 |
| Accts Receivable | 20.9 | 29.2 | 28.5 |
| Other | 100.3 | 91.2 | 33.9 |
| Current Assets | 122.5 | 157.1 | 136.3 |
| Accts Payable | 55.6 | 63.8 | 66.0 |
| Debt Due | 5.3 | .4 | .4 |
| Other | 55.1 | 54.4 | 45.0 |
| Current Liab. | 116.0 | 118.6 | 111.4 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.5% | .5% | *5.0%* |
| "Cash Flow" | 5.5% | 3.0% | *7.0%* |
| Earnings | 9.0% | 5.5% | *6.5%* |
| Dividends | 8.5% | 7.5% | *9.5%* |
| Book Value | 5.5% | 5.0% | *5.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 94.7 | 106.9 | 124.2 | 111.0 | 436.8 |
| 2019 | 101.7 | 124.7 | 134.5 | 113.0 | 473.9 |
| 2020 | 109.1 | 121.3 | 133.6 | 124.2 | 488.2 |
| 2021 | 117.1 | 128.4 | *139* | *125.5* | *510* |
| 2022 | *120* | *130* | *145* | *130* | *525* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .29 | .44 | .62 | .37 | 1.72 |
| 2019 | .35 | .72 | .76 | .45 | 2.28 |
| 2020 | .38 | .69 | .72 | .54 | 2.33 |
| 2021 | .52 | .72 | *.75* | *.46* | *2.45* |
| 2022 | *.50* | *.75* | *.78* | *.57* | *2.60* |

| Calendar | QUARTERLY DIVIDENDS PAID B■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .242 | .242 | .255 | .255 | .99 |
| 2018 | .255 | .255 | .275 | .275 | 1.06 |
| 2019 | .275 | .275 | .305 | .305 | 1.16 |
| 2020 | .305 | .305 | .335 | .335 | 1.28 |
| 2021 | .335 | .335 | .365 | | |

**BUSINESS:** American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 261,976 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,545 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 841. BlackRock, Inc. owns 16.4% of out. shares; Vanguard, 12.0%; off. & dir., 1.0% (4/21 Proxy). Chairman: Lloyd Ross. Pres. & CEO: Robert Sprowls. Inc: CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel.: 909-394-3600. Internet: www.aswater.com.

**American States Water has raised its dividend.** In the September interim, the quarterly share payout was increased from $0.335 to $0.365. This 9% hike was well above the average growth rate compared to the other water utilities that make up this group.

**The company is on track for a decent showing in 2021.** Thanks to a better-than-expected first half, we think that earnings per share could well rise 5% this year. This is not bad, considering that utilities often do not perform well when operating in the final year of a three-year-old rate case.

**Earnings from 2022 will be heavily influenced by a pending regulatory case.** In California, utilities petition state authorities for permission to charge higher fees triennially. American States filed for rate relief for the 2022 to 2024 period several years ago, and a ruling by the California Public Utility Commission should be made early next year. (Any rate hike would be retroactive to January 1st.) Management has been in discussions, and it's possible that a settlement can be reached earlier. In any case, the decision on the previous request for higher rates was relatively constructive.

**Inflation may stall some of the expected growth in the nonregulated segment.** Through its ASUS subsidiary, the company provides water services to military installations in the United States. The armed forces are in the midst of privatizing these operations, and ASUS has done well winning its fair share of the contracts. In the second quarter, shares earnings were off here about 8% due to a spike in the price of commodities and other costs. Unlike its water operations, profitability in this business is not controlled. Hence, there is greater risk, as well as a chance to make more income from investments. Should inflation not be transitory, it would not be helpful because the company operates on 50-year contracts.

**Theses shares are only expected to perform in line with the broader market averages in the year ahead.** Looking further out to 2024-2026, AWR total return prospects are well below the *Value Line* median, which is the case for most stocks in this industry.

*James A. Flood* *October 8, 2021*

**(A)** Primary earnings. Excludes nonrecurring gains/(losses): '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early November.
**(B)** Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
**(C)** In millions, adjusted for split.
**(D)** Includes intangibles. As of 6/30/20; $1.1 million/$0.03 a share.

| | |
|---|---|
| Company's Financial Strength | A |
| Stock's Price Stability | 100 |
| Price Growth Persistence | 85 |
| Earnings Predictability | 90 |

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# AMERICAN WATER NYSE-AWK

RECENT PRICE 170.71 | P/E RATIO 39.5 (Trailing: 41.3 Median: 24.0) | RELATIVE P/E RATIO 2.09 | DIV'D YLD 1.4% | VALUE LINE

TIMELINESS 3 Lowered 6/25/21
SAFETY 3 New 7/25/08
TECHNICAL 2 Raised 10/8/21
BETA .90 (1.00 = Market)

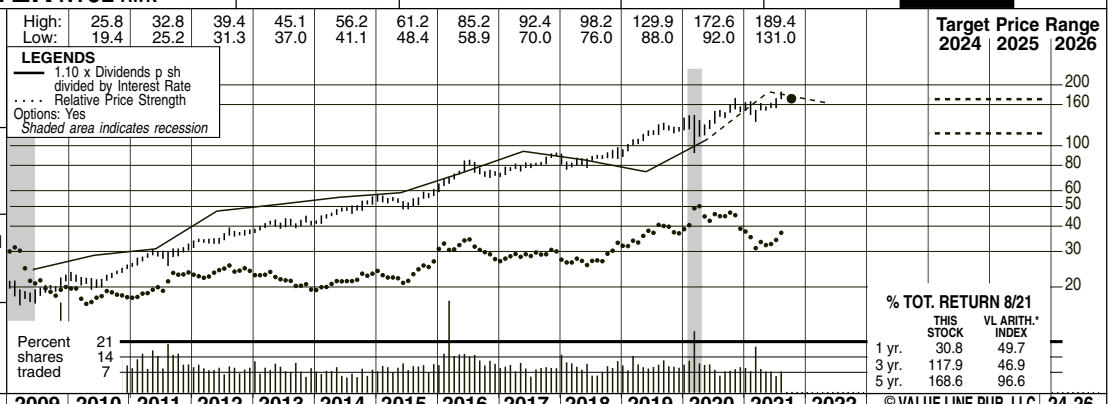
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$120-$279 $200 (15%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 170 | (Nil) | *2%* |
| Low | 115 | (-35%) | *-7%* |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 449 | 434 | 444 |
| to Sell | 344 | 388 | 377 |
| Hld's(000) | 148917 | 148561 | 150291 |




| 2005 | 2006E | 2007E | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | 13.08 | 13.84 | 14.61 | 13.98 | 15.49 | 15.18 | 16.25 | 16.28 | 16.78 | 17.72 | 18.54 | 18.81 | 19.04 | 19.97 | 20.83 | *22.10* | *23.30* | Revenues per sh | *25.80* |
| - - | .65 | d.47 | 2.87 | 2.89 | 3.56 | 3.73 | 4.27 | 4.36 | 4.75 | 5.13 | 5.26 | 5.14 | 6.15 | 6.65 | 7.24 | *7.70* | *8.25* | "Cash Flow" per sh | *9.70* |
| - - | d.97 | d2.14 | 1.10 | 1.25 | 1.53 | 1.72 | 2.11 | 2.06 | 2.39 | 2.64 | 2.62 | 2.38 | 3.15 | 3.43 | 3.91 | *4.25* | *4.60* | Earnings per sh A | *5.50* |
| - - | - - | - - | .40 | .82 | .86 | .90 | 1.21 | .84 | 1.21 | 1.33 | 1.47 | 1.62 | 1.78 | 1.96 | 2.15 | *2.36* | *2.57* | Div'd Decl'd per sh B■ | *3.10* |
| - - | 4.31 | 4.74 | 6.31 | 4.50 | 4.38 | 5.27 | 5.25 | 5.50 | 5.33 | 6.51 | 7.36 | 8.04 | 8.78 | 9.15 | 10.05 | *10.60* | *12.60* | Cap'l Spending per sh | *11.75* |
| - - | 23.86 | 28.39 | 25.64 | 22.91 | 23.59 | 24.11 | 25.11 | 26.52 | 27.39 | 28.25 | 29.24 | 30.13 | 32.42 | 33.83 | 35.58 | *37.95* | *40.20* | Book Value per sh D | *50.00* |
| - - | 160.00 | 160.00 | 160.00 | 174.63 | 175.00 | 175.66 | 176.99 | 178.25 | 179.46 | 178.28 | 178.10 | 178.44 | 180.68 | 180.81 | 181.30 | *181.50* | *182.00* | Common Shs Outst'g C | *190.00* |
| - - | - - | - - | 18.9 | 15.6 | 14.6 | 16.8 | 16.7 | 19.9 | 20.0 | 20.5 | 27.7 | 33.8 | 27.3 | 32.9 | 35.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *26.0* |
| - - | - - | - - | 1.14 | 1.04 | .93 | 1.05 | 1.06 | 1.12 | 1.05 | 1.03 | 1.45 | 1.70 | 1.47 | 1.75 | 1.83 | | | Relative P/E Ratio | *1.45* |
| - - | - - | - - | 1.9% | 4.2% | 3.8% | 3.1% | 3.4% | 2.0% | 2.5% | 2.5% | 2.0% | 2.0% | 2.1% | 1.7% | 1.6% | | | Avg Ann'l Div'd Yield | *2.2%* |
| | | | | | | 2666.2 | 2876.9 | 2901.9 | 3011.3 | 3159.0 | 3302.0 | 3357.0 | 3440.0 | 3610.0 | 3777.0 | *4025* | *4240* | Revenues ($mill) | *4900* |
| | | | | | | 304.9 | 374.3 | 369.3 | 429.8 | 476.0 | 468.0 | 426.0 | 567.0 | 621.0 | 709.0 | *770* | *835* | Net Profit ($mill) | *1045* |
| | | | | | | 39.5% | 40.7% | 39.1% | 39.4% | 39.1% | 39.2% | 53.3% | 28.2% | 25.5% | 23.3% | *19.5%* | *23.5%* | Income Tax Rate | *24.0%* |
| | | | | | | - - | 6.2% | 5.1% | - - | - - | - - | - - | - - | 5.1% | 4.0% | *4.5%* | *5.0%* | AFUDC % to Net Profit | *5.0%* |
| | | | | | | 55.7% | 53.9% | 52.4% | 52.4% | 53.7% | 52.4% | 54.7% | 56.3% | 58.5% | 59.1% | *59.0%* | *61.5%* | Long-Term Debt Ratio | *61.0%* |
| | | | | | | 44.2% | 46.1% | 47.6% | 47.4% | 46.2% | 47.5% | 45.3% | 43.6% | 41.4% | 40.9% | *41.0%* | *39.5%* | Common Equity Ratio | *39.0%* |
| | | | | | | 9580.3 | 9635.5 | 9940.7 | 10364 | 10911 | 10967 | 11875 | 13433 | 14760 | 15787 | *16900* | *18700* | Total Capital ($mill) | *20000* |
| | | | | | | 11021 | 11739 | 12391 | 12900 | 13933 | 14992 | 16246 | 17409 | 18232 | 19710 | *20750* | *22150* | Net Plant ($mill) | *24500* |
| | | | | | | 4.8% | 5.4% | 5.1% | 5.5% | 5.7% | 5.6% | 4.9% | 5.4% | 5.4% | 5.7% | *5.5%* | *5.5%* | Return on Total Cap'l | *6.0%* |
| | | | | | | 7.2% | 8.4% | 7.8% | 8.7% | 9.4% | 9.0% | 7.9% | 9.7% | 10.1% | 11.0% | *11.0%* | *11.5%* | Return on Shr. Equity | *11.0%* |
| | | | | | | 7.2% | 8.4% | 7.8% | 8.7% | 9.4% | 9.0% | 7.9% | 9.7% | 10.1% | 11.0% | *11.0%* | *11.5%* | Return on Com Equity | *11.0%* |
| | | | | | | 3.5% | 3.6% | 4.7% | 4.3% | 4.7% | 4.0% | 2.5% | 4.2% | 4.4% | 5.0% | *5.0%* | *5.5%* | Retained to Com Eq | *4.5%* |
| | | | | | | 52% | 57% | 40% | 50% | 50% | 56% | 68% | 56% | 57% | 55% | *56%* | *56%* | All Div'ds to Net Prof | *56%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $10998 mil. **Due in 5 Yrs** $2867 mil.
**LT Debt** $10343 mil. **LT Interest** $384 mil. (61% of Cap'l)

**Leases, Uncapitalized:** Annual rentals $13.0 mill.
**Pension Assets 12/20** $1990.0 mill
**Oblig.** $2386.0 mill.
**Pfd Stock** $3.0 mill. **Pfd Div'd** $.2 mill

**Common Stock** 181,495,720 shares
**as of 7/27/21**

**MARKET CAP: $31.0 billion (Large Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 91 | 576 | 104 |
| Accts Receivable | 294 | 321 | 311 |
| Other | 900 | 1009 | 1155 |
| Current Assets | 1285 | 1906 | 1570 |
| Accts Payable | 203 | 189 | 146 |
| Debt Due | 814 | 1611 | 655 |
| Other | 1028 | 1081 | 909 |
| Current Liab. | 2045 | 2881 | 1710 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 3.5% | *4.5%* |
| "Cash Flow" | 8.0% | 7.0% | *6.5%* |
| Earnings | 10.5% | 8.0% | *8.5%* |
| Dividends | 11.0% | 11.5% | *8.5%* |
| Book Value | 3.5% | 4.5% | *5.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 761 | 853 | 976 | 850 | 3440 |
| 2019 | 813 | 882 | 1013 | 902 | 3610 |
| 2020 | 844 | 931 | 1079 | 923 | 3777 |
| 2021 | 888 | 999 | *1160* | *975* | *4025* |
| 2022 | *935* | *1055* | *1200* | *1050* | *4240* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .59 | .91 | 1.03 | .62 | 3.15 |
| 2019 | .62 | .94 | 1.33 | .54 | 3.43 |
| 2020 | .68 | .97 | 1.46 | .80 | 3.91 |
| 2021 | .73 | 1.14 | *1.53* | *.85* | *4.25* |
| 2022 | *.80* | *1.15* | *1.70* | *.95* | *4.60* |

| Calendar | QUARTERLY DIVIDENDS PAID B■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .375 | .415 | .415 | .415 | 1.62 |
| 2018 | .415 | .455 | .455 | .455 | 1.78 |
| 2019 | .455 | .50 | .50 | .50 | 1.96 |
| 2020 | .50 | .55 | .55 | .55 | 2.15 |
| 2021 | .55 | .6025 | .6025 | | |

**BUSINESS:** American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 15 million people in 46 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 86% of 2020 revenues. New Jersey is its largest market accounting for 24.5% of regulated revenues; Pennsylvania, 22.5%; Missouri, 10.6%. Has 6,800 employees. The Vanguard Grp, owns 11.7% of outstanding shares; BlackRock, Inc., 8.1%; officers & directors, less than 1.0%. (3/21 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

**American Water Works' earning prospects are among the best in the water utility industry.** The company got off to a strong start in 2021, as share earnings were up 13% in the first half. For the full year, our share-net estimate remains at $4.25, which would represent a 9% gain over 2020's record showing. We think this will be followed in 2022 by an 8% increase to $4.60 a share. What's more, the bottom line ought to grow 7%-10% through mid-decade.

**The company's strategy is very straightforward.** By far, it is the largest publicly traded water utility in the United States. Thus, it has the financial wherewithal and widespread distribution to better take advantage of a very inefficient fractured industry. American Water is able to buy a number of small municipally owned water districts each year and absorb them into its operations. Moreover, because there are such redundancies in this group, substantial cost savings are able to be realized. American is also able to expand its plant base, upon which is earns a return.

**The building budget is massive.** The country's water pipelines, valves, and treatment plants are outdated and in urgent need of replacement and repair. With it sprawling operations, American Water plans on spending almost $2 billion this year alone. The level of annual outlays ought to remain elevated, as the company believes that once this decade is completed, its capital expenditures budget will have been between $22 billion-$25 billion.

**Regulatory treatment remains a key factor in the company's performance.** As a regulated utility, American Water and its subsidiaries must file rate cases in the states where they operate. In the past, most authorities have had a constructive relationship with water companies because there is general agreement that underinvestment in the past was the reason for the poor state of the country's water infrastructure. Should the relationship become more adversarial, earnings growth would be hurt.

**These shares do not stand out at this juncture.** In addition to a 3 (Average) Timeliness rank, AWK's long-term total return potential is subpar.

*James A. Flood* *October 8, 2021*

**(A)** Diluted earnings. Excludes nonrecur. losses: '08, $4.62; '09, $2.63; '11, $0.07. Disc. oper.: '06, ($0.04); '11, $0.03; '12, ($0.10); '13,($0.01). GAAP used as of 2014. Next earnings report due early November. **(B)** Dividends paid in March, June, September, and December. ■ Div. reinvestment available. **(C)** In millions. **(D)** Includes intangibles. On 6/30/21: $1.561 billion, $8.60/share. **(E)** Pro forma numbers for '06 & '07.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 100 |
| Earnings Predictability | 90 |

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# CALIFORNIA WATER NYSE-CWT

RECENT PRICE **58.99** | P/E RATIO **26.7** (Trailing: 20.1 Median: 24.0) | RELATIVE P/E RATIO **1.41** | DIV'D YLD **1.6%** | **VALUE LINE**

**TIMELINESS** 2 Raised 10/1/21
**SAFETY** 3 Lowered 7/27/07
TECHNICAL 2 Raised 9/24/21
**BETA** .70 (1.00 = Market)

**18-Month Target Price Range**

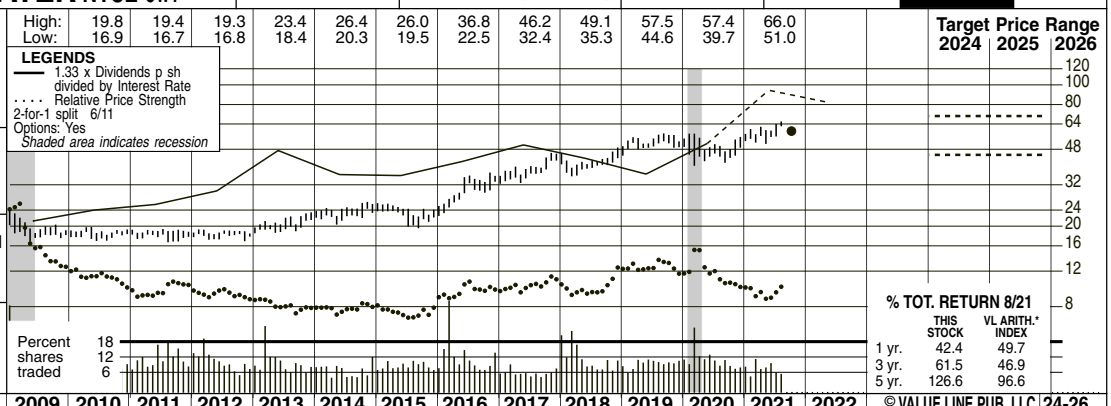
| Low-High | Midpoint (% to Mid) |
|---|---|
| $49-$81 | $65 (10%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 70 | (+20%) | 6% |
| Low | 45 | (-25%) | -4% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 122 | 112 | 113 |
| to Sell | 91 | 104 | 99 |
| Hld's(000) | 37534 | 38005 | 39103 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.72 | 8.10 | 8.88 | 9.90 | 10.82 | 11.05 | 12.00 | 13.34 | 12.23 | 12.50 | 12.29 | 12.70 | 13.89 | 14.53 | 14.72 | 15.78 | ***15.85*** | ***16.35*** | Revenues per sh | ***16.70*** |
| 1.52 | 1.36 | 1.56 | 1.86 | 1.93 | 1.93 | 2.07 | 2.32 | 2.21 | 2.47 | 2.22 | 2.34 | 3.00 | 3.11 | 3.14 | 3.88 | ***3.60*** | ***3.75*** | "Cash Flow" per sh | ***3.85*** |
| .74 | .67 | .75 | .95 | .98 | .91 | .86 | 1.02 | 1.02 | 1.19 | .94 | 1.01 | 1.40 | 1.36 | 1.31 | 1.97 | ***2.05*** | ***2.20*** | Earnings per sh [A] | ***2.35*** |
| .57 | .58 | .58 | .59 | .59 | .60 | .62 | .63 | .64 | .65 | .67 | .69 | .72 | .75 | .79 | .85 | ***.92*** | ***.98*** | Div'd Decl'd per sh [B] ■ | ***1.15*** |
| 2.01 | 2.14 | 1.84 | 2.41 | 2.66 | 2.97 | 2.83 | 3.04 | 2.58 | 2.76 | 3.69 | 4.77 | 5.40 | 5.65 | 5.64 | 5.93 | ***5.25*** | ***5.50*** | Cap'l Spending per sh | ***5.85*** |
| 7.90 | 9.07 | 9.25 | 9.72 | 10.13 | 10.45 | 10.76 | 11.28 | 12.54 | 13.11 | 13.41 | 13.75 | 14.44 | 15.19 | 16.07 | 18.30 | ***19.90*** | ***19.70*** | Book Value per sh [C] | ***20.30*** |
| 36.78 | 41.31 | 41.33 | 41.45 | 41.53 | 41.67 | 41.82 | 41.98 | 47.74 | 47.81 | 47.88 | 47.97 | 48.01 | 48.07 | 48.53 | 50.33 | ***51.50*** | ***52.00*** | Common Shs Outst'g [D] | ***53.00*** |
| 24.9 | 29.2 | 26.1 | 19.8 | 19.7 | 20.3 | 21.3 | 17.9 | 20.1 | 19.7 | 24.8 | 29.6 | 26.9 | 30.3 | 39.3 | 24.9 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | ***24.0*** |
| 1.33 | 1.58 | 1.39 | 1.19 | 1.31 | 1.29 | 1.34 | 1.14 | 1.13 | 1.04 | 1.25 | 1.55 | 1.35 | 1.64 | 2.09 | 1.29 | | | Relative P/E Ratio | ***1.30*** |
| 3.1% | 2.9% | 3.0% | 3.1% | 3.1% | 3.2% | 3.4% | 3.5% | 3.1% | 2.8% | 2.9% | 2.3% | 1.9% | 1.8% | 1.5% | 1.7% | | | Avg Ann'l Div'd Yield | ***2.0%*** |
| 501.8 | 560.0 | 584.1 | 597.5 | 588.4 | 609.4 | 666.9 | 698.2 | 714.6 | 794.3 | ***815*** | ***850*** | Revenues ($mill) [E] | ***885*** |
| 36.1 | 42.6 | 47.3 | 56.7 | 45.0 | 48.7 | 67.2 | 65.6 | 63.1 | 96.8 | ***105*** | ***115*** | Net Profit ($mill) | ***124*** |
| 40.5% | 37.5% | 30.3% | 33.0% | 36.0% | 35.5% | 30.1% | 24.5% | 19.1% | 11.1% | ***21.0%*** | ***21.0%*** | Income Tax Rate | ***21.0%*** |
| 7.6% | 8.0% | 4.3% | 2.7% | 4.3% | 6.1% | 3.5% | 3.1% | 5.8% | 3.3% | ***5.0%*** | ***5.0%*** | AFUDC % to Net Profit | ***5.0%*** |
| 51.7% | 47.8% | 41.6% | 40.1% | 44.4% | 44.6% | 42.7% | 49.3% | 50.2% | 45.9% | ***49.5%*** | ***45.5%*** | Long-Term Debt Ratio | ***41.0%*** |
| 48.3% | 52.2% | 58.4% | 59.9% | 55.6% | 55.4% | 57.3% | 50.7% | 49.8% | 54.1% | ***50.5%*** | ***54.5%*** | Common Equity Ratio | ***59.0%*** |
| 931.5 | 908.2 | 1024.9 | 1045.9 | 1154.4 | 1191.2 | 1209.3 | 1440.2 | 1566.7 | 1702.4 | ***2025*** | ***1875*** | Total Capital ($mill) | ***1825*** |
| 1381.1 | 1457.1 | 1515.8 | 1590.4 | 1701.8 | 1859.3 | 2048.0 | 2232.7 | 2406.4 | 2650.6 | ***2775*** | ***2800*** | Net Plant ($mill) | ***2925*** |
| 5.5% | 6.3% | 6.0% | 6.3% | 5.2% | 5.5% | 7.1% | 5.9% | 5.5% | 7.0% | ***6.0%*** | ***7.0%*** | Return on Total Cap'l | ***7.5%*** |
| 8.0% | 9.0% | 7.9% | 9.1% | 7.0% | 7.4% | 9.7% | 9.0% | 8.1% | 10.5% | ***10.5%*** | ***11.0%*** | Return on Shr. Equity | ***11.5%*** |
| 8.0% | 9.0% | 7.9% | 9.1% | 7.0% | 7.4% | 9.7% | 9.0% | 8.1% | 10.5% | ***10.5%*** | ***11.0%*** | Return on Com Equity | ***11.5%*** |
| 2.3% | 3.4% | 3.4% | 4.1% | 2.0% | 2.4% | 4.7% | 4.0% | 3.2% | 6.0% | ***5.5%*** | ***6.0%*** | Retained to Com Eq | ***6.0%*** |
| 71% | 62% | 56% | 55% | 71% | 68% | 51% | 55% | 60% | 43% | ***45%*** | ***45%*** | All Div'ds to Net Prof | ***49%*** |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $1210.1 mill. **Due in 5 Yrs** $357.0 mill.
**LT Debt** $1059.9 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 6.2x) (51% of Cap'l)

**Pension Assets-12/20** $716.8 mill.
**Oblig.** $833.9 mill.

**Pfd Stock** None

**Common Stock** 51,535,000 shs.

**MARKET CAP: $3.0 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 42.7 | 44.6 | 66.5 |
| Other | 142.0 | 221.4 | 239.1 |
| Current Assets | 184.7 | 266.0 | 305.6 |
| Accts Payable | 108.5 | 131.7 | 133.0 |
| Debt Due | 197.0 | 375.1 | 150.2 |
| Other | 53.2 | 81.9 | 79.2 |
| Current Liab. | 358.7 | 588.7 | 362.4 |

**BUSINESS:** California Water Service Group provides regulated and nonregulated water service to 492,600 customers in 100 communities in the state of California. Accounts for about 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '20: residential, 70%; business, 18%; industrial, 4%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/21 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki. Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.5% | 4.0% | *2.0%* |
| "Cash Flow" | 6.0% | 8.0% | *2.0%* |
| Earnings | 5.0% | 8.0% | *7.0%* |
| Dividends | 3.0% | 4.0% | *6.5%* |
| Book Value | 5.0% | 5.0% | *3.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.)[E] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 134.6 | 174.9 | 221.3 | 167.4 | 698.2 |
| 2019 | 126.1 | 179.0 | 232.6 | 176.9 | 714.6 |
| 2020 | 125.6 | 175.5 | 304.1 | 189.1 | 794.3 |
| 2021 | 147.7 | 213.1 | ***250*** | ***204.2*** | ***815*** |
| 2022 | ***160*** | ***220*** | ***260*** | ***210*** | ***850*** |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | d.02 | .31 | .75 | .32 | 1.36 |
| 2019 | d.16 | .35 | .88 | .24 | 1.31 |
| 2020 | d.42 | .11 | 1.94 | .31 | 1.97 |
| 2021 | d.06 | .75 | ***.95*** | ***.41*** | ***2.05*** |
| 2022 | ***.10*** | ***.65*** | ***1.00*** | ***.45*** | ***2.20*** |

| Calendar | QUARTERLY DIVIDENDS PAID [B] ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .18 | .18 | .18 | .18 | .72 |
| 2018 | .1875 | .1875 | .1875 | .1875 | .75 |
| 2019 | .1975 | .1975 | .1975 | .1975 | .79 |
| 2020 | .2125 | .2125 | .2125 | .2125 | .85 |
| 2021 | .230 | .230 | .230 | | |

**California Water's second-quarter results markedly exceeded expectations.** The stronger-than-anticipated showing can be largely attributed to the company's December, 2020 general rate case approval (as noted in our previous report). Specifically, cumulative rate increases and the continuation of various regulatory benefits helped bolster California Water's June-period operating results. Revenues of $213 million improved 21% year over year, easily outpacing our $200 million projection. Likewise, earnings of $0.75 per share smashed consensus estimates, jumping more than six times the previous-year tally. Positives from the abovementioned rate case vastly outweighed a modest uptick in administrative expenses. All told, we are adding $15 million and $0.35 to our current-year top- and bottom-line estimates, to $815 million and $2.05 per share, respectively.

**The West Coast utility recently received the nod to acquire the water and wastewater systems of Preserve community in Millerton.** The planned community consists of 1,400 mixed-use units, including residential, commercial, parks, and offices. California Water will begin operating and servicing the community upon official occupancy, which is slated for early next year.

**Business prospects are bright 3- to 5-years out.** First, economic conditions are apt to improve over the coming years, which ought to support residential and commercial water consumption. Second, the ball has just started rolling on the company's strategic capital investment initiatives (service pipeline and wastewater treatment facility upgrades). To this point, further rate case filings are likely to follow, suggesting higher rates for customers will eventually be on tap as well.

**Momentum investors are best suited here, at the moment.** California Water is favorably ranked (Timeliness: 2) for relative year-ahead price performance. But at the recent quotation, the stock does not particularly stand out for the pull to mid-decade, as total return potential is below the *Value Line* median. In sum, patient subscribers looking to add a noncyclical utility to their portfolios should probably turn the page, for now.

*Nicholas P. Patrikis* *October 8, 2021*

**(A)** Basic EPS. Excl. nonrecurring gain (loss): '11, 4¢. Next earnings report due early Nov.
**(B)** Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
**(C)** Incl. intangible assets. In '20 : $27.6 mill., $0.55/sh.
**(D)** In millions, adjusted for split.
**(E)** Excludes non-regulated revenues

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 95 |
| Price Growth Persistence | 70 |
| Earnings Predictability | 60 |

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# ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE 46.48 | P/E RATIO 28.2 (Trailing: 28.0 Median: 23.0) | RELATIVE P/E RATIO 1.49 | DIV'D YLD 2.3% | VALUE LINE

**TIMELINESS** 3 Lowered 7/30/21
**SAFETY** 3 Lowered 1/8/21
TECHNICAL 3 Raised 9/3/21
**BETA** 1.00 (1.00 = Market)

**18-Month Target Price Range**

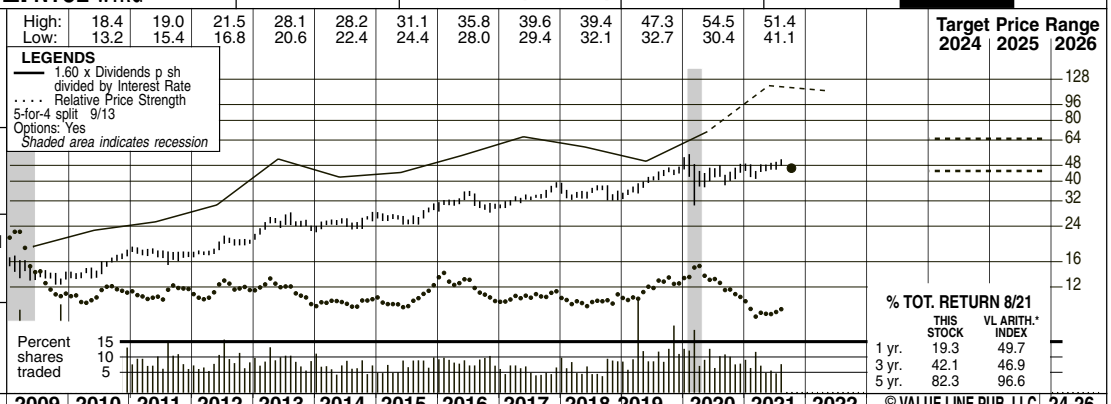
| Low-High | Midpoint (% to Mid) |
|---|---|
| $37-$87 | $62 (35%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+40%) | *11%* |
| Low | 45 | (-5%) | *2%* |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 264 | 258 | 244 |
| to Sell | 221 | 238 | 231 |
| Hld's(000) | 169334 | 176001 | 171680 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.08 | 3.23 | 3.61 | 3.71 | 3.93 | 4.21 | 4.10 | 4.32 | 4.32 | 4.37 | 4.61 | 4.62 | 4.56 | 4.71 | 4.03 | 5.96 | *7.45* | *8.00* | Revenues per sh | *8.70* |
| .97 | 1.01 | 1.10 | 1.14 | 1.29 | 1.42 | 1.45 | 1.51 | 1.82 | 1.89 | 1.87 | 2.07 | 2.12 | 1.90 | 1.73 | 2.21 | *2.55* | *2.80* | "Cash Flow" per sh | *3.05* |
| .57 | .56 | .57 | .58 | .62 | .72 | .83 | .87 | 1.16 | 1.20 | 1.14 | 1.32 | 1.35 | 1.08 | 1.04 | 1.12 | *1.70* | *1.80* | Earnings per sh A | *2.00* |
| .32 | .35 | .38 | .41 | .44 | .47 | .50 | .54 | .58 | .63 | .69 | .74 | .79 | .85 | .91 | .97 | *1.04* | *1.12* | Div'd Decl'd per sh B■ | *1.40* |
| 1.47 | 1.64 | 1.43 | 1.58 | 1.66 | 1.89 | 1.90 | 1.98 | 1.73 | 1.84 | 2.07 | 2.16 | 2.69 | 2.78 | 2.49 | 3.41 | *4.00* | *4.00* | Cap'l Spending per sh | *3.75* |
| 5.04 | 5.57 | 5.85 | 6.26 | 6.50 | 6.81 | 7.21 | 7.90 | 8.63 | 9.27 | 9.78 | 10.43 | 11.02 | 11.28 | 17.58 | 19.09 | *20.90* | *21.80* | Book Value per sh | *24.15* |
| 161.21 | 165.41 | 166.75 | 169.21 | 170.61 | 172.46 | 173.60 | 175.43 | 177.93 | 178.59 | 176.54 | 177.39 | 177.71 | 178.09 | 220.76 | 245.39 | *253.00* | *254.50* | Common Shs Outst'g C | *270.00* |
| 31.8 | 34.7 | 32.0 | 24.9 | 23.1 | 21.1 | 21.3 | 21.9 | 21.2 | 20.8 | 23.5 | 23.9 | 24.7 | 32.6 | 39.1 | 39.6 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *27.0* |
| 1.69 | 1.87 | 1.70 | 1.50 | 1.54 | 1.34 | 1.34 | 1.39 | 1.19 | 1.09 | 1.18 | 1.25 | 1.24 | 1.76 | 2.08 | 2.06 | | | Relative P/E Ratio | *1.50* |
| 1.8% | 1.8% | 2.1% | 2.8% | 3.1% | 3.1% | 2.8% | 2.8% | 2.4% | 2.5% | 2.6% | 2.3% | 2.4% | 2.4% | 2.2% | 2.2% | | | Avg Ann'l Div'd Yield | *2.8%* |
| 712.0 | 757.8 | 768.6 | 779.9 | 814.2 | 819.9 | 809.5 | 838.1 | 889.7 | 1462.7 | *1890* | *2040* | Revenues ($mill) | *2350* | | | | | | |
| 144.8 | 153.1 | 205.0 | 213.9 | 201.8 | 234.2 | 239.7 | 192.0 | 224.5 | 284.8 | *420* | *455* | Net Profit ($mill) | *540* | | | | | | |
| 32.9% | 39.0% | 10.0% | 10.5% | 6.9% | 8.2% | 6.6% | - - | 6.6% | 6.6% | *5.0%* | *6.0%* | Income Tax Rate | *7.0%* | | | | | | |
| - - | - - | 1.1% | 2.4% | 3.1% | 3.8% | 6.3% | 6.8% | 7.2% | 4.5% | *7.0%* | *7.5%* | AFUDC % to Net Profit | *6.0%* | | | | | | |
| 52.7% | 52.7% | 48.9% | 48.5% | 50.3% | 48.4% | 50.6% | 54.4% | 43.1% | 54.0% | *54.0%* | *56.0%* | Long-Term Debt Ratio | *55.0%* | | | | | | |
| 47.3% | 47.3% | 51.1% | 51.5% | 49.7% | 51.6% | 49.4% | 45.6% | 56.9% | 46.0% | *46.0%* | *44.0%* | Common Equity Ratio | *45.0%* | | | | | | |
| 2646.8 | 2929.7 | 3003.6 | 3216.0 | 3469.5 | 3587.7 | 3965.4 | 4407.8 | 6824.2 | 10192 | *11325* | *12400* | Total Capital ($mill) | *14500* | | | | | | |
| 3612.9 | 3936.2 | 4167.3 | 4402.0 | 4688.9 | 5001.6 | 5399.9 | 5930.3 | 6345.8 | 9512.9 | *10175* | *10875* | Net Plant ($mill) | *12300* | | | | | | |
| 6.9% | 6.6% | 8.0% | 7.8% | 6.9% | 7.6% | 7.1% | 5.5% | 4.2% | 3.7% | *4.5%* | *5.0%* | Return on Total Cap'l | *5.5%* | | | | | | |
| 11.6% | 11.0% | 13.4% | 12.9% | 11.7% | 12.7% | 12.2% | 9.6% | 5.8% | 6.1% | *8.0%* | *8.5%* | Return on Shr. Equity | *8.5%* | | | | | | |
| 11.6% | 11.0% | 13.4% | 12.9% | 11.7% | 12.7% | 12.2% | 9.6% | 5.8% | 6.1% | *8.0%* | *8.5%* | Return on Com Equity | *8.5%* | | | | | | |
| 4.6% | 4.3% | 6.7% | 6.1% | 4.7% | 5.6% | 5.1% | 2.1% | .9% | 1.1% | *3.0%* | *3.0%* | Retained to Com Eq | *3.0%* | | | | | | |
| 60% | 61% | 50% | 52% | 60% | 56% | 59% | 79% | 84% | 82% | *63%* | *62%* | All Div'ds to Net Prof | *70%* | | | | | | |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $5799.7 mill. **Due in 5 Yrs** $1102 mill.
**LT Debt** $5648.2 mill. **LT Interest** $203.0 mill.
(42% of Cap'l)

**Pension Assets-12/20** $426.8 mill.
**Oblig.** $486.2 mill.

**Pfd Stock** None
**Common Stock** 245,757,399 shares
**as of 7/23/21**

**MARKET CAP: $11.4 billion (Large Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 1868.9 | 4.8 | 8.4 |
| Receivables | 67.1 | 154.8 | 129.2 |
| Inventory (AvgCst) | 18.4 | 58.4 | 63.4 |
| Other | 58.3 | 162.2 | 103.7 |
| Current Assets | 2012.7 | 380.2 | 304.7 |
| Accts Payable | 74.9 | 177.5 | 131.8 |
| Debt Due | 130.8 | 162.6 | 151.5 |
| Other | 113.1 | 263.8 | 185.9 |
| Current Liab. | 318.8 | 603.9 | 469.2 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.0% | 2.0% | *10.0%* |
| "Cash Flow" | 4.5% | 1.0% | *6.5%* |
| Earnings | 5.5% | -1.5% | *10.0%* |
| Dividends | 7.5% | 7.5% | *7.5%* |
| Book Value | 9.5% | 11.5% | *6.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 194.3 | 211.9 | 226.2 | 205.7 | 838.1 |
| 2019 | 201.1 | 218.9 | 243.6 | 226.1 | 889.7 |
| 2020 | 255.6 | 384.5 | 348.6 | 474.0 | 1462.7 |
| 2021 | 583.6 | 397.0 | *389.4* | *520* | *1890* |
| 2022 | *600* | *435* | *435* | *570* | *2040* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .29 | .37 | .44 | d.02 | 1.08 |
| 2019 | .09 | .25 | .38 | .28 | 1.04 |
| 2020 | .21 | .29 | .22 | .40 | 1.12 |
| 2021 | .72 | .32 | *.23* | *.43* | *1.70* |
| 2022 | *.67* | *.33* | *.35* | *.45* | *1.80* |

| Calendar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .1913 | .1913 | .2047 | .2047 | .79 |
| 2018 | .2047 | .2047 | .219 | .219 | .85 |
| 2019 | .219 | .219 | .2343 | .2343 | .91 |
| 2020 | .2343 | .2343 | .2507 | .2507 | .97 |
| 2021 | .2507 | .2507 | .2682 | | |

**BUSINESS:** Essential Utilities, Inc. became the new name for Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples, a natural gas utility, which occurred in 3/20. In 2020, Aqua Amer. provided water and wastewater services to about 5 million people in PA, OH, TX, IL, NC, NJ, IN, VA NS WS. Employed 3,180 Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water respn. for 65% of revenues in 2020; residential, 39%; commercial, 10%; industrial, wastewater & other, 16%. Gas 35%. Off. & dir. own less than 1% of the common stock; Vanguard, 10.1%; BlackRock, 10.0%; Canadian Pension Plan about 8.8% (5/21 proxy). Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 W Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

**Shares of Essential Water have not performed well of late.** Since our July report, the price of the stock is up less than 1%. This compares unfavorably to the equities of other water utilities and the S&P 500 Index. Indeed, WTRG has trailed all but one equity in the group.

**A major rate case has been filed in Pennsylvania.** In late August, the company petitioned state regulators to recover the $1.1 billion (an average of $2,235 per customer), it has invested since its last filing. These funds were spent on replacing more than 400 miles of pipes and upgrading treatment plants. Historically, the regulatory commission has reached constructive decisions, as it's a recognized fact that like most other members in the industry, Essential's water infrastructure is badly in need of repair. If the full request is permitted, the average residential monthly bill would rise from $55.51 to $73.95. So, even though previous rulings have been positive, regulatory commissions are under pressure to keep rates low. Due to the necessity of these outlays, and knowing that the company must continue making large expenditures, we think state authorities will be fair.

**Second-quarter earnings were better than expected.** The June period was the first three-month income report in which Essential's numbers could be compared on an apple-to-apple basis to the previous year. (Recall that the company is the result of a large acquisition of the natural gas utility Peoples in mid-March of 2020.) Share net of $0.32 was 23% higher than we had forecast. This came despite weak demand for gas resulting from warmer-than-anticipated temperatures. We now expect the company to post earnings per share of $1.70, slightly above management's $1.64 to $1.69 range. In 2022, a more moderate advance of about 6% seems to be in the cards.

**This neutrally ranked stock does not stand out for near- or long-term total return potential.** However, its prospects are still better than most in the industry, and its dividend was recently raised a healthy 7%. Investors should also bear in mind that WTRG is no longer a pure water utility play, as its gas operations are now substantial.

*James A. Flood* *October 8, 2021*

**(A)** Diluted egs. Excl. nonrec. gains: '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. Quarterly EPS do not add in '19 due to a large change in the number of shares outstanding in the Dec. period. Next earnings report early November. **(B)** Dividends historically paid in early March, June, Sept., & Dec. ■ Div'd. reinvestment plan available (5% discount). **(C)** In millions, adjusted for stock splits. **(D)** Includes intangibles: 6/30/21, $2.341 bill./$9.53 a share.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 85 |
| Price Growth Persistence | 90 |
| Earnings Predictability | 60 |

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# MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 104.47 | P/E RATIO 43.9 (Trailing: 47.5 Median: 23.0) | RELATIVE P/E RATIO 2.32 | DIV'D YLD 1.1% | VALUE LINE

TIMELINESS 3 Lowered 6/4/21
SAFETY 2 New 10/21/11
TECHNICAL 3 Raised 10/1/21
BETA .70 (1.00 = Market)

**18-Month Target Price Range**

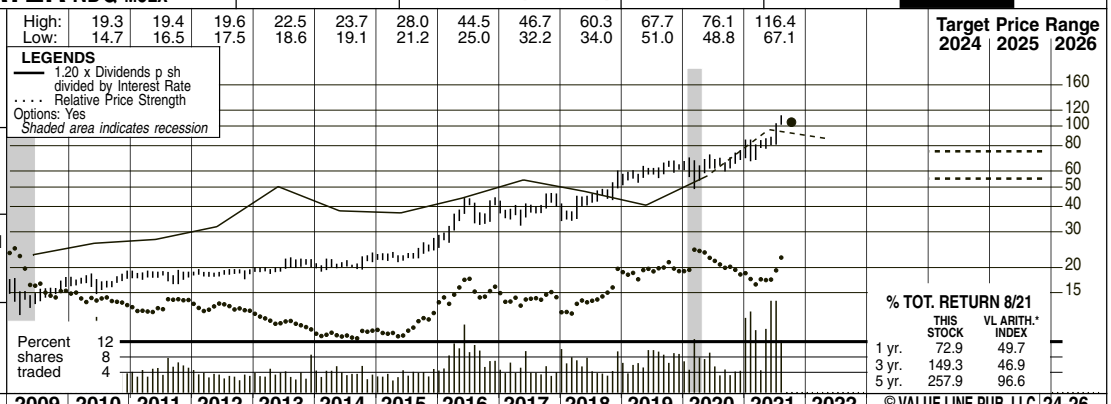
| Low-High | Midpoint (% to Mid) |
|---|---|
| $65-$132 | $99 (-5%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 75 | (-30%) | -6% |
| Low | 55 | (-45%) | -13% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 67 | 64 | 71 |
| to Sell | 49 | 67 | 65 |
| Hld's(000) | 10675 | 10712 | 10852 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.44 | 6.16 | 6.50 | 6.79 | 6.75 | 6.60 | 6.50 | 6.98 | 7.19 | 7.26 | 7.77 | 8.16 | 8.00 | 8.42 | 7.72 | 8.10 | *8.45* | *8.70* | Revenues per sh | *9.15* |
| 1.33 | 1.33 | 1.49 | 1.53 | 1.40 | 1.55 | 1.46 | 1.56 | 1.72 | 1.84 | 1.97 | 2.17 | 2.24 | 2.89 | 2.90 | 3.25 | *3.20* | *3.35* | "Cash Flow" per sh | *3.75* |
| .71 | .82 | .87 | .89 | .72 | .96 | .84 | .90 | 1.03 | 1.13 | 1.22 | 1.38 | 1.38 | 1.96 | 2.01 | 2.18 | *2.30* | *2.40* | Earnings per sh [A] | *2.75* |
| .67 | .68 | .69 | .70 | .71 | .72 | .73 | .74 | .75 | .76 | .78 | .81 | .86 | .91 | .98 | 1.04 | *1.10* | *1.15* | Div'd Decl'd per sh [B]■ | *1.35* |
| 2.18 | 2.31 | 1.66 | 2.12 | 1.49 | 1.90 | 1.50 | 1.36 | 1.26 | 1.40 | 1.59 | 2.91 | 3.08 | 4.40 | 5.11 | 6.04 | *5.50* | *5.50* | Cap'l Spending per sh | *6.25* |
| 8.26 | 9.52 | 10.05 | 10.03 | 10.33 | 11.13 | 11.27 | 11.48 | 11.82 | 12.24 | 12.74 | 13.40 | 14.02 | 15.17 | 18.81 | 19.81 | *19.45* | *19.60* | Book Value per sh | *20.85* |
| 11.58 | 13.17 | 13.25 | 13.40 | 13.52 | 15.57 | 15.70 | 15.82 | 15.96 | 16.12 | 16.23 | 16.30 | 16.35 | 16.40 | 17.43 | 17.47 | *17.75* | *17.85* | Common Shs Outst'g [C] | *18.00* |
| 27.4 | 22.7 | 21.6 | 19.8 | 21.0 | 17.8 | 21.7 | 20.8 | 19.7 | 18.5 | 19.1 | 25.6 | 28.4 | 22.2 | 29.7 | 30.1 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *24.0* |
| 1.46 | 1.23 | 1.15 | 1.19 | 1.40 | 1.13 | 1.36 | 1.32 | 1.11 | .97 | .96 | 1.34 | 1.43 | 1.20 | 1.58 | 1.56 | | | Relative P/E Ratio | *1.30* |
| 3.5% | 3.7% | 3.7% | 4.0% | 4.7% | 4.2% | 4.0% | 4.0% | 3.7% | 3.7% | 3.3% | 2.3% | 2.2% | 2.1% | 1.6% | 1.6% | | | Avg Ann'l Div'd Yield | *2.1%* |
| 102.1 | 110.4 | 114.8 | 117.1 | 126.0 | 132.9 | 130.8 | 138.1 | 134.6 | 141.6 | *150* | *155* | Revenues ($mill) | *165* |
| 13.4 | 14.4 | 16.6 | 18.4 | 20.0 | 22.7 | 22.8 | 32.5 | 33.9 | 38.4 | *41.0* | *43.0* | Net Profit ($mill) | *49.5* |
| 32.7% | 33.9% | 34.1% | 35.0% | 34.5% | 34.0% | 32.7% | 2.8% | 2.8% | 2.8% | *21.0%* | *21.0%* | Income Tax Rate | *21.0%* |
| 6.1% | 3.4% | 1.9% | 1.7% | 1.9% | 2.7% | 3.1% | 1.4% | 3.4% | 3.9% | *2.5%* | *2.5%* | AFUDC % to Net Profit | *2.5%* |
| 42.3% | 41.5% | 40.4% | 40.5% | 39.4% | 37.9% | 37.5% | 37.8% | 41.5% | 44.0% | *42.5%* | *41.5%* | Long-Term Debt Ratio | *40.0%* |
| 56.6% | 57.4% | 58.7% | 58.8% | 59.8% | 61.5% | 61.8% | 61.6% | 58.2% | 55.7% | *57.0%* | *58.0%* | Common Equity Ratio | *60.0%* |
| 312.5 | 316.5 | 321.4 | 335.8 | 345.4 | 355.4 | 370.7 | 404.1 | 556.7 | 621.5 | *610* | *600* | Total Capital ($mill) | *630* |
| 422.2 | 435.2 | 446.5 | 465.4 | 481.9 | 517.8 | 557.2 | 618.5 | 705.7 | 796.6 | *800* | *815* | Net Plant ($mill) | *835* |
| 5.2% | 5.4% | 5.9% | 6.3% | 6.6% | 7.1% | 6.9% | 8.9% | 6.7% | 6.8% | *7.0%* | *7.5%* | Return on Total Cap'l | *8.5%* |
| 7.5% | 7.8% | 8.7% | 9.2% | 9.6% | 10.3% | 9.8% | 12.9% | 10.4% | 11.0% | *12.0%* | *12.0%* | Return on Shr. Equity | *13.0%* |
| 7.5% | 7.8% | 8.7% | 9.3% | 9.6% | 10.3% | 9.9% | 13.0% | 10.4% | 11.1% | *12.0%* | *12.5%* | Return on Com Equity | *13.0%* |
| 1.0% | 1.4% | 2.4% | 3.1% | 3.5% | 4.3% | 3.8% | 7.0% | 5.4% | 5.8% | *6.0%* | *6.5%* | Retained to Com Eq | *6.5%* |
| 87% | 83% | 73% | 67% | 63% | 58% | 62% | 46% | 48% | 48% | *48%* | *48%* | All Div'ds to Net Prof | *49%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $279.7 mill. **Due in 5 Yrs** $43.7 mill.
**LT Debt** $272.5 mill. **LT Interest** $7.5 mill.
(Total interest coverage: 7.8x)
(44% of Cap'l)

**Pension Assets-12/20** $88.9 mill.
**Oblig.** $115.9 mill.
**Pfd Stock** $2.4 mill. **Pfd Div'd:** $.1 mill.

**Common Stock** 17,490,561 shs.
**as of 7/30/20**

**MARKET CAP: $1.8 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 2.2 | 4.5 | 6.0 |
| Other | 26.9 | 29.6 | 31.2 |
| Current Assets | 29.1 | 34.1 | 37.2 |
| Accts Payable | 23.3 | 30.4 | 23.1 |
| Debt Due | 27.2 | 9.3 | 7.2 |
| Other | 14.5 | 17.1 | 50.4 |
| Current Liab. | 65.0 | 56.8 | 80.7 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.0% | 2.0% | *2.0%* |
| "Cash Flow" | 7.5% | 10.5% | *3.5%* |
| Earnings | 9.0% | 12.5% | *5.0%* |
| Dividends | 3.0% | 5.0% | *5.5%* |
| Book Value | 5.5% | 8.0% | *2.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 31.2 | 34.9 | 38.7 | 33.3 | 138.1 |
| 2019 | 30.7 | 33.4 | 37.8 | 32.7 | 134.6 |
| 2020 | 31.8 | 35.3 | 39.9 | 34.6 | 141.6 |
| 2021 | 32.5 | 36.7 | *43.0* | *37.8* | *150* |
| 2022 | *34.0* | *38.0* | *45.0* | *38.0* | *155* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .27 | .52 | .74 | .43 | 1.96 |
| 2019 | .39 | .49 | .66 | .46 | 2.01 |
| 2020 | .44 | .55 | .72 | .47 | 2.18 |
| 2021 | .39 | .62 | *.75* | *.54* | *2.30* |
| 2022 | *.47* | *.58* | *.80* | *.55* | *2.40* |

| Calendar | QUARTERLY DIVIDENDS PAID [B]■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .21125 | .21125 | .21125 | .22375 | .86 |
| 2018 | .22375 | .22375 | .22375 | .24 | .91 |
| 2019 | .24 | .24 | .24 | .2562 | .98 |
| 2020 | .2562 | .2562 | .2562 | .2725 | 1.04 |
| 2021 | .2725 | .2725 | .2725 | | |

**BUSINESS:** Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2020, the Middlesex System accounted for 59% of operating revenues. At 12/31/20, the company had 348 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 2.0% of the com. stock; BlackRock Inst. Trust Co., 7.8% (4/21 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

**Shares of Middlesex Water established a fresh all-time high price during the month of September.** In fact, since our previous report, the stock has surged more than 20% in value and, year to date, has logged about a 30% gain. Underpinning recent investor support for the water utility, in our view, is a combination of strong second-quarter financial results (discussed below) and a broadly increasing adoption of a flight-to-safety investment approach.

**We are lifting our 2021 bottom-line estimate.** For the June period, Middlesex delivered revenues of $36.7 million, which was roughly on par with consensus expectations. The figure improved about 4% year over year, helped along by higher water consumption and an expanding customer base in its Delaware systems. Meanwhile, net income jumped 13% from the previous-year tally, to $0.62 per share. On balance, we are adding $0.10 to our current-year forecast, to $2.30 per share.

**The company has agreed to an asset divestment.** Specifically, Middlesex inked a deal to sell its wholly-owned wastewater subsidiary Tidewater Environmental Services to Artesian Wastewater Management for $6.4 million in cash. The unit services approximately 3,600 customers in the Delaware area. The transaction, which is slated for completion within the fourth quarter, is subject to approval by the Delaware Public Service Commission and other customary closing conditions.

**Business prospects three to five years out are solid.** Our outlook for modest annual revenue and earnings expansion has not wavered. Middlesex's operations, which are largely uncorrelated to economic conditions, ought to perform decently over the pull to mid-decade.

**We think the recently elevated quotation presents an opportunity for current shareholders to book some profits.** Good-quality Middlesex shares are merely an Average (3) selection for relative year-ahead price performance. Moreover, the stock is trading at an extremely lofty price-to-earnings multiple. Patient subscribers should turn the page, too, as nearly all of the growth we envision out to 2024-2026 appears to already be baked into the recent price.

*Nicholas P. Patrikis* *October 8, 2021*

**(A)** Diluted earnings. Next earnings report due early November.

**(B)** Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.

**(C)** In millions.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 85 |
| Price Growth Persistence | 70 |
| Earnings Predictability | 85 |

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# SJW GROUP NYSE-SJW

RECENT PRICE 65.82 | P/E RATIO 28.7 (Trailing: 30.6 Median: 21.0) | RELATIVE P/E RATIO 1.52 | DIV'D YLD 2.1% | VALUE LINE

TIMELINESS 4 Lowered 8/13/21
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 10/1/21
BETA .80 (1.00 = Market)

**18-Month Target Price Range**

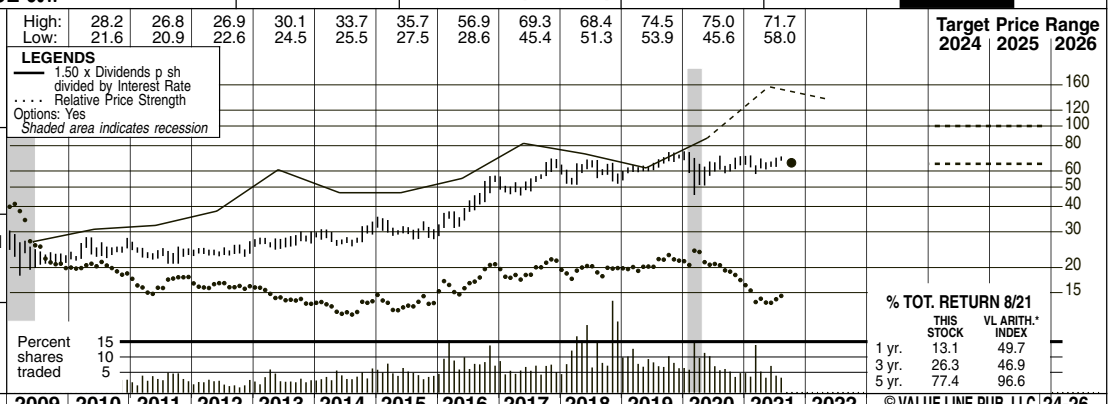
| Low-High | Midpoint (% to Mid) |
|---|---|
| $52-$113 | $83 (25%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 100 | (+50%) | 13% |
| Low | 65 | (Nil) | 2% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 80 | 87 | 81 |
| to Sell | 68 | 73 | 64 |
| Hld's(000) | 19850 | 20963 | 21472 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.86 | 10.35 | 11.25 | 12.12 | 11.68 | 11.62 | 12.85 | 14.01 | 13.73 | 15.76 | 14.97 | 16.61 | 18.97 | 14.00 | 14.78 | 19.77 | *19.65* | *20.50* | Revenues per sh | *22.15* |
| 2.21 | 2.38 | 2.30 | 2.44 | 2.21 | 2.38 | 2.80 | 2.97 | 2.90 | 4.42 | 3.86 | 4.76 | 5.24 | 3.29 | 3.67 | 5.28 | *3.85* | *4.30* | "Cash Flow" per sh | *5.30* |
| 1.12 | 1.19 | 1.04 | 1.08 | .81 | .84 | 1.11 | 1.18 | 1.12 | 2.54 | 1.85 | 2.57 | 2.86 | 1.82 | 1.35 | 2.14 | *2.20* | *2.65* | Earnings per sh [A] | *3.65* |
| .53 | .57 | .61 | .65 | .66 | .68 | .69 | .71 | .73 | .75 | .78 | .81 | 1.04 | 1.12 | 1.20 | 1.28 | *1.36* | *1.44* | Div'd Decl'd per sh [B]■ | *1.72* |
| 2.83 | 3.87 | 6.62 | 3.79 | 3.17 | 5.65 | 3.75 | 5.67 | 4.68 | 5.02 | 5.24 | 6.95 | 7.26 | 5.08 | 6.25 | 7.44 | *6.75* | *7.00* | Cap'l Spending per sh | *7.50* |
| 10.72 | 12.48 | 12.90 | 13.99 | 13.66 | 13.75 | 14.20 | 14.71 | 15.92 | 17.75 | 18.83 | 20.61 | 22.57 | 31.31 | 31.27 | 32.12 | *35.00* | *36.65* | Book Value per sh | *40.85* |
| 18.27 | 18.28 | 18.36 | 18.18 | 18.50 | 18.55 | 18.59 | 18.67 | 20.17 | 20.29 | 20.38 | 20.46 | 20.52 | 28.40 | 28.46 | 28.56 | *30.00* | *30.00* | Common Shs Outst'g [C] | *30.00* |
| 19.7 | 23.5 | 33.4 | 26.2 | 28.7 | 29.1 | 21.2 | 20.4 | 24.3 | 11.2 | 16.6 | 15.7 | 18.8 | 32.7 | 47.8 | 30.0 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *23.0* |
| 1.05 | 1.27 | 1.77 | 1.58 | 1.91 | 1.85 | 1.33 | 1.30 | 1.37 | .59 | .84 | .82 | .95 | 1.77 | 2.55 | 1.56 | | | Relative P/E Ratio | *1.30* |
| 2.4% | 2.0% | 1.7% | 2.3% | 2.8% | 2.8% | 2.9% | 3.0% | 2.7% | 2.6% | 2.5% | 2.0% | 1.9% | 1.9% | 1.9% | 2.0% | | | Avg Ann'l Div'd Yield | *2.1%* |
| 239.0 | 261.5 | 276.9 | 319.7 | 305.1 | 339.7 | 389.2 | 397.7 | 420.5 | 564.5 | *590* | *615* | Revenues ($mill) | *665* |
| 20.9 | 22.3 | 23.5 | 51.8 | 37.9 | 52.8 | 59.2 | 38.8 | 38.7 | 61.5 | *66.0* | *80.0* | Net Profit ($mill) | *110* |
| 41.1% | 41.1% | 38.7% | 32.5% | 38.1% | 38.8% | 36.7% | 20.6% | 25.3% | 12.0% | *21.0%* | *21.5%* | Income Tax Rate | *21.0%* |
| -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.5% | *1.5%* | *1.5%* | AFUDC % to Net Profit | *1.5%* |
| 56.6% | 55.0% | 51.1% | 51.6% | 49.8% | 50.7% | 48.2% | 32.7% | 59.1% | 58.4% | *53.5%* | *51.0%* | Long-Term Debt Ratio | *38.0%* |
| 43.4% | 45.0% | 48.9% | 48.4% | 50.2% | 49.3% | 51.8% | 67.3% | 40.9% | 41.6% | *46.5%* | *49.0%* | Common Equity Ratio | *62.0%* |
| 607.9 | 610.2 | 656.2 | 744.5 | 764.6 | 855.0 | 894.3 | 1320.7 | 2173.6 | 2204.7 | *2250* | *2250* | Total Capital ($mill) | *1975* |
| 756.2 | 831.6 | 898.7 | 963.0 | 1036.8 | 1146.4 | 1239.3 | 1328.8 | 2206.5 | 2334.9 | *2450* | *2565* | Net Plant ($mill) | *2775* |
| 4.9% | 5.0% | 5.0% | 8.3% | 6.3% | 7.4% | 7.9% | 3.9% | 2.5% | 4.0% | *3.5%* | *4.0%* | Return on Total Cap'l | *6.0%* |
| 7.9% | 8.1% | 7.3% | 14.4% | 9.9% | 12.5% | 12.8% | 4.4% | 4.3% | 6.7% | *6.5%* | *7.0%* | Return on Shr. Equity | *9.0%* |
| 7.9% | 8.1% | 7.3% | 14.4% | 9.9% | 12.5% | 12.8% | 4.4% | 4.3% | 6.7% | *6.5%* | *7.0%* | Return on Com Equity | *9.0%* |
| 3.1% | 3.3% | 2.8% | 10.2% | 5.7% | 8.6% | 8.2% | 1.8% | .5% | 2.7% | *2.5%* | *3.5%* | Retained to Com Eq | *4.5%* |
| 61% | 59% | 62% | 29% | 42% | 31% | 36% | 60% | 88% | 59% | *62%* | *54%* | All Div'ds to Net Prof | *47%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $1398.9 mill. **Due in 5 Yrs** $22.4 mill.
**LT Debt** $1372.1 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 4.1x)
(58% of Cap'l)

**Pension Assets-12/20** $278.1 mill.
**Oblig.** $386.1 mill.
**Pfd Stock** None.
**Common Stock** 29,804,927 shs.

**MARKET CAP: $2.0 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 17.9 | 9.3 | 28.1 |
| Accts Receivable | 36.3 | 58.1 | 54.9 |
| Other | 67.8 | 59.9 | 63.9 |
| Current Assets | 122.0 | 127.3 | 146.9 |
| Accts Payable | 34.9 | 34.2 | 39.5 |
| Debt Due | 22.3 | 76.2 | 26.8 |
| Other | 177.4 | 240.4 | 208.1 |
| Current Liab. | 234.6 | 350.8 | 274.4 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 2.0% | *5.5%* |
| "Cash Flow" | 5.5% | 2.0% | *4.5%* |
| Earnings | 7.0% | -.5% | *13.0%* |
| Dividends | 6.0% | 10.0% | *6.0%* |
| Book Value | 8.5% | 12.5% | *4.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 75.0 | 99.1 | 124.9 | 98.7 | 397.7 |
| 2019 | 77.7 | 103.0 | 114.0 | 126.0 | 420.5 |
| 2020 | 115.8 | 147.2 | 165.9 | 135.6 | 564.5 |
| 2021 | 114.8 | 152.2 | *175* | *148.0* | *590* |
| 2022 | *125* | *155* | *185* | *150* | *615* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .06 | .62 | .76 | .38 | 1.82 |
| 2019 | .21 | .47 | .33 | .34 | 1.35 |
| 2020 | .08 | .69 | .91 | .46 | 2.14 |
| 2021 | .09 | .69 | *.90* | *.52* | *2.20* |
| 2022 | *.18* | *.77* | *1.00* | *.70* | *2.65* |

| Calendar | QUARTERLY DIVIDENDS PAID [BD]■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .2175 | .2175 | .2175 | .3875 | 1.04 |
| 2018 | .28 | .28 | .28 | .28 | 1.12 |
| 2019 | .30 | .30 | .30 | .30 | 1.20 |
| 2020 | .32 | .32 | .32 | .32 | 1.28 |
| 2021 | .34 | .34 | .34 | | |

**BUSINESS:** SJW Group engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 231,000 connections with a total population of roughly one million people in the San Jose area and 16,000 connections that reach about 49,000 residents in the region between San Antonio and Austin, Texas. The company merged with Connecticut Water (10/19) which provides service to approx. 138,000 connections with a total population of 450,000 people. Has 361 employees. Officers and directors own 8.3% of outstanding shares (3/21 proxy). Chairman & CEO: Eric Thornburg. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

**SJW Group reported better-than-expected second-quarter financial results.** The East and West coasts water utility generated revenues of $152 million in the June period. The figure came in marginally above our $150 million call, thanks to cumulative water rate increases and higher customer usage. More impressively, SJW posted net income of $0.69 per share, matching the previous-year tally, while handily topping consensus estimates. Operating margins are indeed on the mend, but it is worth noting that roughly $0.09 can be attributed to a one-time gain from holdback funds received from the sale of equity interests in 2017.

**We are upping our current-year top- and bottom-line projections.** Our 2021 revenue estimate is moving higher by $5 million, to $590 million, while our earnings-per-share forecast is being raised by $0.15, to $2.20. Over the back half of this year, SJW's operations stand to benefit from a further rebound in economic activity, resulting in increased water consumption across both residential and commercial arenas.

**Share-net growth ought to accelerate next year and beyond.** For 2022, we look for earnings to expand 20%, year over year, to $2.65 per share. Moreover, the company has filed a relatively new rate case with the California Public Utilities Commission seeking approval to boost revenues up to $90 million, a $435 million capital budget to invest in water delivery infrastructure and upgrades, along with nearly $20 million in memorandum account recovery. All in all, the filing, which would be effective through 2024, should allow SJW to periodically increase customer rates over the next few years, thereby supporting top- and bottom-line growth.

**The stock has fallen out of favor on our Timeliness ranking scale.** Shares of SJW have been downgraded one notch, to 4 (Below Average) and, thus, are slated to lag the broader market over the coming six to 12 months. Moreover, at recent levels, total return potential over the 2024-2026 time frame is unenticing. Although long-term business prospects are favorable, we advise interested subscribers to remain on the sidelines until a better entry point is available.

*Nicholas P. Patrikis* *October 8, 2021*

**(A)** Diluted earnings. Excludes nonrecurring losses: '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early November. Quarterly egs. may not add due to rounding.
**(B)** Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
**(C)** In millions.
**(D)** Paid special dividend of $0.17 per share on 11/17.
**(E)** Suspended due to recent CTWS merger.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 80 |
| Earnings Predictability | 50 |

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# YORK WATER NDQ-YORW

RECENT PRICE 44.52 | P/E RATIO 32.5 (Trailing: 35.1 Median: 28.0) | RELATIVE P/E RATIO 1.72 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Lowered 1/15/21
SAFETY 3 Lowered 7/17/15
TECHNICAL 3 Raised 10/1/21
BETA .85 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $34-$73 | $54 (20%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+10%) | *5%* |
| Low | 35 | (-20%) | *-4%* |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 56 | 38 | 51 |
| to Sell | 46 | 56 | 43 |
| Hld's(000) | 5341 | 5518 | 5416 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.58 | 2.56 | 2.79 | 2.89 | 2.95 | 3.07 | 3.18 | 3.21 | 3.27 | 3.58 | 3.68 | 3.70 | 3.77 | 3.74 | 3.96 | 4.12 | *4.25* | *4.50* | Revenues per sh | *5.10* |
| .79 | .77 | .86 | .88 | .95 | 1.07 | 1.09 | 1.12 | 1.19 | 1.36 | 1.45 | 1.42 | 1.53 | 1.58 | 1.70 | 1.90 | *1.95* | *2.10* | "Cash Flow" per sh | *2.45* |
| .56 | .58 | .57 | .57 | .64 | .71 | .71 | .72 | .75 | .89 | .97 | .92 | 1.01 | 1.04 | 1.11 | 1.27 | *1.35* | *1.40* | Earnings per sh A | *1.65* |
| .42 | .45 | .48 | .49 | .51 | .52 | .53 | .54 | .55 | .57 | .60 | .63 | .65 | .67 | .70 | .73 | *.78* | *.83* | Div'd Decl'd per sh B | *1.00* |
| 1.69 | 1.85 | 1.69 | 2.17 | 1.18 | .83 | .74 | .94 | .76 | 1.10 | 1.11 | 1.03 | 1.95 | - - | .16 | .09 | *1.35* | *1.45* | Cap'l Spending per sh | *1.85* |
| 4.85 | 5.84 | 5.97 | 6.14 | 6.92 | 7.19 | 7.45 | 7.73 | 7.98 | 8.15 | 8.51 | 8.88 | 9.28 | 9.75 | 10.31 | 10.97 | *11.55* | *12.00* | Book Value per sh | *12.90* |
| 10.40 | 11.20 | 11.27 | 11.37 | 12.56 | 12.69 | 12.79 | 12.92 | 12.98 | 12.83 | 12.81 | 12.85 | 12.87 | 12.94 | 13.02 | 13.06 | *13.00* | *12.90* | Common Shs Outst'g C | *12.80* |
| 26.3 | 31.2 | 30.3 | 24.6 | 21.9 | 20.7 | 23.9 | 24.4 | 26.3 | 23.1 | 23.5 | 32.8 | 34.6 | 30.3 | 33.8 | 35.7 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *25.0* |
| 1.40 | 1.68 | 1.61 | 1.48 | 1.46 | 1.32 | 1.50 | 1.55 | 1.48 | 1.22 | 1.18 | 1.72 | 1.74 | 1.64 | 1.80 | 1.83 | | | Relative P/E Ratio | *1.40* |
| 2.9% | 2.5% | 2.8% | 3.5% | 3.6% | 3.5% | 3.1% | 3.1% | 2.8% | 2.8% | 2.6% | 2.1% | 1.9% | 2.1% | 1.9% | 1.6% | | | Avg Ann'l Div'd Yield | *2.4%* |
| 40.6 | 41.4 | 42.4 | 45.9 | 47.1 | 47.6 | 48.6 | 48.4 | 51.6 | 53.9 | *55.0* | *57.0* | Revenues ($mill) | *65.0* |
| 9.1 | 9.3 | 9.7 | 11.5 | 12.5 | 11.8 | 13.0 | 13.4 | 14.4 | 16.6 | *17.5* | *18.0* | Net Profit ($mill) | *21.0* |
| 35.3% | 37.6% | 37.6% | 29.8% | 27.5% | 31.3% | 25.9% | 15.7% | 13.5% | 10.8% | *21.0%* | *21.0%* | Income Tax Rate | *21.0%* |
| 1.1% | 1.1% | .8% | 1.8% | 1.6% | 1.9% | 6.7% | 1.7% | 2.5% | 3.2% | *1.5%* | *1.5%* | AFUDC % to Net Profit | *1.5%* |
| 47.1% | 46.0% | 45.1% | 44.8% | 44.4% | 42.6% | 43.0% | 42.5% | 41.3% | 46.3% | *44.5%* | *42.5%* | Long-Term Debt Ratio | *37.5%* |
| 52.9% | 54.0% | 54.9% | 55.2% | 55.6% | 57.4% | 57.0% | 57.5% | 58.7% | 53.7% | *55.5%* | *57.5%* | Common Equity Ratio | *62.5%* |
| 180.2 | 184.8 | 188.4 | 189.4 | 196.3 | 198.7 | 209.5 | 219.5 | 228.7 | 266.8 | *270* | *270* | Total Capital ($mill) | *265* |
| 233.0 | 240.3 | 244.2 | 253.2 | 261.4 | 270.9 | 288.8 | 299.2 | 313.2 | 343.6 | *355* | *370* | Net Plant ($mill) | *405* |
| 6.4% | 6.4% | 6.5% | 7.4% | 7.6% | 7.2% | 7.5% | 7.3% | 7.4% | 7.1% | *7.5%* | *7.5%* | Return on Total Cap'l | *9.0%* |
| 9.5% | 9.3% | 9.3% | 11.0% | 11.5% | 10.4% | 10.9% | 10.6% | 10.7% | 11.6% | *11.5%* | *11.5%* | Return on Shr. Equity | *13.0%* |
| 9.5% | 9.3% | 9.3% | 11.0% | 11.5% | 10.4% | 10.9% | 10.6% | 10.7% | 11.6% | *11.5%* | *11.5%* | Return on Com Equity | *13.0%* |
| 2.5% | 2.4% | 2.4% | 3.9% | 4.4% | 3.4% | 4.0% | 3.8% | 4.0% | 5.0% | *5.0%* | *4.5%* | Retained to Com Eq | *5.0%* |
| 73% | 74% | 74% | 64% | 62% | 67% | 63% | 64% | 62% | 57% | *58%* | *59%* | All Div'ds to Net Prof | *61%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $127.0 mill. **Due in 5 Yrs** $42.5 mill.
**LT Debt** $127.0 mill. **LT Interest** $5.5 mill.

(46% of Cap'l)

**Pension Assets12/20** $56.3 mill.
**Oblig.** $54.1 mill.

**Pfd Stock** None

**Common Stock** 13,090,055 shs.

**MARKET CAP: $575 million (Small Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | - - | 5.0 | - - |
| Accounts Receivable | 4.4 | 5.2 | 4.2 |
| Inventory (Avg. Cost) | 1.0 | 1.0 | 1.0 |
| Other | 4.0 | 5.1 | 5.7 |
| Current Assets | 9.4 | 16.3 | 10.9 |
| Accts Payable | 3.4 | 6.5 | 8.4 |
| Debt Due | 6.5 | - - | - - |
| Other | 5.3 | 5.5 | 5.5 |
| Current Liab. | 15.2 | 12.0 | 13.9 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 2.5% | *4.5%* |
| "Cash Flow" | 6.0% | 5.5% | *6.0%* |
| Earnings | 6.0% | 5.5% | *6.5%* |
| Dividends | 3.5% | 4.0% | *6.0%* |
| Book Value | 4.5% | 4.5% | *4.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 11.6 | 12.0 | 12.7 | 12.1 | 48.4 |
| 2019 | 11.8 | 13.0 | 13.7 | 13.1 | 51.6 |
| 2020 | 12.9 | 13.3 | 14.3 | 13.4 | 53.9 |
| 2021 | 13.1 | 13.8 | *14.5* | *13.6* | *55.0* |
| 2022 | *13.7* | *14.3* | *15.0* | *14.0* | *57.0* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .20 | .26 | .29 | .29 | 1.04 |
| 2019 | .22 | .28 | .35 | .26 | 1.11 |
| 2020 | .31 | .32 | .36 | .28 | 1.27 |
| 2021 | .28 | .35 | *.37* | *.35* | *1.35* |
| 2022 | *.30* | *.36* | *.38* | *.36* | *1.40* |

| Calendar | QUARTERLY DIVIDENDS PAID B Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .1602 | .1602 | .1602 | .1666 | .647 |
| 2018 | .1666 | .1666 | .1666 | .1733 | .673 |
| 2019 | .1733 | .1733 | .1733 | .1802 | .70 |
| 2020 | .1802 | .1802 | .1802 | .1874 | .73 |
| 2021 | .1874 | .1874 | .1874 | | |

**BUSINESS:** The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2020, the company's average daily availability was 35.6 million gallons and its service territory had an estimated population of 202,000. Has more than 72,600 customers. Residential customers accounted for 66% of 2020 revenues; commercial and industrial (26%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/20. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.3% of the common stock (3/21 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

**York Water delivered good share-profit growth in the June interim.** As expected, the regulated water utility posted net income of $0.35 per share for the second quarter, representing sequential and annual improvements of 25% and 9%, respectively. The bottom-line advance was aided partly by lower income taxes stemming from wider deductions under IRS tangible property rules. Meanwhile, revenues of $13.8 million rose nicely compared to the previous-year tally, thanks to a growing customer base and increased billings/collections. For this year, revenues of $55 million (up $0.5 million from our previous estimate) are likely on tap. At the same time, we are leaving unchanged our 2021 EPS call, at $1.35. Looking at 2022, our model suggests that revenues will improve by $2 million, to $57 million, and earnings ought to jump a nickel, to $1.40 per share.

**The stock price has bounced around over the past three months.** In fact, the equity was trading near all-time high territory in early September before sliding back into the mid-$40-per-share vicinity. Year to date, the stock is largely flat, despite some uncharacteristically choppy price movements.

**Long term, we think York Water is well positioned for sustainable, albeit modest top- and bottom-line growth.** Our relatively rosy thesis has a few legs to stand on, including prospects for a healthier economic backdrop (higher water consumption), further expansion in its customer base, as well as the likelihood for additional rate hikes (granted periodically by state regulators to help York replenish and maintain a strong capital spending budget). To this point, robust investment in clean water infrastructure and delivery and pumping system upgrades is probably in the cards.

**But investment appeal is limited at this juncture.** Based on our Timeliness ranking scale, shares of York Water are merely an Average (3) selection for relative year-ahead price performance. In addition, at the recent quotation, total return potential over the three- to five-year pull is nothing to write home about. Overall, we recommend subscribers turn the page, for now.

*Nicholas P. Patrikis* *October 8, 2021*

**(A)** Diluted earnings. Next earnings report due early November.
**(B)** Dividends historically paid in late February, June, September, and December.
**(C)** In millions, adjusted for split.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 75 |
| Earnings Predictability | 100 |

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City of Beaver Falls
Summary of Risk Premium Models for the
Proxy Group of Seven Water Companies

| | Proxy Group of Seven Water Companies |
|---|---|
| Predictive Risk Premium Model (PRPM) (1) | 11.50 % |
| Risk Premium Using an Adjusted Total Market Approach (2) | 10.83 % |
| Average | 11.17 % |

Notes:
(1) From page 14 of this Appendix.
(2) From page 15 of this Appendix.

City of Beaver Falls
Indicated ROE
Derived by the Predictive Risk Premium Model (1)

| Proxy Group of Seven Water Companies | [1] LT Average Predicted Variance | [2] Spot Predicted Variance | [3] Recommended Variance (2) | [4] GARCH Coefficient | [5] Predicted Risk Premium (3) | [6] Risk-Free Rate (4) | [7] Indicated ROE (5) |
|---|---|---|---|---|---|---|---|
| American States Water Company | 0.38% | 0.36% | 0.37% | 1.9549 | 9.03% | 2.70% | 11.73% |
| American Water Works Company, Inc. | 0.24% | 0.19% | 0.22% | 5.8253 | 16.13% | 2.70% | NMF |
| California Water Service Group | 0.32% | 0.33% | 0.32% | 2.0651 | 8.33% | 2.70% | 11.03% |
| Essential Utilities Inc. | 0.44% | 0.36% | 0.40% | 2.2722 | 11.41% | 2.70% | 14.11% |
| Middlesex Water Company | 0.32% | 0.75% | 0.32% | 2.1890 | 8.68% | 2.70% | 11.38% |
| SJW Group | 0.41% | 0.33% | 0.37% | 1.5521 | 7.13% | 2.70% | 9.83% |
| The York Water Company | 0.46% | 0.51% | 0.49% | 2.0820 | 12.87% | 2.70% | NMF |
| | | | | | | Average | 11.62% |
| | | | | | | Median | 11.38% |
| | | | | | Average of Mean and Median | | 11.50% |

NMF = Not Meaningful Figure

Notes:

(1) The Predictive Risk Premium Model uses historical data to generate a predicted variance and a GARCH coefficient. The historical data used are the equity risk premiums for the first available trading month as reported by Bloomberg Professional Service.

(2) Average of Columns [1] and [2]; Middlesex Water Company based on Column [1].

(3) (1+(Column [3] * Column [4])^12) - 1.

(4) From note 2 on page 26 of this Appendix.

(5) Column [5] + Column [6].

City of Beaver Falls
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

| Line No. | | Proxy Group of Seven Water Companies | |
|---|---|---|---|
| 1. | Prospective Yield on Aaa Rated Corporate Bonds (1) | 3.53 | % |
| 2. | Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds | 0.41 | (2) |
| 3. | Adjusted Prospective Yield on A2 Rated Public Utility Bonds | 3.94 | % |
| 4. | Adjustment to Reflect Bond Rating Difference of Proxy Group | 0.08 | (3) |
| 5. | Adjusted Prospective Bond Yield | 4.02 | % |
| 6. | Equity Risk Premium (4) | 6.81 | |
| 7. | Risk Premium Derived Common Equity Cost Rate | 10.83 | % |

Notes:
(1) Consensus forecast of Moody's Aaa Rated Corporate bonds from Blue Chip Financial Forecasts (see pages 22 and 23 of this Appendix).
(2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.41% from page 16 of this Appendix.
(3) Adjustment to reflect the A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 17 of this Appendix The 0.08% upward adjustment is derived by taking 1/3 of the spread between A2 and Baa2 Public Utility Bonds (1/3 * 0.23% = 0.08%) as derived from page 16 of this Appendix.
(4) From page 19 of this Appendix.

City of Beaver Falls
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

| | [1] Aaa Rated Corporate Bond | [2] A2 Rated Public Utility Bond | [3] Baa2 Rated Public Utility Bond |
|---|---|---|---|
| Nov-2021 | 2.62 % | 3.02 % | 3.25 % |
| Oct-2021 | 2.68 | 3.09 | 3.32 |
| Sep-2021 | 2.53 | 2.96 | 3.19 |
| Average | 2.61 % | 3.02 % | 3.25 % |

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds: 0.41 % (1)

Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds: 0.23 % (2)

Notes:
(1) Column [2] - Column [1].
(2) Column [3] - Column [2].

Source of Information:
Bloomberg Professional Service

City of Beaver Falls
Comparison of Long-Term Issuer Ratings for
Proxy Group of Seven Water Companies

| | Moody's | | Standard & Poor's | |
|---|---|---|---|---|
| | Long-Term Issuer Rating November 2021 | | Long-Term Issuer Rating November 2021 | |
| Proxy Group of Seven Water Companies | Long-Term Issuer Rating | Numerical Weighting (1) | Long-Term Issuer Rating | Numerical Weighting (1) |
| American States Water Company (2) | A2 | 6.0 | A+ | 5.0 |
| American Water Works Company, Inc. (3) | A3 | 7.0 | A | 6.0 |
| California Water Service Group | NR | - - | A+ | 5.0 |
| Essential Utilities Inc. (4) | Baa1 | 8.0 | A | 6.0 |
| Middlesex Water Company | NR | - - | A | 6.0 |
| SJW Group (5) | NR | - - | A/A- | 6.5 |
| The York Water Company | NR | - - | A- | 7.0 |
| Average | A3 | 7.0 | A | 5.9 |

Notes:
(1) From page 18 of this Appendix.
(2) Ratings that of Golden State Water Company.
(3) Ratings that of New Jersey and Pennsylvania American Water Companies.
(4) Ratings that of PNG Companies and Aqua Pennsylvania, Inc. (S&P).
(5) Ratings that of San Jose Water Company and Connecticut Water Inc.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

# Numerical Assignment for Moody's and Standard & Poor's Bond Ratings

| Moody's Bond Rating | Numerical Bond Weighting | Standard & Poor's Bond Rating |
|---|---|---|
| Aaa | 1 | AAA |
| Aa1 | 2 | AA+ |
| Aa2 | 3 | AA |
| Aa3 | 4 | AA- |
| A1 | 5 | A+ |
| A2 | 6 | A |
| A3 | 7 | A- |
| Baa1 | 8 | BBB+ |
| Baa2 | 9 | BBB |
| Baa3 | 10 | BBB- |
| Ba1 | 11 | BB+ |
| Ba2 | 12 | BB |
| Ba3 | 13 | BB- |
| B1 | 14 | B+ |
| B2 | 15 | B |
| B3 | 16 | B- |

City of Beaver Falls
Judgment of Equity Risk Premium for the
Proxy Group of Seven Water Companies

| Line No. | | Proxy Group of Seven Water Companies |
|---|---|---|
| 1. | Calculated equity risk premium based on the total market using the beta approach (1) | 7.97 % |
| 2. | Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2) | 5.64 |
| 3. | Average equity risk premium | 6.81 % |

Notes: (1) From page 20 of this Appendix.
(2) From page 24 of this Appendix.

City of Beaver Falls
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Seven Water Companies

| Line No. | Equity Risk Premium Measure | Proxy Group of Seven Water Companies |
|---|---|---|
| | Ibbotson-Based Equity Risk Premiums: | |
| 1. | Ibbotson Equity Risk Premium (1) | 5.92 % |
| 2. | Regression on Ibbotson Risk Premium Data (2) | 8.73 |
| 3. | Ibbotson Equity Risk Premium based on PRPM (3) | 8.42 |
| 4. | Equity Risk Premium Based on Value Line Summary and Index (4) | 6.04 |
| 5. | Equity Risk Premium Based on Value Line S&P 500 Companies (5) | 12.76 |
| 6. | Equity Risk Premium Based on Bloomberg S&P 500 Companies (6) | 13.12 |
| 7. | Conclusion of Equity Risk Premium | 9.16 % |
| 8. | Adjusted Beta (7) | 0.87 |
| 9. | Forecasted Equity Risk Premium | 7.97 % |

Notes provided on page 21 of this Appendix.

Notes:

(1) Based on the arithmetic mean historical monthly returns on large company common stocks from Ibbotson® SBBI® 2021 Market Report minus the arithmetic mean monthly yield of Moody's average Aaa and Aa2 corporate bonds from 1928-2020.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of large company common stocks relative to Moody's average Aaa and Aa2 rated corporate bond yields from 1928-2020 referenced in Note 1 above.

(3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa2 corporate monthly bond yields, from January 1928 through November 2021.

(4) The equity risk premium based on the Value Line Summary and Index is derived by subtracting the average consensus forecast of Aaa corporate bonds of 3.53% (from page 15 of this Appendix) from the projected 3-5 year total annual market return of 9.57% (described fully in note 1 on page 26 of this Appendix).

(5) Using data from Value Line for the S&P 500, an expected total return of 16.29% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 3.53% results in an expected equity risk premium of 12.76%

(6) Using data from the Bloomberg Professional Service for the S&P 500, an expected total return of 16.65% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 3.53% results in an expected equity risk premium of 13.12%.

(7) Average of mean and median beta from Page 25 of this Appendix.

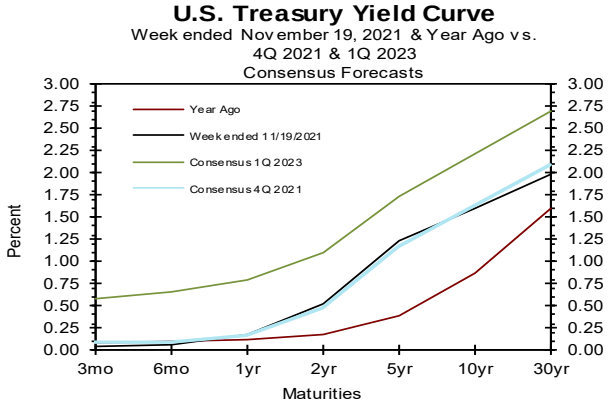
Sources of Information:

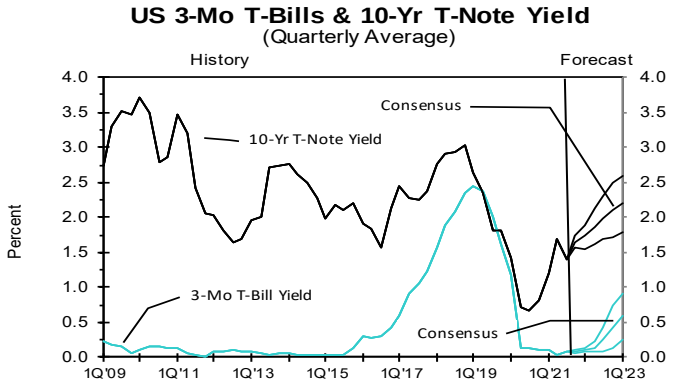
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, December 1, 2021
Bloomberg Professional Service

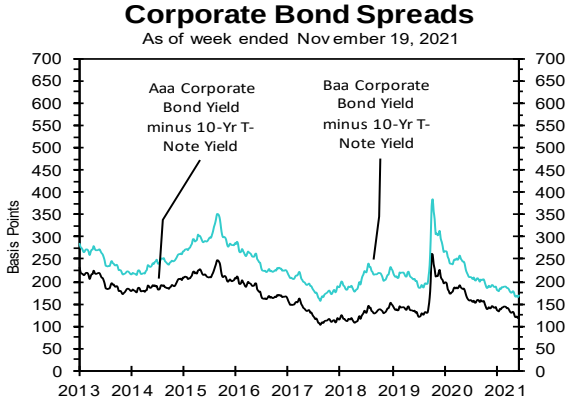
# Consensus Forecasts of U.S. Interest Rates and Key Assumptions

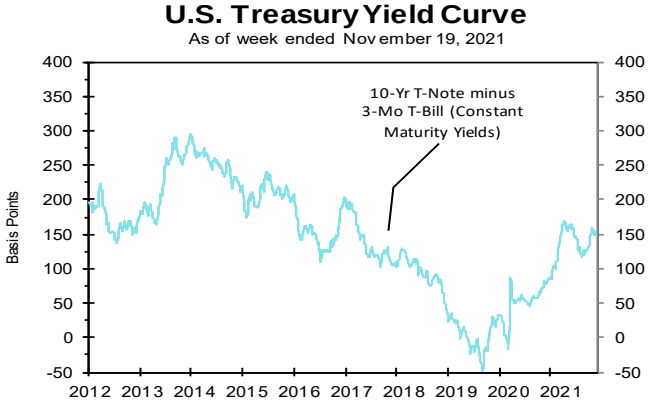
| | History | | | | | | | | Consensus Forecasts-Quarterly Avg. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Average For Week Ending | | | | Average For Month | | | *Latest Qtr* | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| Interest Rates | Nov 19 | Nov 12 | Nov 5 | Oct 29 | Oct | Sep | Aug | 3Q 2021 | 2021 | 2022 | 2022 | 2022 | 2022 | 2023 |
| Federal Funds Rate | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | **0.1** | **0.1** | **0.1** | **0.3** | **0.4** | **0.6** |
| Prime Rate | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | **3.3** | **3.3** | **3.3** | **3.4** | **3.5** | **3.7** |
| LIBOR, 3-mo. | 0.16 | 0.15 | 0.14 | 0.13 | 0.13 | 0.12 | 0.12 | 0.13 | **0.2** | **0.2** | **0.3** | **0.4** | **0.6** | **0.7** |
| Commercial Paper, 1-mo. | 0.06 | 0.05 | 0.07 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | **0.1** | **0.1** | **0.2** | **0.3** | **0.5** | **0.6** |
| Treasury bill, 3-mo. | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.04 | 0.05 | 0.05 | **0.1** | **0.1** | **0.1** | **0.2** | **0.4** | **0.6** |
| Treasury bill, 6-mo. | 0.06 | 0.07 | 0.07 | 0.06 | 0.06 | 0.05 | 0.06 | 0.05 | **0.1** | **0.1** | **0.2** | **0.3** | **0.5** | **0.7** |
| Treasury bill, 1 yr. | 0.18 | 0.16 | 0.15 | 0.14 | 0.11 | 0.08 | 0.07 | 0.08 | **0.2** | **0.2** | **0.3** | **0.4** | **0.6** | **0.8** |
| Treasury note, 2 yr. | 0.53 | 0.48 | 0.45 | 0.48 | 0.39 | 0.24 | 0.22 | 0.23 | **0.5** | **0.6** | **0.7** | **0.8** | **1.0** | **1.1** |
| Treasury note, 5 yr. | 1.24 | 1.17 | 1.14 | 1.18 | 1.11 | 0.86 | 0.77 | 0.80 | **1.2** | **1.3** | **1.4** | **1.5** | **1.6** | **1.7** |
| Treasury note, 10 yr. | 1.60 | 1.53 | 1.54 | 1.59 | 1.58 | 1.37 | 1.28 | 1.32 | **1.6** | **1.7** | **1.9** | **2.0** | **2.1** | **2.2** |
| Treasury note, 30 yr. | 1.98 | 1.90 | 1.95 | 2.00 | 2.06 | 1.94 | 1.92 | 1.93 | **2.1** | **2.2** | **2.3** | **2.5** | **2.6** | **2.7** |
| Corporate Aaa bond | 2.82 | 2.72 | 2.77 | 2.80 | 2.85 | 2.72 | 2.72 | 2.72 | **2.7** | **2.9** | **3.1** | **3.2** | **3.4** | **3.6** |
| Corporate Baa bond | 3.29 | 3.18 | 3.22 | 3.25 | 3.31 | 3.16 | 3.16 | 3.16 | **3.4** | **3.6** | **3.8** | **4.0** | **4.2** | **4.4** |
| State & Local bonds | 2.56 | 2.56 | 2.60 | 2.61 | 2.59 | 2.67 | 2.64 | 2.64 | **2.4** | **2.6** | **2.7** | **2.9** | **3.0** | **3.1** |
| Home mortgage rate | 3.10 | 2.98 | 3.09 | 3.14 | 3.07 | 2.90 | 2.84 | 2.87 | **3.1** | **3.2** | **3.4** | **3.5** | **3.7** | **3.8** |
| | History | | | | | | | | Consensus Forecasts-Quarterly | | | | | |
| | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| Key Assumptions | 2019 | 2020 | 2020 | 2020 | 2020 | 2021 | 2021 | 2021 | 2021 | 2022 | 2022 | 2022 | 2022 | 2023 |
| Fed's AFE $ Index | 110.5 | 111.4 | 112.4 | 107.3 | 105.2 | 103.4 | 102.9 | 105.0 | **106.5** | **106.9** | **106.8** | **106.6** | **106.3** | **106.1** |
| Real GDP | 1.9 | -5.1 | -31.2 | 33.8 | 4.5 | 6.3 | 6.7 | 2.1 | **5.1** | **4.4** | **3.8** | **3.3** | **2.6** | **2.4** |
| GDP Price Index | 1.5 | 1.6 | -1.5 | 3.6 | 2.2 | 4.3 | 6.1 | 5.9 | **4.6** | **3.4** | **2.8** | **2.7** | **2.5** | **2.5** |
| Consumer Price Index | 2.6 | 1.0 | -3.1 | 4.7 | 2.4 | 3.7 | 8.4 | 6.6 | **5.6** | **3.3** | **2.9** | **2.6** | **2.5** | **2.4** |
| PCE Price Index | 1.7 | 1.3 | -1.6 | 3.7 | 1.5 | 3.8 | 6.5 | 5.3 | **4.5** | **2.9** | **2.5** | **2.5** | **2.3** | **2.3** |

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, PCE Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data are sourced from Haver Analytics. Historical data for Fed's Major Currency Index are from FRSR H.10. Historical data for Real GDP, GDP Price Index and PCE Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index history is from the Department of Labor's Bureau of Labor Statistics (BLS).



# Long-Range Survey:

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2023 through 2027 and averages for the five-year periods 2023-2027 and 2028-2032. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

| | | Average For The Year | | | | | Five-Year Averages | |
|---|---|---|---|---|---|---|---|---|
| | | 2023 | 2024 | 2025 | 2026 | 2027 | 2023-2027 | 2028-2032 |
| 1. Federal Funds Rate | **CONSENSUS** | **0.8** | **1.6** | **2.0** | **2.2** | **2.3** | **1.8** | **2.2** |
| | Top 10 Average | 1.2 | 2.2 | 2.7 | 2.7 | 2.8 | 2.3 | 2.9 |
| | Bottom 10 Average | 0.4 | 1.0 | 1.4 | 1.7 | 1.8 | 1.2 | 1.5 |
| 2. Prime Rate | **CONSENSUS** | **4.0** | **4.7** | **5.1** | **5.3** | **5.4** | **4.9** | **5.3** |
| | Top 10 Average | 4.3 | 5.3 | 5.8 | 5.8 | 5.9 | 5.4 | 6.0 |
| | Bottom 10 Average | 3.6 | 4.1 | 4.5 | 4.9 | 5.0 | 4.4 | 4.6 |
| 3. LIBOR, 3-Mo. | **CONSENSUS** | **1.0** | **1.7** | **2.2** | **2.4** | **2.5** | **1.9** | **2.4** |
| | Top 10 Average | 1.3 | 2.1 | 2.7 | 2.9 | 3.0 | 2.4 | 3.1 |
| | Bottom 10 Average | 0.7 | 1.2 | 1.6 | 1.9 | 2.0 | 1.5 | 1.8 |
| 4. Commercial Paper, 1-Mo | **CONSENSUS** | **0.9** | **1.6** | **2.1** | **2.3** | **2.4** | **1.9** | **2.4** |
| | Top 10 Average | 1.2 | 2.0 | 2.6 | 2.8 | 2.9 | 2.3 | 2.9 |
| | Bottom 10 Average | 0.6 | 1.2 | 1.6 | 1.9 | 2.0 | 1.5 | 1.8 |
| 5. Treasury Bill Yield, 3-Mo | **CONSENSUS** | **0.8** | **1.4** | **1.8** | **2.0** | **2.3** | **1.7** | **2.2** |
| | Top 10 Average | 1.2 | 1.9 | 2.5 | 2.6 | 2.8 | 2.2 | 2.9 |
| | Bottom 10 Average | 0.4 | 0.8 | 1.2 | 1.5 | 1.8 | 1.1 | 1.6 |
| 6. Treasury Bill Yield, 6-Mo | **CONSENSUS** | **0.8** | **1.4** | **1.9** | **2.1** | **2.4** | **1.7** | **2.3** |
| | Top 10 Average | 1.2 | 2.0 | 2.6 | 2.7 | 2.9 | 2.3 | 3.0 |
| | Bottom 10 Average | 0.4 | 0.9 | 1.2 | 1.6 | 1.9 | 1.2 | 1.7 |
| 7. Treasury Bill Yield, 1-Yr | **CONSENSUS** | **1.0** | **1.6** | **2.1** | **2.4** | **2.5** | **1.9** | **2.4** |
| | Top 10 Average | 1.4 | 2.1 | 2.7 | 2.8 | 3.0 | 2.4 | 3.1 |
| | Bottom 10 Average | 0.6 | 1.2 | 1.5 | 1.9 | 2.0 | 1.4 | 1.8 |
| 8. Treasury Note Yield, 2-Yr | **CONSENSUS** | **1.3** | **1.9** | **2.4** | **2.6** | **2.6** | **2.2** | **2.6** |
| | Top 10 Average | 1.7 | 2.5 | 3.0 | 3.1 | 3.2 | 2.7 | 3.4 |
| | Bottom 10 Average | 0.8 | 1.4 | 1.8 | 2.0 | 2.1 | 1.6 | 1.9 |
| 9. Treasury Note Yield, 5-Yr | **CONSENSUS** | **1.9** | **2.4** | **2.8** | **2.9** | **2.9** | **2.6** | **3.0** |
| | Top 10 Average | 2.3 | 3.0 | 3.4 | 3.5 | 3.6 | 3.1 | 3.8 |
| | Bottom 10 Average | 1.5 | 1.9 | 2.1 | 2.3 | 2.3 | 2.0 | 2.2 |
| 10. Treasury Note Yield, 10-Yr | **CONSENSUS** | **2.4** | **2.8** | **3.1** | **3.2** | **3.2** | **2.9** | **3.3** |
| | Top 10 Average | 2.8 | 3.3 | 3.7 | 3.8 | 3.9 | 3.5 | 4.2 |
| | Bottom 10 Average | 2.0 | 2.3 | 2.4 | 2.5 | 2.5 | 2.3 | 2.4 |
| 11. Treasury Bond Yield, 30-Yr | **CONSENSUS** | **2.9** | **3.3** | **3.6** | **3.7** | **3.7** | **3.4** | **3.8** |
| | Top 10 Average | 3.4 | 3.9 | 4.3 | 4.4 | 4.4 | 4.1 | 4.6 |
| | Bottom 10 Average | 2.4 | 2.8 | 2.9 | 3.0 | 3.0 | 2.8 | 3.0 |
| 12. Corporate Aaa Bond Yield | **CONSENSUS** | **3.7** | **4.2** | **4.5** | **4.6** | **4.8** | **4.4** | **4.9** |
| | Top 10 Average | 4.3 | 4.7 | 5.1 | 5.2 | 5.4 | 4.9 | 5.6 |
| | Bottom 10 Average | 3.2 | 3.7 | 3.9 | 4.1 | 4.2 | 3.8 | 4.2 |
| 13. Corporate Baa Bond Yield | **CONSENSUS** | **4.6** | **5.0** | **5.3** | **5.5** | **5.6** | **5.2** | **5.7** |
| | Top 10 Average | 5.1 | 5.5 | 5.9 | 6.1 | 6.2 | 5.7 | 6.5 |
| | Bottom 10 Average | 4.0 | 4.5 | 4.8 | 4.9 | 5.0 | 4.7 | 5.0 |
| 14. State & Local Bonds Yield | **CONSENSUS** | **3.2** | **3.7** | **3.9** | **4.1** | **4.2** | **3.8** | **4.3** |
| | Top 10 Average | 3.8 | 4.3 | 4.5 | 4.7 | 4.8 | 4.4 | 5.0 |
| | Bottom 10 Average | 2.7 | 3.2 | 3.4 | 3.5 | 3.6 | 3.3 | 3.6 |
| 15. Home Mortgage Rate | **CONSENSUS** | **4.0** | **4.4** | **4.7** | **4.8** | **4.8** | **4.5** | **4.9** |
| | Top 10 Average | 4.5 | 5.0 | 5.3 | 5.4 | 5.4 | 5.1 | 5.7 |
| | Bottom 10 Average | 3.6 | 3.9 | 4.1 | 4.1 | 4.2 | 4.0 | 4.1 |
| A. Fed's AFE Nominal $ Index | **CONSENSUS** | **106.2** | **106.0** | **106.1** | **106.2** | **106.4** | **106.2** | **106.5** |
| | Top 10 Average | 108.1 | 108.4 | 108.9 | 109.0 | 109.2 | 108.7 | 110.1 |
| | Bottom 10 Average | 104.4 | 104.0 | 103.7 | 103.7 | 103.9 | 103.9 | 103.1 |
| | | Year-Over-Year, % Change | | | | | Five-Year Averages | |
| | | 2023 | 2024 | 2025 | 2026 | 2027 | 2023-2027 | 2028-2032 |
| B. Real GDP | **CONSENSUS** | **2.6** | **2.2** | **2.1** | **2.0** | **2.0** | **2.2** | **2.0** |
| | Top 10 Average | 3.1 | 2.6 | 2.5 | 2.4 | 2.3 | 2.6 | 2.4 |
| | Bottom 10 Average | 2.2 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 1.7 |
| C. GDP Chained Price Index | **CONSENSUS** | **2.5** | **2.2** | **2.2** | **2.1** | **2.1** | **2.2** | **2.1** |
| | Top 10 Average | 3.0 | 2.7 | 2.5 | 2.4 | 2.4 | 2.6 | 2.4 |
| | Bottom 10 Average | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 |
| D. Consumer Price Index | **CONSENSUS** | **2.6** | **2.3** | **2.3** | **2.2** | **2.2** | **2.3** | **2.2** |
| | Top 10 Average | 3.2 | 2.8 | 2.6 | 2.5 | 2.5 | 2.7 | 2.5 |
| | Bottom 10 Average | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 |
| E. PCE Price Index | **CONSENSUS** | **2.5** | **2.2** | **2.1** | **2.1** | **2.1** | **2.2** | **2.1** |
| | Top 10 Average | 3.0 | 2.6 | 2.4 | 2.4 | 2.3 | 2.6 | 2.4 |
| | Bottom 10 Average | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |

City of Beaver Falls
Derivation of Mean Equity Risk Premium Based Studies
Using Holding Period Returns and
Projected Market Appreciation of the S&P Utility Index

| Line No. | | Implied Equity Risk Premium |
|---|---|---|
| | Equity Risk Premium based on S&P Utility Index Holding Period Returns (1): | |
| 1. | Historical Equity Risk Premium | 4.16 % |
| 2. | Regression of Historical Equity Risk Premium (2) | 6.38 |
| 3. | Forecasted Equity Risk Premium Based on PRPM (3) | 4.97 |
| 4. | Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Value Line Data) (4) | 7.18 |
| 5. | Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Bloomberg Data) (5) | 5.52 |
| 6. | Average Equity Risk Premium (6) | 5.64 % |

Notes:
(1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility Bond average monthly yields from 1928-2020. Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A2 rated public utility bond yields from 1928 - 2020 referenced in note 1 above.

(3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A2 rated public utility bonds from January 1928 - November 2021.

(4) Using data from Value Line for the S&P Utilities Index, an expected return of 11.12% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.94%, calculated on line 3 of page 15 of this Appendix results in an equity risk premium of 7.18%. (11.12% - 3.94% = 7.18%)

(5) Using data from Bloomberg Professional Service for the S&P Utilities Index, an expected return of 9.46% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.94%, calculated on line 3 of page 15 of this Appendix results in an equity risk premium of 5.52%. (9.46% - 3.94% = 5.52%)

(6) Average of lines 1 through 5.

City of Beaver Falls
Indicated Common Equity Cost Rate Through Use
of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

| Proxy Group of Seven Water Companies | [1] Value Line Adjusted Beta | [2] Bloomberg Adjusted Beta | [3] Average Beta | [4] Market Risk Premium (1) | [5] Risk-Free Rate (2) | [6] Traditional CAPM Cost Rate | [7] ECAPM Cost Rate | [8] Indicated Common Equity Cost Rate (3) |
|---|---|---|---|---|---|---|---|---|
| American States Water Company | 0.65 | 0.63 | 0.64 | 10.09 % | 2.70 % | 9.16 % | 10.06 % | 9.61 % |
| American Water Works Company, Inc. | 0.90 | 1.06 | 0.98 | 10.09 | 2.70 | 12.59 | 12.64 | 12.61 |
| California Water Service Group | 0.70 | 0.67 | 0.68 | 10.09 | 2.70 | 9.56 | 10.37 | 9.96 |
| Essential Utilities Inc. | 1.00 | 1.07 | 1.04 | 10.09 | 2.70 | 13.19 | 13.09 | 13.14 |
| Middlesex Water Company | 0.70 | 0.80 | 0.75 | 10.09 | 2.70 | 10.27 | 10.90 | 10.58 |
| SJW Group | 0.80 | 0.99 | 0.90 | 10.09 | 2.70 | 11.78 | 12.03 | 11.90 |
| The York Water Company | 0.85 | 0.99 | 0.92 | 10.09 | 2.70 | 11.98 | 12.18 | 12.08 |
| Mean | | | 0.84 | | | 11.22 % | 11.61 % | 11.41 % |
| Median | | | 0.90 | | | 11.78 % | 12.03 % | 11.90 % |
| Average of Mean and Median | | | 0.87 | | | 11.50 | 11.82 | 11.66 % |

Notes on page 26 of this Appendix.

City of Beaver Falls
Notes to Accompany the Application of the CAPM and ECAPM

Notes:

(1) The market risk premium (MRP) is derived by using six different measures from three sources: Ibbotson, Value Line, and Bloomberg as illustrated below:

Historical Data MRP Estimates:

Measure 1: Ibbotson Arithmetic Mean MRP (1926-2020)

| | |
|---|---|
| Arithmetic Mean Monthly Returns for Large Stocks 1926-2020: | 12.20 % |
| Arithmetic Mean Income Returns on Long-Term Government Bonds: | 5.05 |
| MRP based on Ibbotson Historical Data: | 7.15 % |

Measure 2: Application of a Regression Analysis to Ibbotson Historical Data (1926-2020) 9.57 %

Measure 3: Application of the PRPM to Ibbotson Historical Data: (January 1926 - November 2021) 9.39 %

Value Line MRP Estimates:

Measure 4: Value Line Projected MRP (Thirteen weeks ending December 03, 2021)

| | |
|---|---|
| Total projected return on the market 3-5 years hence*: | 9.57 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Value Line Summary & Index: | 6.87 % |

*Forcasted 3-5 year capital appreciation plus expected dividend yield

Measure 5: Value Line Projected Return on the Market based on the S&P 500

| | |
|---|---|
| Total return on the Market based on the S&P 500: | 16.29 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Value Line data | 13.59 % |

Measure 6: Bloomberg Projected MRP

| | |
|---|---|
| Total return on the Market based on the S&P 500: | 16.65 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Bloomberg data | 13.95 % |

Average of Value Line, Ibbotson, and Bloomberg MRP: 10.09 %

(2) For reasons explained in the direct testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 22-23 of this Appendix.) The projection of the risk-free rate is illustrated below:

| | |
|---|---|
| Fourth Quarter 2021 | 2.10 % |
| First Quarter 2022 | 2.20 |
| Second Quarter 2022 | 2.30 |
| Third Quarter 2022 | 2.50 |
| Fourth Quarter 2022 | 2.60 |
| First Quarter 2023 | 2.70 |
| 2023-2027 | 3.40 |
| 2028-2032 | 3.80 |
| | 2.70 % |

(3) Average of Column 6 and Column 7.

Sources of Information:
Value Line Summary and Index
Blue Chip Financial Forecasts, December 1, 2021
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Bloomberg Professional Services

City of Beaver Falls
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Utility Proxy Group

The criteria for selection of the Non-Price Regulated Proxy Group was that the non-price regulated companies be domestic and reported in Value Line Investment Survey (Standard Edition).

The Non-Price Regulated Proxy Group companies were then selected based on the unadjusted beta range of 0.49 – 0.81 and residual standard error of the regression range of 2.8601 – 3.4113 of the Utility Proxy Group.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and residual standard errors of the regression.

The standard deviation of the Water Utility Proxy Group's residual standard error of the regression is 0.1378. The standard deviation of the standard error of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus, } 0.1378 = \frac{3.1357}{\sqrt{518}} = \frac{3.1357}{22.7596}$$

Source of Information: Value Line, Inc., September 2021
Value Line Investment Survey (Standard Edition)

City of Beaver Falls
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

| Proxy Group of Seven Water Companies | [1] Value Line Adjusted Beta | [2] Unadjusted Beta | [3] Residual Standard Error of the Regression | [4] Standard Deviation of Beta |
|---|---|---|---|---|
| American States Water Company | 0.65 | 0.43 | 2.4316 | 0.0610 |
| American Water Works Company, Inc. | 0.90 | 0.78 | 3.2060 | 0.0805 |
| California Water Service Group | 0.70 | 0.48 | 3.0679 | 0.0770 |
| Essential Utilities Inc. | 1.00 | 0.92 | 2.7436 | 0.0689 |
| Middlesex Water Company | 0.70 | 0.52 | 3.4980 | 0.0878 |
| SJW Group | 0.80 | 0.69 | 3.4937 | 0.0877 |
| The York Water Company | 0.85 | 0.72 | 3.5092 | 0.0881 |
| Average | 0.80 | 0.65 | 3.1357 | 0.0787 |
| Beta Range (+/- 2 std. Devs. of Beta) | 0.49 | 0.81 | | |
| 2 std. Devs. of Beta | 0.16 | | | |
| Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.) | 2.8601 | 3.4113 | | |
| Std. dev. of the Res. Std. Err. | 0.1378 | | | |
| 2 std. devs. of the Res. Std. Err. | 0.2756 | | | |

Source of Information: Valueline Proprietary Database, September 2021

City of Beaver Falls
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Seven Water Companies

| Proxy Group of Thirty-One Non-Price Regulated Companies | [1] VL Adjusted Beta | [2] Unadjusted Beta | [3] Residual Standard Error of the Regression | [4] Standard Deviation of Beta |
|---|---|---|---|---|
| Adobe Inc. | 0.75 | 0.55 | 3.1978 | 0.0803 |
| ANSYS, Inc. | 0.85 | 0.75 | 3.3031 | 0.0829 |
| Becton, Dickinson | 0.75 | 0.62 | 2.8923 | 0.0726 |
| Bio-Rad Labs. 'A' | 0.75 | 0.58 | 3.3904 | 0.0851 |
| Bristol-Myers Squibb | 0.85 | 0.76 | 3.3431 | 0.0839 |
| Casey's Gen'l Stores | 0.90 | 0.81 | 3.1690 | 0.0795 |
| C.H. Robinson | 0.75 | 0.55 | 2.9724 | 0.0746 |
| CSG Systems Int'l | 0.75 | 0.60 | 3.1345 | 0.0787 |
| CSW Industrials | 0.90 | 0.80 | 2.8605 | 0.0718 |
| Quest Diagnostics | 0.85 | 0.70 | 2.9807 | 0.0748 |
| Exponent, Inc. | 0.90 | 0.79 | 2.8942 | 0.0726 |
| FirstCash, Inc. | 0.90 | 0.79 | 3.2553 | 0.0817 |
| Heartland Express | 0.75 | 0.56 | 2.9213 | 0.0733 |
| Iron Mountain | 0.90 | 0.80 | 3.1804 | 0.0798 |
| Henry (Jack) & Assoc | 0.85 | 0.70 | 2.8714 | 0.0721 |
| Lancaster Colony | 0.70 | 0.52 | 2.9659 | 0.0744 |
| Lilly (Eli) | 0.75 | 0.60 | 3.2505 | 0.0816 |
| ManTech Int'l 'A' | 0.85 | 0.75 | 3.1404 | 0.0788 |
| Monster Beverage | 0.85 | 0.74 | 3.0420 | 0.0764 |
| Northrop Grumman | 0.85 | 0.74 | 2.9028 | 0.0729 |
| Progressive Corp. | 0.80 | 0.63 | 2.8764 | 0.0722 |
| PerkinElmer Inc. | 0.90 | 0.81 | 3.1146 | 0.0782 |
| Pool Corp. | 0.85 | 0.74 | 3.3291 | 0.0836 |
| RLI Corp. | 0.80 | 0.67 | 3.0414 | 0.0763 |
| Rollins, Inc. | 0.85 | 0.71 | 3.0047 | 0.0754 |
| Selective Ins. Group | 0.90 | 0.80 | 2.9915 | 0.0751 |
| TriMas Corp. | 0.85 | 0.77 | 3.3219 | 0.0834 |
| Tyler Technologies | 0.70 | 0.54 | 3.2020 | 0.0804 |
| United Parcel Serv. | 0.80 | 0.63 | 3.2463 | 0.0815 |
| Werner Enterprises | 0.75 | 0.59 | 3.3015 | 0.0829 |
| West Pharmac. Svcs. | 0.80 | 0.69 | 3.3126 | 0.0831 |
| Average | 0.82 | 0.69 | 3.1100 | 0.0781 |
| Proxy Group of Seven Water Companies | 0.80 | 0.65 | 3.1357 | 0.0787 |

Source of Information: Valueline Proprietary Database, September 2021

City of Beaver Falls
Summary of Cost of Equity Models Applied to
Proxy Group of Thirty-One Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Seven Water Companies

| Principal Methods | Proxy Group of Thirty-One Non-Price Regulated Companies |
|---|---|
| Discounted Cash Flow Model (DCF) (1) | 13.03 % |
| Risk Premium Model (RPM) (2) | 11.98 |
| Capital Asset Pricing Model (CAPM) (3) | 11.33 |
| Mean | 12.11 % |
| Median | 11.98 % |
| Average of Mean and Median | 12.05 % |

Notes:
(1) From page 31 of this Appendix.
(2) From page 32 of this Appendix.
(3) From page 35 of this Appendix.

City of Beaver Falls
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Seven Water Companies

| | [1] | [2] | [3] | [4] | [6] | [7] | [8] |
|---|---|---|---|---|---|---|---|
| Proxy Group of Thirty-One Non-Price Regulated Companies | Average Dividend Yield | Value Line Projected Five Year Growth in EPS | Zack's Five Year Projected Growth Rate in EPS | Yahoo! Finance Projected Five Year Growth in EPS | Average Projected Five Year Growth Rate in EPS | Adjusted Dividend Yield | Indicated Common Equity Cost Rate (1) |
| Adobe Inc. | - % | 15.50 % | 19.10 % | 18.28 % | 17.63 % | - % | NA % |
| ANSYS, Inc. | - | 8.00 | 11.90 | 11.18 | 10.36 | - | NA |
| Becton, Dickinson | 1.41 | 7.50 | 7.30 | 9.10 | 7.97 | 1.47 | 9.44 |
| Bio-Rad Labs. 'A' | - | 11.50 | NA | NMF | 11.50 | - | NA |
| Bristol-Myers Squibb | 3.31 | 12.50 | 7.10 | 5.97 | 8.52 | 3.45 | 11.97 |
| Casey's Gen'l Stores | 0.73 | 10.50 | NA | 7.40 | 8.95 | 0.76 | 9.71 |
| C.H. Robinson | 2.20 | 9.00 | 9.00 | 12.70 | 10.23 | 2.31 | 12.54 |
| CSG Systems Int'l | 1.99 | 11.00 | NA | (5.00) | 11.00 | 2.10 | 13.10 |
| CSW Industrials | 0.45 | 11.50 | NA | 12.00 | 11.75 | 0.48 | 12.23 |
| Quest Diagnostics | 1.68 | 7.50 | NA | (7.78) | 7.50 | 1.74 | 9.24 |
| Exponent, Inc. | 0.69 | 12.50 | NA | 15.00 | 13.75 | 0.74 | 14.49 |
| FirstCash, Inc. | 1.43 | 10.00 | NA | 23.00 | 16.50 | 1.55 | 18.05 |
| Heartland Express | 0.48 | 10.00 | NA | 13.30 | 11.65 | 0.51 | 12.16 |
| Iron Mountain | 5.40 | 8.50 | NA | 6.44 | 7.47 | 5.60 | 13.07 |
| Henry (Jack) & Assoc | 1.12 | 10.50 | 14.00 | 14.00 | 12.83 | 1.19 | 14.02 |
| Lancaster Colony | 1.91 | 5.50 | NA | 3.00 | 4.25 | 1.95 | 6.20 |
| Lilly (Eli) | 1.39 | 11.00 | 15.80 | 16.82 | 14.54 | 1.49 | 16.03 |
| ManTech Int'l 'A' | 1.94 | 9.00 | 3.80 | 5.38 | 6.06 | 2.00 | 8.06 |
| Monster Beverage | - | 11.50 | 13.90 | 14.21 | 13.20 | - | NA |
| Northrop Grumman | 1.71 | 7.50 | 9.00 | 6.00 | 7.50 | 1.77 | 9.27 |
| Progressive Corp. | 0.43 | 7.00 | 6.00 | (10.00) | 6.50 | 0.44 | 6.94 |
| PerkinElmer Inc. | 0.16 | 12.00 | 44.20 | 37.90 | 31.37 | 0.19 | 31.56 |
| Pool Corp. | 0.65 | 17.00 | NA | 17.00 | 17.00 | 0.71 | 17.71 |
| RLI Corp. | 0.94 | 12.00 | NA | NMF | 12.00 | 1.00 | 13.00 |
| Rollins, Inc. | 1.09 | 11.50 | NA | 8.20 | 9.85 | 1.14 | 10.99 |
| Selective Ins. Group | 1.43 | 12.00 | 13.40 | 13.40 | 12.93 | 1.52 | 14.45 |
| TriMas Corp. | 0.48 | 10.50 | NA | 9.34 | 9.92 | 0.50 | 10.42 |
| Tyler Technologies | - | 14.00 | NA | 10.00 | 12.00 | - | NA |
| United Parcel Serv. | 2.06 | 11.50 | 12.10 | 16.23 | 13.28 | 2.20 | 15.48 |
| Werner Enterprises | 1.05 | 10.50 | 11.10 | 13.60 | 11.73 | 1.11 | 12.84 |
| West Pharmac. Svcs. | 0.17 | 17.00 | 27.60 | 27.60 | 24.07 | 0.19 | 24.26 |
| | | | | | | Mean | 13.36 % |
| | | | | | | Median | 12.69 % |
| | | | | | | Average of Mean and Median | 13.03 % |

NA= Not Available
NMF= Not Meaningful Figure

(1) The application of the DCF model to the domestic, non-price regluated comparable risk companies is identical to the application of the DCF to the utility proxy group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of November 30, 2021. The dividend yield is then adjusted by 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information:
Value Line Investment Survey
www.zacks.com Downloaded on 11/30/2021
www.yahoo.com Downloaded on 11/30/2021
Bloomberg Professional Services

City of Beaver Falls
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

| Line No. | | Proxy Group of Thirty-One Non-Price Regulated Companies |
|---|---|---|
| 1. | Prospective Yield on Baa2 Rated Corporate Bonds (1) | 4.29 % |
| 2. | Equity Risk Premium (3) | 7.69 |
| 3. | Risk Premium Derived Common Equity Cost Rate | 11.98 % |

Notes: (1) Average forecast of Baa2 corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated December 1, 2021 (See pages 22-23 of this Appendix). The estimates are detailed below.

| | |
|---|---|
| Fourth Quarter 2021 | 3.40 % |
| First Quarter 2022 | 3.60 |
| Second Quarter 2022 | 3.80 |
| Third Quarter 2022 | 4.00 |
| Fourth Quarter 2022 | 4.20 |
| First Quarter 2023 | 4.40 |
| 2023-2027 | 5.20 |
| 2028-2032 | 5.70 |
| Average | 4.29 % |

(3) From page 34 of this Appendix.

City of Beaver Falls
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Thirty-One Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Seven Water Companies

| | Moody's Long-Term Issuer Rating November 2021 | | Standard & Poor's Long-Term Issuer Rating November 2021 | |
|---|---|---|---|---|
| Proxy Group of Thirty-One Non-Price Regulated Companies | Long-Term Issuer Rating | Numerical Weighting (1) | Long-Term Issuer Rating | Numerical Weighting (1) |
| Adobe Inc. | A2 | 6.0 | A+ | 5.0 |
| ANSYS, Inc. | NR | -- | NR | -- |
| Becton, Dickinson | Baa3 | 10.0 | BBB | 9.0 |
| Bio-Rad Labs. 'A' | Baa2 | 9.0 | BBB | 9.0 |
| Bristol-Myers Squibb | A2 | 6.0 | A+ | 5.0 |
| Casey's Gen'l Stores | NR | -- | NR | -- |
| C.H. Robinson | Baa2 | 9.0 | BBB+ | 8.0 |
| CSG Systems Int'l | NR | -- | BB+ | 11.0 |
| CSW Industrials | NR | -- | NR | -- |
| Quest Diagnostics | Baa2 | 9.0 | BBB+ | 8.0 |
| Exponent, Inc. | NR | -- | NR | -- |
| FirstCash, Inc. | Ba2 | 12.0 | BB | 12.0 |
| Heartland Express | NR | -- | NR | -- |
| Iron Mountain | Ba3 | 13.0 | BB- | 13.0 |
| Henry (Jack) & Assoc | NR | -- | NR | -- |
| Lancaster Colony | NR | -- | NR | -- |
| Lilly (Eli) | A2 | 6.0 | A+ | 5.0 |
| ManTech Int'l 'A' | WR | -- | BB+ | 11.0 |
| Monster Beverage | NR | -- | NR | -- |
| Northrop Grumman | Baa1 | 8.0 | BBB+ | 8.0 |
| Progressive Corp. | A2 | 6.0 | A | 6.0 |
| PerkinElmer Inc. | Baa3 | 10.0 | BBB | 9.0 |
| Pool Corp. | NR | -- | NR | -- |
| RLI Corp. | Baa2 | 9.0 | BBB | 9.0 |
| Rollins, Inc. | NR | -- | NR | -- |
| Selective Ins. Group | Baa2 | 9.0 | BBB | 9.0 |
| TriMas Corp. | Ba3 | 13.0 | BB | 12.0 |
| Tyler Technologies | NR | -- | NR | -- |
| United Parcel Serv. | A2 | 6.0 | A- | 7.0 |
| Werner Enterprises | NR | -- | NR | -- |
| West Pharmac. Svcs. | NR | -- | NR | -- |
| Average | Baa2 | 8.8 | BBB | 8.7 |

Notes:
(1) From page 18 of this Appendix.

Source of Information:
Bloomberg Professional Services

City of Beaver Falls
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Proxy Group of Thirty-One Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Seven Water Companies

| Line No. | Equity Risk Premium Measure | Proxy Group of Thirty-One Non-Price Regulated Companies |
|---|---|---|
| | Ibbotson-Based Equity Risk Premiums: | |
| 1. | Ibbotson Equity Risk Premium (1) | 5.92 % |
| 2. | Regression on Ibbotson Risk Premium Data (2) | 8.73 |
| 3. | Ibbotson Equity Risk Premium based on PRPM (3) | 8.42 |
| 4. | Equity Risk Premium Based on Value Line Summary and Index (4) | 6.04 |
| 5 | Equity Risk Premium Based on Value Line S&P 500 Companies (5) | 12.76 |
| 6. | Equity Risk Premium Based on Bloomberg S&P 500 Companies (6) | 13.12 |
| 7. | Conclusion of Equity Risk Premium | 9.16 % |
| 8. | Adjusted Beta (7) | 0.84 |
| 9. | Forecasted Equity Risk Premium | 7.69 % |

Notes:
(1) From note 1 of page 21 of this Appendix.
(2) From note 2 of page 21 of this Appendix.
(3) From note 3 of page 21 of this Appendix.
(4) From note 4 of page 21 of this Appendix.
(5) From note 5 of page 21 of this Appendix.
(6) From note 6 of page 21 of this Appendix.
(7) Average of mean and median beta from page 35 of this Appendix.

Sources of Information:
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Value Line Summary and Index
Blue Chip Financial Forecasts, December 1, 2021
Bloomberg Professional Services

City of Beaver Falls
Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Seven Water Companies

| Proxy Group of Thirty-One Non-Price Regulated Companies | [1] Value Line Adjusted Beta | [2] Bloomberg Beta | [3] Average Beta | [4] Market Risk Premium (1) | [5] Risk-Free Rate (2) | [6] Traditional CAPM Cost Rate | [7] ECAPM Cost Rate | [8] Indicated Common Equity Cost Rate (3) |
|---|---|---|---|---|---|---|---|---|
| Adobe Inc. | 0.75 | 0.87 | 0.81 | 10.09 % | 2.70 % | 10.87 % | 11.35 % | 11.11 % |
| ANSYS, Inc. | 0.85 | 0.98 | 0.92 | 10.09 | 2.70 | 11.98 | 12.18 | 12.08 |
| Becton, Dickinson | 0.75 | 0.57 | 0.66 | 10.09 | 2.70 | 9.36 | 10.22 | 9.79 |
| Bio-Rad Labs. 'A' | 0.75 | 0.71 | 0.73 | 10.09 | 2.70 | 10.06 | 10.74 | 10.40 |
| Bristol-Myers Squibb | 0.85 | 0.79 | 0.82 | 10.09 | 2.70 | 10.97 | 11.43 | 11.20 |
| Casey's Gen'l Stores | 0.90 | 0.93 | 0.92 | 10.09 | 2.70 | 11.98 | 12.18 | 12.08 |
| C.H. Robinson | 0.75 | 0.68 | 0.71 | 10.09 | 2.70 | 9.86 | 10.59 | 10.23 |
| CSG Systems Int'l | 0.75 | 0.90 | 0.83 | 10.09 | 2.70 | 11.07 | 11.50 | 11.29 |
| CSW Industrials | 0.90 | 1.04 | 0.97 | 10.09 | 2.70 | 12.48 | 12.56 | 12.52 |
| Quest Diagnostics | 0.85 | 0.95 | 0.90 | 10.09 | 2.70 | 11.78 | 12.03 | 11.90 |
| Exponent, Inc. | 0.90 | 0.97 | 0.94 | 10.09 | 2.70 | 12.18 | 12.33 | 12.26 |
| FirstCash, Inc. | 0.90 | 0.94 | 0.92 | 10.09 | 2.70 | 11.98 | 12.18 | 12.08 |
| Heartland Express | 0.75 | 0.77 | 0.76 | 10.09 | 2.70 | 10.37 | 10.97 | 10.67 |
| Iron Mountain | 0.90 | 1.06 | 0.98 | 10.09 | 2.70 | 12.59 | 12.64 | 12.61 |
| Henry (Jack) & Assoc | 0.85 | 0.88 | 0.87 | 10.09 | 2.70 | 11.48 | 11.80 | 11.64 |
| Lancaster Colony | 0.70 | 0.71 | 0.70 | 10.09 | 2.70 | 9.76 | 10.52 | 10.14 |
| Lilly (Eli) | 0.75 | 0.76 | 0.75 | 10.09 | 2.70 | 10.27 | 10.90 | 10.58 |
| ManTech Int'l 'A' | 0.85 | 1.11 | 0.98 | 10.09 | 2.70 | 12.59 | 12.64 | 12.61 |
| Monster Beverage | 0.85 | 0.97 | 0.91 | 10.09 | 2.70 | 11.88 | 12.11 | 11.99 |
| Northrop Grumman | 0.85 | 0.78 | 0.82 | 10.09 | 2.70 | 10.97 | 11.43 | 11.20 |
| Progressive Corp. | 0.80 | 0.77 | 0.79 | 10.09 | 2.70 | 10.67 | 11.20 | 10.93 |
| PerkinElmer Inc. | 0.90 | 0.79 | 0.85 | 10.09 | 2.70 | 11.27 | 11.65 | 11.46 |
| Pool Corp. | 0.85 | 0.98 | 0.91 | 10.09 | 2.70 | 11.88 | 12.11 | 11.99 |
| RLI Corp. | 0.80 | 0.92 | 0.86 | 10.09 | 2.70 | 11.37 | 11.73 | 11.55 |
| Rollins, Inc. | 0.85 | 0.69 | 0.77 | 10.09 | 2.70 | 10.47 | 11.05 | 10.76 |
| Selective Ins. Group | 0.90 | 1.00 | 0.95 | 10.09 | 2.70 | 12.28 | 12.41 | 12.35 |
| TriMas Corp. | 0.85 | 0.96 | 0.91 | 10.09 | 2.70 | 11.88 | 12.11 | 11.99 |
| Tyler Technologies | 0.70 | 0.79 | 0.74 | 10.09 | 2.70 | 10.16 | 10.82 | 10.49 |
| United Parcel Serv. | 0.80 | 0.83 | 0.82 | 10.09 | 2.70 | 10.97 | 11.43 | 11.20 |
| Werner Enterprises | 0.75 | 0.78 | 0.76 | 10.09 | 2.70 | 10.37 | 10.97 | 10.67 |
| West Pharmac. Svcs. | 0.80 | 0.74 | 0.77 | 10.09 | 2.70 | 10.47 | 11.05 | 10.76 |
| Mean | | | 0.84 | | | 11.17 % | 11.57 % | 11.37 % |
| Median | | | 0.83 | | | 11.07 % | 11.50 % | 11.29 % |
| Average of Mean and Median | | | 0.84 | | | 11.12 % | 11.54 % | 11.33 % |

Notes:
(1) From page 26 of this Appendix, note 1.
(2) From page 26 of this Appendix, note 2.
(3) Average of CAPM and ECAPM cost rates.

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Summary of Assets**

| [1] Account | [2] Description | [3] Original Cost | [4] Net Book Value | [5] Reproduction Cost New Less Depreciation |
|---|---|---|---|---|
| **353 - Land and Land Rights** | | | | |
| 353.2 | Land & ROW - Collection Sewers | $ 109 | $ 109 | $ 109 |
| 353.3 | Land & ROW - Pumping Station (Eastvale) | $ 1 | $ 1 | $ 1 |
| 353.4 | Land & ROW - Treatment Plant | $ 36,900 | $ 36,900 | $ 36,900 |
| | Subtotal - Land and Land Rights | $ 37,010 | $ 37,010 | $ 37,010 |
| **354 - Structures and Improvements** | | | | |
| 354.3 | Structures & Imp. - Pumping Station (Eastvale) | $ 133,168 | $ 93,218 | $ 162,943 |
| 354.4 | Structures & Imp. - WWTP | $ 4,471,176 | $ 1,879,246 | $ 4,549,835 |
| | Subtotal - Structures and Improvements | $ 4,604,344 | $ 1,972,463 | $ 4,712,779 |
| **355 - Power Generation Equipment** | | | | |
| 355.3 | Power Gen. Equip. - Pumping Station | $ 3,842 | $ 3,586 | $ 4,853 |
| 355.4 | Power Gen. Equip. - WWTP | $ 87,502 | $ - | $ - |
| | Subtotal - Power Generation Equipment | $ 91,344 | $ 3,586 | $ 4,853 |
| **360 - Collection Sewers - Force** | | | | |
| 360 | Collection Sewers - Force | $ 234,542 | $ 187,634 | $ 342,382 |
| **361 - Collection Sewers - Gravity** | | | | |
| 361 | Collection Sewers - Gravity | $ 3,880,841 | $ 2,125,701 | $ 4,804,350 |
| **363 - Services to Customers** | | | | |
| 363 | Services to Customers | $ 171,404 | $ - | $ - |
| **364 - Flow Measuring Devices** | | | | |
| 364 | Flow Measuring Devices | $ 57,141 | $ 9,344 | $ 9,800 |
| **371 - Pumping Equipment** | | | | |
| 371.3 | Pumping Equip. - Pumping Station | $ 235,843 | $ 94,337 | $ 221,392 |
| 371.4 | Pumping Equip. - WWTP | $ 351,654 | $ 41,310 | $ 42,336 |
| 371.4 | Pumping Equip. - WWTP Raw Influent Pumping Station | $ 142,799 | $ - | $ - |
| | Subtotal - Pumping Equipment | $ 730,297 | $ 135,647 | $ 263,728 |

**Cost Approach**
**Summary of Assets**

| [1] Account | [2] Description | [3] Original Cost | [4] Net Book Value | [5] Reproduction Cost New Less Depreciation |
|---|---|---|---|---|
| **380 - Treatment and Disposal Equipment** | | | | |
| 380.4 | Treatment & Disp. - WWTP | $ 1,910,837 | $ 12,600 | $ 13,344 |
| **381 - Plant Sewers** | | | | |
| 381.4 | Plant Sewers - WWTP | $ 700,785 | $ 348,714 | $ 1,082,396 |
| **382 - Outfall Sewer Lines** | | | | |
| 382.4 | Outfall Sewer Lines - WWTP | $ 3,453 | $ - | $ - |
| **389 - Other Plant and Misc Equipment** | | | | |
| 389.4 | Other Plant & Misc. Equip. - WWTP | $ 27,490 | $ 15,000 | $ 15,317 |
| **390 - Office Furniture and Equipment** | | | | |
| 390.7 | Office Furniture & Equip. - General Plant | $ 8,976 | $ 7,429 | $ 7,450 |
| **391 - Transportation Equipment** | | | | |
| 391.7 | Transportation Equip. - General Plant | $ 194,295 | $ 46,133 | $ 47,892 |
| **392 - Stores Equipment** | | | | |
| 392.7 | Stores Equip. - General Plant | $ 17,902 | $ - | $ - |
| **393 - Tools, Shop, and Garage Equipment** | | | | |
| 393.7 | Tools, Shop, & Garage Equip. - General Plant | $ 105,953 | $ 84,762 | $ 87,704 |
| **394 - Laboratory Equipment** | | | | |
| 394 | Laboratory Equip. - General Plant | $ 79,907 | $ 6,581 | $ 6,581 |
| **396 - Communication Equipment** | | | | |
| 396.7 | Communication Equip. - General Plant | $ 11,600 | $ 9,880 | $ 9,930 |
| **397 - Miscellaneous Equipment** | | | | |
| 397.7 | Misc. Equip. - General Plant | $ 2,000 | $ 1,360 | $ 1,411 |
| | **Total - Beaver Falls Wastewater System** | **$ 12,870,121** | **$ 5,003,844** | **$ 11,446,928** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **353.4** | **Land & ROW - Treatment Plant** | | | | | | | | | | | | | | |
| 353.4 | Parcel 01-001-0100.002 | 1930 | 1 | EA | | | | | | | | | | | |
| 353.4 | Parcel 01-001-0100.003 | 1930 | 1 | EA | | | | | | | | | | | |
| 353.4 | Parcel 01-001-0100.004 - DBV 865, pg 279 | 1964 | 1 | EA | | $ 10,800.00 | NA | NA | $ - | $ 10,800.00 | NA | NA | NA | NA | $ 10,800.00 |
| 353.4 | Parcel 01-001-0100.001- DBV 1005, pg 137 | 1973 | 1 | EA | | $ 26,100.00 | NA | NA | $ - | $ 26,100.00 | NA | NA | NA | NA | $ 26,100.00 |
| 353.4 | Parcel 01-001-0100.007- DBV 1005, pg 137 | 1973 | 1 | EA | | | | | | | | | | | |
| 353.4 | Parcel 01-001-0111.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | | | | | | | | | | |
| 353.4 | Parcel 01-002-0100.001 - DBV 1005, pg 137 | 1973 | 1 | EA | | | | | | | | | | | |
| 353.4 | Parcel 01-002-0101.000 - DBV 1005, pg 137 | 1973 | 1 | EA | | | | | | | | | | | |
| | **Subtotal** | | | | | **$ 36,900.00** | | | | **$ 36,900.00** | | | | | **$ 36,900.00** |
| **354.4** | **Structures & Imp. - WWTP** | | | | | | | | | | | | | | |
| 354.4 | Architect's plans and specifications | 1974 | 1 | LS | | $ 150,878.66 | 50 | 47 | $ 141,825.94 | $ 9,052.72 | 304.0 | 117.00 | 815.00 | 6.97 | $ 63,059.54 |
| 354.4 | Legal | 1974 | 1 | LS | | $ 10,000.00 | 50 | 47 | $ 9,400.00 | $ 600.00 | 304.0 | 117.00 | 815.00 | 6.97 | $ 4,179.49 |
| 354.4 | Adminstration | 1974 | 1 | LS | | $ 3,000.00 | 50 | 47 | $ 2,820.00 | $ 180.00 | 304.0 | 117.00 | 815.00 | 6.97 | $ 1,253.85 |
| 354.4 | Indirect Costs | 1974 | 1 | LS | | $ 8,000.00 | 50 | 47 | $ 7,520.00 | $ 480.00 | 304.0 | 117.00 | 815.00 | 6.97 | $ 3,343.59 |
| 354.4 | Site | 1974 | 1 | LS | | $ 25,000.00 | 50 | 47 | $ 23,500.00 | $ 1,500.00 | 304.0 | 117.00 | 815.00 | 6.97 | $ 10,448.72 |
| 354.4 | Architect's plans and specifications | 1996 | 1 | LS | | $ 487,083.25 | 50 | 25 | $ 243,541.63 | $ 243,541.63 | 304.0 | 321.00 | 815.00 | 2.54 | $ 618,337.77 |
| 354.4 | Legal | 1996 | 1 | LS | | $ 26,460.48 | 50 | 25 | $ 13,230.24 | $ 13,230.24 | 304.0 | 321.00 | 815.00 | 2.54 | $ 33,590.80 |
| 354.4 | Permits | 1996 | 1 | LS | | $ 20,500.00 | 50 | 25 | $ 10,250.00 | $ 10,250.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 26,024.14 |
| 354.4 | Land | 1996 | 1 | LS | | $ 10,737.50 | 50 | 25 | $ 5,368.75 | $ 5,368.75 | 304.0 | 321.00 | 815.00 | 2.54 | $ 13,630.94 |
| 354.4 | Erosion Control | 1996 | 1 | LS | | $ 5,800.00 | 50 | 25 | $ 2,900.00 | $ 2,900.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,362.93 |
| 354.4 | Landscaping/Final Grade | 1996 | 1 | LS | | $ 14,600.00 | 50 | 25 | $ 7,300.00 | $ 7,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 18,534.27 |
| 354.4 | Paving/Subbase | 1996 | 1 | LS | | $ 36,000.00 | 50 | 25 | $ 18,000.00 | $ 18,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 45,700.93 |
| 354.4 | Ongrade Slab/Sidewalk | 1996 | 1 | LS | | $ 17,800.00 | 50 | 25 | $ 8,900.00 | $ 8,900.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 22,596.57 |
| 354.4 | Fences | 1996 | 1 | LS | | $ 11,600.00 | 50 | 25 | $ 5,800.00 | $ 5,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 14,725.86 |
| 354.4 | Main Equipment Building Original Remaining in Service-Above Grade | 1964 | 1 | LS | $ 391,800.00 | $ 26,921.23 | 50 | 57 | $ 26,921.23 | $ - | 304.0 | 56.00 | 815.00 | 14.55 | $ - |
| 354.4 | Main Equipment Building Original Remaining in Service-Below Grade | 1964 | 1 | LS | $ 467,000.00 | $ 32,088.34 | 50 | 57 | $ 32,088.34 | $ - | 304.0 | 56.00 | 815.00 | 14.55 | $ - |
| 354.4 | Power Feed Mains | 1964 | 1 | LS | $ 95,000.00 | $ 6,527.61 | 50 | 57 | $ 6,527.61 | $ - | 304.0 | 56.00 | 815.00 | 14.55 | $ - |
| 354.4 | Grit Chamber Rebuild CO#1 | 1996 | 1 | LS | | $ 5,791.10 | 50 | 25 | $ 2,895.55 | $ 2,895.55 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,351.63 |
| 354.4 | Grit Chamber Painting CO#1 | 1996 | 1 | LS | | $ 1,412.82 | 50 | 25 | $ 706.41 | $ 706.41 | 304.0 | 321.00 | 815.00 | 2.54 | $ 1,793.53 |
| 354.4 | Replace Roof Over Existing Bldg CO#3 | 1996 | 1 | LS | | $ 39,768.12 | 50 | 25 | $ 19,884.06 | $ 19,884.06 | 304.0 | 321.00 | 815.00 | 2.54 | $ 50,484.45 |
| 354.4 | Roof Improvements CO#5 | 1996 | 1 | LS | | $ 20,000.00 | 50 | 25 | $ 10,000.00 | $ 10,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 25,389.41 |
| 354.4 | Ex. Primary Settling Tank Mech Mods. | 1996 | 1 | LS | | $ 11,000.00 | 50 | 25 | $ 5,500.00 | $ 5,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 13,964.17 |
| 354.4 | Primary Settling Tanks 1, 2,3 original Remaining in Service | 1964 | 1 | LS | $ 410,000.00 | $ 28,171.78 | 50 | 57 | $ 28,171.78 | $ - | 304.0 | 56.00 | 815.00 | 14.55 | $ - |
| 354.4 | Ex. Primary Settling Tank General Mods. | 1996 | 1 | LS | | $ 20,000.00 | 50 | 25 | $ 10,000.00 | $ 10,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 25,389.41 |
| 354.4 | Electrical - Primary Settling Tanks | 1996 | 1 | LS | | $ 5,020.00 | 50 | 25 | $ 2,510.00 | $ 2,510.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 6,372.74 |
| 354.4 | Ex Prim Eff Pump Station Gratings/Supports | 1996 | 1 | LS | | $ 6,000.00 | 50 | 25 | $ 3,000.00 | $ 3,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,616.82 |
| 354.4 | Ex Pump Stations Grating & Supports | 1996 | 1 | LS | | $ 1,000.00 | 50 | 25 | $ 500.00 | $ 500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 1,269.47 |
| 354.4 | Expansion of existing Secondary Pump Station wetwell | 2010 | 1 | LS | $ 200,000.00 | $ 137,361.96 | 50 | 11 | $ 30,219.63 | $ 107,142.33 | 304.0 | 559.75 | 815.00 | 1.46 | $ 156,000.00 |
| 354.4 | Oxidation Tower 1 - Remaining in Service | 1996 | 1 | LS | | $ 136,300.00 | 50 | 25 | $ 68,150.00 | $ 68,150.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 173,028.82 |
| 354.4 | Oxidation Tower 1 - Modification/EPDM | 1996 | 1 | LS | | $ 12,095.00 | 50 | 25 | $ 6,047.50 | $ 6,047.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 15,354.24 |
| 354.4 | Oxidation Tower 1 -Brick/Mortar Work | 1996 | 1 | LS | | $ 4,800.00 | 50 | 25 | $ 2,400.00 | $ 2,400.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 6,093.46 |
| 354.4 | Ex Ox Tower Stairs/Railings | 1996 | 1 | LS | | $ 14,200.00 | 50 | 25 | $ 7,100.00 | $ 7,100.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 18,026.48 |
| 354.4 | Oxidation Tower 2 - Excavate | 1996 | 1 | LS | | $ 5,600.00 | 50 | 25 | $ 2,800.00 | $ 2,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,109.03 |
| 354.4 | Oxidation Tower 2 - Reinforce Steel | 1996 | 1 | LS | | $ 26,900.00 | 50 | 25 | $ 13,450.00 | $ 13,450.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 34,148.75 |
| 354.4 | Oxidation Tower 2 - Pipe Encase & Fottomg | 1996 | 1 | LS | | $ 8,200.00 | 50 | 25 | $ 4,100.00 | $ 4,100.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 10,409.66 |
| 354.4 | Oxidation Tower 2 - Trough Pour | 1996 | 1 | LS | | $ 7,600.00 | 50 | 25 | $ 3,800.00 | $ 3,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 9,647.98 |
| 354.4 | Oxidation Tower 2 - Sub-base | 1996 | 1 | LS | | $ 6,300.00 | 50 | 25 | $ 3,150.00 | $ 3,150.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,997.66 |
| 354.4 | Oxidation Tower 2 - Base slab | 1996 | 1 | LS | | $ 41,100.00 | 50 | 25 | $ 20,550.00 | $ 20,550.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 52,175.23 |
| 354.4 | Oxidation Tower 2 - Ring Wall | 1996 | 1 | LS | | $ 16,600.00 | 50 | 25 | $ 8,300.00 | $ 8,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 21,073.21 |
| 354.4 | Oxidation Tower 2 - Beams | 1996 | 1 | LS | | $ 12,600.00 | 50 | 25 | $ 6,300.00 | $ 6,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 15,995.33 |
| 354.4 | Oxidation Tower 2 - Vent Walls | 1996 | 1 | LS | | $ 5,200.00 | 50 | 25 | $ 2,600.00 | $ 2,600.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 6,601.25 |
| 354.4 | Oxidation Tower 2 - Grout | 1996 | 1 | LS | | $ 1,600.00 | 50 | 25 | $ 800.00 | $ 800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 2,031.15 |
| 354.4 | Oxidation Tower 2 - Anchor bolts/Tank Plate | 1996 | 1 | LS | | $ 4,600.00 | 50 | 25 | $ 2,300.00 | $ 2,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,839.56 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 354.4 | Oxidation Tower 2 - Stair System Piers/Excavate/Reinforce/Pou | 1996 | 1 | LS | | $ 8,400.00 | 50 | 25 | $ 4,200.00 | $ 4,200.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 10,663.55 |
| 354.4 | New Ox Tower#2 Grating/frames/ Stairs/Railings | 1996 | 1 | LS | | $ 17,500.00 | 50 | 25 | $ 8,750.00 | $ 8,750.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 22,215.73 |
| 354.4 | Ladders Ox Tower CO#3 | 1996 | 1 | LS | | $ 1,741.30 | 50 | 25 | $ 870.65 | $ 870.65 | 304.0 | 321.00 | 815.00 | 2.54 | $ 2,210.53 |
| 354.4 | Electrical - Oxidation Towers 1 and 2 | 1996 | 1 | LS | | $ 3,220.00 | 50 | 25 | $ 1,610.00 | $ 1,610.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 4,087.69 |
| 354.4 | Recirculation/Distribution Structure | 1996 | 1 | LS | | $ 19,000.00 | 50 | 25 | $ 9,500.00 | $ 9,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 24,119.94 |
| 354.4 | Manhole "A" | 1996 | 1 | LS | | $ 3,700.00 | 50 | 25 | $ 1,850.00 | $ 1,850.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 4,697.04 |
| 354.4 | Recirc/Dist STR. Grating & Supports | 1996 | 1 | LS | | $ 4,800.00 | 50 | 25 | $ 2,400.00 | $ 2,400.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 6,093.46 |
| 354.4 | Fin. Settling Tanks - Excavate | 1996 | 1 | LS | | $ 9,600.00 | 50 | 25 | $ 4,800.00 | $ 4,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 12,186.92 |
| 354.4 | Fin. Settling Tanks - Gravel Base | 1996 | 1 | LS | | $ 5,600.00 | 50 | 25 | $ 2,800.00 | $ 2,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,109.03 |
| 354.4 | Fin. Settling Tanks - Slab Reinforcement | 1996 | 1 | LS | | $ 21,000.00 | 50 | 25 | $ 10,500.00 | $ 10,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 26,658.88 |
| 354.4 | Fin. Settling Tanks - Slab Form & Pour | 1996 | 1 | LS | | $ 62,600.00 | 50 | 25 | $ 31,300.00 | $ 31,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 79,468.85 |
| 354.4 | Fin. Settling Tanks - Hoppers/Reinforcement | 1996 | 1 | LS | | $ 13,000.00 | 50 | 25 | $ 6,500.00 | $ 6,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 16,503.12 |
| 354.4 | Fin. Settling Tanks - Hoppers/Form & Pour | 1996 | 1 | LS | | $ 21,600.00 | 50 | 25 | $ 10,800.00 | $ 10,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 27,420.56 |
| 354.4 | Fin. Settling Tanks - Walls/Reinforcement | 1996 | 1 | LS | | $ 24,000.00 | 50 | 25 | $ 12,000.00 | $ 12,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 30,467.29 |
| 354.4 | Fin. Settling Tanks - Walls/Form & Pour | 1996 | 1 | LS | | $ 74,000.00 | 50 | 25 | $ 37,000.00 | $ 37,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 93,940.81 |
| 354.4 | Fin. Settling Tanks - Grout | 1996 | 1 | LS | | $ 9,600.00 | 50 | 25 | $ 4,800.00 | $ 4,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 12,186.92 |
| 354.4 | Fin. Settling Tanks - Walkways/Form & Pour Embedded Items | 1996 | 1 | LS | | $ 13,600.00 | 50 | 25 | $ 6,800.00 | $ 6,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 17,264.80 |
| 354.4 | Fin. Settling Tanks - Embedded Items | 1996 | 1 | LS | | $ 3,600.00 | 50 | 25 | $ 1,800.00 | $ 1,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 4,570.09 |
| 354.4 | Fin. Settling Tanks - Offsite Dirt Handling - All | 1996 | 1 | LS | | $ 22,000.00 | 50 | 25 | $ 11,000.00 | $ 11,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 27,928.35 |
| 354.4 | Final Sed Tanks-Grating/ Frames/Stairs/Railings | 1996 | 1 | LS | | $ 34,000.00 | 50 | 25 | $ 17,000.00 | $ 17,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 43,161.99 |
| 354.4 | Ground Stabilization at Final Tanks CO#1 | 1996 | 1 | LS | | $ 10,343.30 | 50 | 25 | $ 5,171.65 | $ 5,171.65 | 304.0 | 321.00 | 815.00 | 2.54 | $ 13,130.51 |
| 354.4 | Electrical - Final Settling Tanks | 1996 | 1 | LS | | $ 9,551.00 | 50 | 25 | $ 4,775.50 | $ 4,775.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 12,124.71 |
| 354.4 | Electrical - Settling Tank Lighting | 1996 | 1 | LS | | $ 8,611.00 | 50 | 25 | $ 4,305.50 | $ 4,305.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 10,931.41 |
| 354.4 | Utility Water from Chlorine Tanks to Belt Press Bldg. | 1996 | 1 | LS | | $ 13,400.00 | 50 | 25 | $ 6,700.00 | $ 6,700.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 17,010.90 |
| 354.4 | Electrical - Sampler | 1996 | 1 | LS | | $ 9,465.00 | 50 | 25 | $ 4,732.50 | $ 4,732.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 12,015.54 |
| 354.4 | Grit Washer/ScumConcentrator/Stairs,Platforms, Railing | 1996 | 1 | LS | | $ 4,200.00 | 50 | 25 | $ 2,100.00 | $ 2,100.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,331.78 |
| 354.4 | Electrical - Grit Washer | 1996 | 1 | LS | | $ 2,265.00 | 50 | 25 | $ 1,132.50 | $ 1,132.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 2,875.35 |
| 354.4 | Aerated Sludge Holding Tank - Excavation | 1996 | 1 | LS | | $ 17,600.00 | 50 | 25 | $ 8,800.00 | $ 8,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 22,342.68 |
| 354.4 | Aerated Sludge Holding Tank - Gravel Base | 1996 | 1 | LS | | $ 9,900.00 | 50 | 25 | $ 4,950.00 | $ 4,950.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 12,567.76 |
| 354.4 | Aerated Sludge Holding Tank - Slab Reinforcement | 1996 | 1 | LS | | $ 39,000.00 | 50 | 25 | $ 19,500.00 | $ 19,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 49,509.35 |
| 354.4 | Aerated Sludge Holding Tank - Slab Form & Pour | 1996 | 1 | LS | | $ 49,600.00 | 50 | 25 | $ 24,800.00 | $ 24,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 62,965.73 |
| 354.4 | Aerated Sludge Holding Tank - Wall Reinforcement | 1996 | 1 | LS | | $ 31,000.00 | 50 | 25 | $ 15,500.00 | $ 15,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 39,353.58 |
| 354.4 | Aerated Sludge Holding Tank - Wall Form & Pour | 1996 | 1 | LS | | $ 77,000.00 | 50 | 25 | $ 38,500.00 | $ 38,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 97,749.22 |
| 354.4 | Aerated Sludge Holding Tank - Footer Drainage | 1996 | 1 | LS | | $ 6,000.00 | 50 | 25 | $ 3,000.00 | $ 3,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,616.82 |
| 354.4 | Aerated Sludge Holding Tank - Grout | 1996 | 1 | LS | | $ 11,000.00 | 50 | 25 | $ 5,500.00 | $ 5,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 13,964.17 |
| 354.4 | Thickened Sludge/Belt Press - Reinforcement | 1996 | 1 | LS | | $ 12,900.00 | 50 | 25 | $ 6,450.00 | $ 6,450.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 16,376.17 |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | | $ 36,800.00 | 50 | 25 | $ 18,400.00 | $ 18,400.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 46,716.51 |
| 354.4 | Thickened Sludge/Belt Press - Slab on Decking | 1996 | 1 | LS | | $ 12,600.00 | 50 | 25 | $ 6,300.00 | $ 6,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 15,995.33 |
| 354.4 | Thickened Sludge/Belt Press - Excavation | 1996 | 1 | LS | | $ 6,800.00 | 50 | 25 | $ 3,400.00 | $ 3,400.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 8,632.40 |
| 354.4 | Thickened Sludge/Belt Press - Gravel Base | 1996 | 1 | LS | | $ 2,800.00 | 50 | 25 | $ 1,400.00 | $ 1,400.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 3,554.52 |
| 354.4 | Thickened Sludge/Belt Press - Slab Reinforcement | 1996 | 1 | LS | | $ 18,000.00 | 50 | 25 | $ 9,000.00 | $ 9,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 22,850.47 |
| 354.4 | Thickened Sludge/Belt Press - Form & Pour | 1996 | 1 | LS | | $ 38,600.00 | 50 | 25 | $ 19,300.00 | $ 19,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 49,001.56 |
| 354.4 | Thickened Sludge/Belt Press - Sump/Reinforce/Pour | 1996 | 1 | LS | | $ 3,100.00 | 50 | 25 | $ 1,550.00 | $ 1,550.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 3,935.36 |
| 354.4 | Thickened Sludge/Belt Press - Wall Reinforcement | 1996 | 1 | LS | | $ 12,900.00 | 50 | 25 | $ 6,450.00 | $ 6,450.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 16,376.17 |
| 354.4 | Thickened Sludge/Belt Press - Wall Form & Pour | 1996 | 1 | LS | | $ 22,000.00 | 50 | 25 | $ 11,000.00 | $ 11,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 27,928.35 |
| 354.4 | Anerobic Digesters 1 & 2 Original Remaining in Service | 1937 | 1 | LS | $ 300,105.00 | $ 6,628.09 | 50 | 84 | $ 6,628.09 | $ - | 304.0 | 18.00 | 815.00 | 45.28 | $ - |
| 354.4 | Remove Sludge from Digestor #2 CO#3 | 1996 | 1 | LS | | $ 29,447.05 | 50 | 25 | $ 14,723.53 | $ 14,723.53 | 304.0 | 321.00 | 815.00 | 2.54 | $ 37,382.16 |
| 354.4 | Add Clean/Patch/Paint Interior Wall s of Digestor #2 CO#3 | 1996 | 1 | LS | | $ 7,746.40 | 50 | 25 | $ 3,873.20 | $ 3,873.20 | 304.0 | 321.00 | 815.00 | 2.54 | $ 9,833.83 |
| 354.4 | Sludge Drying Bed (one) Remaining in Service | 1937 | 1 | LS | $ 150,000.00 | $ 3,312.88 | 50 | 84 | $ 3,312.88 | $ - | 304.0 | 18.00 | 815.00 | 45.28 | $ - |
| 354.4 | Digester Control Building Remaining in Service | 1937 | 1 | LS | $ 159,000.00 | $ 3,511.66 | 50 | 84 | $ 3,511.66 | $ - | 304.0 | 18.00 | 815.00 | 45.28 | $ - |
| 354.4 | Belt Press Bldg - Doors & Windows | 1996 | 1 | LS | | $ 21,265.00 | 50 | 25 | $ 10,632.50 | $ 10,632.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 26,995.29 |
| 354.4 | Belt Press Bldg- Access Hatch | 1996 | 1 | LS | | $ 4,600.00 | 50 | 25 | $ 2,300.00 | $ 2,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,839.56 |
| 354.4 | Belt Press Bldg - Ceiling | 1996 | 1 | LS | | $ 2,600.00 | 50 | 25 | $ 1,300.00 | $ 1,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 3,300.62 |
| 354.4 | Belt Press Bldg - HVAC & Gas Lines | 1996 | 1 | LS | | $ 26,300.00 | 50 | 25 | $ 13,150.00 | $ 13,150.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 33,387.07 |
| 354.4 | Belt Press Bldg - Roof/Flr Drains and Plumbing | 1996 | 1 | LS | | $ 19,400.00 | 50 | 25 | $ 9,700.00 | $ 9,700.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 24,627.73 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 354.4 | Belt Prss Bldg - Carpet Paint/Finishers | 1996 | 1 | LS | | $ 12,000.00 | 50 | 25 | $ 6,000.00 | $ 6,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 15,233.64 |
| 354.4 | Belt Press Bldg - pipe encasement | 1996 | 1 | LS | | $ 5,800.00 | 50 | 25 | $ 2,900.00 | $ 2,900.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 7,362.93 |
| 354.4 | Belt Press Bldg - Roof/Flash | 1996 | 1 | LS | | $ 34,000.00 | 50 | 25 | $ 17,000.00 | $ 17,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 43,161.99 |
| 354.4 | Belt Press Bldg - Concrete Masonry Unit | 1996 | 1 | LS | | $ 48,000.00 | 50 | 25 | $ 24,000.00 | $ 24,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 60,934.58 |
| 354.4 | Belt Press Bldg - Insulation | 1996 | 1 | LS | | $ 4,000.00 | 50 | 25 | $ 2,000.00 | $ 2,000.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,077.88 |
| 354.4 | Belt Filter Press Bldg- Walkways/Railings/Support Access Hatches/Platforms & Railings at Press/Alum Ladder Steel Joists | 1996 | 1 | LS | | $ 79,000.00 | 50 | 25 | $ 39,500.00 | $ 39,500.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 100,288.16 |
| 354.4 | Electrical - Belt Filter Press | 1996 | 1 | LS | | $ 15,220.00 | 50 | 25 | $ 7,610.00 | $ 7,610.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 19,321.34 |
| 354.4 | Utility Water Booster System | 1996 | 1 | LS | | $ 57,800.00 | 50 | 25 | $ 28,900.00 | $ 28,900.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 73,375.39 |
| 354.4 | Electrical - BFP/Garge, Misc. | 1996 | 1 | LS | | $ 12,658.00 | 50 | 25 | $ 6,329.00 | $ 6,329.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 16,068.96 |
| 354.4 | Laboratory/Garage - Excavate & Pour | 1996 | 1 | LS | | $ 6,600.00 | 50 | 25 | $ 3,300.00 | $ 3,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 8,378.50 |
| 354.4 | Laboratory/Garage - Slab Complete | 1996 | 1 | LS | | $ 13,600.00 | 50 | 25 | $ 6,800.00 | $ 6,800.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 17,264.80 |
| 354.4 | Electrical - Lab Office | 1996 | 1 | LS | | $ 4,177.00 | 50 | 25 | $ 2,088.50 | $ 2,088.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,302.58 |
| 354.4 | Electrical - Garage | 1996 | 1 | LS | | $ 4,177.00 | 50 | 25 | $ 2,088.50 | $ 2,088.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,302.58 |
| 354.4 | Painting | 1996 | 1 | LS | | $ 94,600.00 | 50 | 25 | $ 47,300.00 | $ 47,300.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 120,091.90 |
| 354.4 | Electrical Lighting | 1996 | 1 | LS | | $ 7,703.00 | 50 | 25 | $ 3,851.50 | $ 3,851.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 9,778.73 |
| 354.4 | Electrical - Entrance Area Lighting | 1996 | 1 | LS | | $ 6,931.00 | 50 | 25 | $ 3,465.50 | $ 3,465.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 8,798.70 |
| 354.4 | Road Between Existing Bldg & Primary Tanks CO#3 | 1996 | 1 | LS | | $ 2,384.32 | 50 | 25 | $ 1,192.16 | $ 1,192.16 | 304.0 | 321.00 | 815.00 | 2.54 | $ 3,026.82 |
| 354.4 | Replace Existing Handrail CO#3 | 1996 | 1 | LS | | $ 36,563.98 | 50 | 25 | $ 18,281.99 | $ 18,281.99 | 304.0 | 321.00 | 815.00 | 2.54 | $ 46,416.89 |
| 354.4 | Additional Fence CO#5 | 1996 | 1 | LS | | $ 24,926.85 | 50 | 25 | $ 12,463.43 | $ 12,463.43 | 304.0 | 321.00 | 815.00 | 2.54 | $ 31,643.90 |
| 354.4 | Electrical - Panel MCP | 1996 | 1 | LS | | $ 66,306.00 | 50 | 25 | $ 33,153.00 | $ 33,153.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 84,173.50 |
| 354.4 | Electrical - Blowers | 1996 | 1 | LS | | $ 2,975.00 | 50 | 25 | $ 1,487.50 | $ 1,487.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 3,776.67 |
| 354.4 | Electrical - Breaker Panels - 2 | 1996 | 1 | LS | | $ 4,175.00 | 50 | 25 | $ 2,087.50 | $ 2,087.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,300.04 |
| 354.4 | Electrical - Transformers | 1996 | 1 | LS | | $ 1,555.00 | 50 | 25 | $ 777.50 | $ 777.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 1,974.03 |
| 354.4 | Electrical - Panel DP-2 | 1996 | 1 | LS | | $ 66,306.00 | 50 | 25 | $ 33,153.00 | $ 33,153.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 84,173.50 |
| 354.4 | Electrical - Square D Breakers - 2 | 1996 | 1 | LS | | $ 3,998.00 | 50 | 25 | $ 1,999.00 | $ 1,999.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 5,075.34 |
| 354.4 | Electrical - Main Pump Building Misc. | 1996 | 1 | LS | | $ 12,058.00 | 50 | 25 | $ 6,029.00 | $ 6,029.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 15,307.27 |
| 354.4 | Electrical - Panel DP-1 | 1996 | 1 | LS | | $ 66,306.00 | 50 | 25 | $ 33,153.00 | $ 33,153.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 84,173.50 |
| 354.4 | Electrical - Westinghouse Breaker | 1996 | 1 | LS | | $ 1,999.00 | 50 | 25 | $ 999.50 | $ 999.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 2,537.67 |
| 354.4 | Electrical - Duct Banks | 1996 | 1 | LS | | $ 11,369.00 | 50 | 25 | $ 5,684.50 | $ 5,684.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 14,432.61 |
| 354.4 | Electrical - ESP System | 1996 | 1 | LS | | $ 24,710.00 | 50 | 25 | $ 12,355.00 | $ 12,355.00 | 304.0 | 321.00 | 815.00 | 2.54 | $ 31,368.61 |
| 354.4 | Electrical - Interlink RTU | 1996 | 1 | LS | | $ 11,097.00 | 50 | 25 | $ 5,548.50 | $ 5,548.50 | 304.0 | 321.00 | 815.00 | 2.54 | $ 14,087.31 |
| 354.4 | Electrical Secondary Pump Station Power Feed Mains | 2020 | 1 | LS | $ 73,000.00 | $ 65,856.75 | 50 | 1 | $ 1,317.13 | $ 64,539.61 | 304.0 | 735.25 | 815.00 | 1.11 | $ 71,540.00 |
| 354.4 | Secondary Pump Station, Garage, Oxidation Tower, Final Settling Tanks 1 & 2 and Chlorine Contact Tanks 1 & 2 original to remain in service | 1974 | 1 | LS | | $ 874,793.45 | 50 | 47 | $ 822,305.84 | $ 52,487.61 | 304.0 | 117.00 | 815.00 | 6.97 | $ 365,618.80 |
| 354.4 | Three-Bay Metal Vehicle and Equipment Storgae Building with Interior Office Space | 2010 | 1 | LS | $ 513,250.00 | $ 352,505.14 | 50 | 11 | $ 77,551.13 | $ 274,954.01 | 304.0 | 559.75 | 815.00 | 1.46 | $ 400,335.00 |
| | **Subtotal** | | | | | **$ 4,471,176.01** | | | | **$ 1,879,245.51** | | | | | **$ 4,549,835.14** |
| **355.4** | **Power Gen. Equip. - WWTP** | | | | | | | | | | | | | | |
| 355.4 | Electrical - Generator | 1996 | 1 | LS | | $ 87,502.00 | 15 | 25 | $ 87,502.00 | $ - | | 348.25 | 742.00 | 2.13 | $ - |
| | **Subtotal** | | | | | **$ 87,502.00** | | | | **$ -** | | | | | **$ -** |
| **371.3** | **Pumping Equip. - WWTP** | | | | | | | | | | | | | | |
| 371.3 | Mission - Grit Pump | 1996 | 1 | EA | | $ 10,700.00 | 25 | 25 | $ 10,700.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Grit Pump | 1996 | 1 | LS | | $ 1,910.00 | 25 | 25 | $ 1,910.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Flygt Model CT3300 Centrifugal Primary Effluent Pumps | 1996 | 4 | EA | | $ 88,000.00 | 25 | 25 | $ 88,000.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Ex. Primary Eff. Pump Mods/Control Valve/Mtrs | 1996 | 1 | LS | | $ 14,100.00 | 25 | 25 | $ 14,100.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Primary Pumps | 1996 | 1 | LS | | $ 7,641.00 | 25 | 25 | $ 7,641.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Install Sewage Sump Simplex system | 1996 | 1 | LS | | $ 12,400.00 | 25 | 25 | $ 12,400.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Install Sewage Sump Duplex system Zoeller Model #282 | 1996 | 1 | LS | | $ 18,900.00 | 25 | 25 | $ 18,900.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Sump Pumps | 1996 | 1 | LS | | $ 1,430.00 | 25 | 25 | $ 1,430.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Digester Recirculation Pumps | 1996 | 2 | EA | | $ 27,000.00 | 25 | 25 | $ 27,000.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 371.3 | Moyno Progressive Cavity Pump, 2000 Series, Model 1G090G1CDQAAA, #AS4702896A, 200GPM, 25', 235RPM, Single Stage, 8 X 8, 7.5HP AC Totally Enclosed Fan Cooled Motor, 1200RPM, Extreme Duty, Unit Base Steel, Complete with piping, connections, wiring and controls. | 2020 | 1 | LS | $ 7,000.00 | $ 6,830.38 | 25 | 1 | $ 273.22 | $ 6,557.16 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 6,720.00 |
| 371.3 | PIONEER Self-Priming Pump, Model SBHCP3F-0036DD, #2462, 4 X 4, 3HP with wiring, conrols, piping and connections | 2020 | 1 | LS | $ 3,000.00 | $ 2,927.30 | 25 | 1 | $ 117.09 | $ 2,810.21 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 2,880.00 |
| 371.3 | Yale 2-ton capacity spur geared chain hoist with 4 wheel trolley and rail | 2020 | 1 | LS | $ 900.00 | $ 878.19 | 25 | 1 | $ 35.13 | $ 843.06 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 864.00 |
| 371.3 | Moyno Progressive Cavity Primary Sludge Pumps, Model #IHII5 | 1996 | 2 | EA | | $ 32,000.00 | 25 | 25 | $ 32,000.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Primary Sludge Pumps | 1996 | 1 | LS | | $ 3,820.00 | 25 | 25 | $ 3,820.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Mission - 4" x 3" x 13" Secondary Sludge Pumps | 1996 | 2 | EA | | $ 30,300.00 | 25 | 25 | $ 30,300.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Secondary Pumps | 1996 | 1 | LS | | $ 3,820.00 | 25 | 25 | $ 3,820.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Moyno Model #IHII5GICDQAAA - Gravity Belt Thickener Pumps | 1996 | 2 | EA | | $ 15,600.00 | 25 | 25 | $ 15,600.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Moyno Model IG065GICDQAAA Thickened Sludge Pumps | 1996 | 2 | EA | | $ 29,100.00 | 25 | 25 | $ 29,100.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Sludge Pumps (4) | 1996 | 1 | LS | | $ 11,902.00 | 25 | 25 | $ 11,902.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Monorail Crane With coffing electric chain hoist and crane rail | 2020 | 1 | LS | $ 2,000.00 | $ 1,951.54 | 25 | 1 | $ 78.06 | $ 1,873.47 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 1,920.00 |
| 371.3 | Monorail Crane, 2 ton capacity with Little Mule 2 Ton Capacity Electric Chain Hoist, 4 wheel trolley & 6' tank lift beam | 2020 | 1 | LS | $ 2,800.00 | $ 2,732.15 | 25 | 1 | $ 109.29 | $ 2,622.86 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 2,688.00 |
| 371.3 | Wright Safeway 2 Ton Capacity Spur Geared Chain Hoist on 4 Wheel Trolley, complete with Rail and Yale Electric Chain Hoist. | 2020 | 1 | LS | $ 3,400.00 | $ 3,317.61 | 25 | 1 | $ 132.70 | $ 3,184.91 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 3,264.00 |
| 371.3 | Flygt Submersible Sewage Pump, Model 3201.180-131011, 320 | 2020 | 1 | LS | $ 25,000.00 | $ 24,394.20 | 25 | 1 | $ 975.77 | $ 23,418.43 | 311.0 | 1429.50 | 1465.00 | 1.02 | $ 24,000.00 |
| | **Subtotal** | | | | | **$ 351,654.37** | | | | **$ 41,310.11** | | | | | **$ 42,336.00** |
| **371.3** | **Raw Sewage Pump Station** | | | | | | | | | | | | | | |
| 371.3 | Flygt dry pit submersible pumps - Raw | 1996 | 4 | EA | | $ 112,400.00 | 25 | 25 | $ 112,400.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Concrete Pump Supports Raw Sewage and Prime Sludge Pump | 1996 | 1 | LS | | $ 3,900.00 | 25 | 25 | $ 3,900.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Core holes and install water seal for pumps | 1996 | 1 | LS | | $ 3,600.00 | 25 | 25 | $ 3,600.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Chain Hoist filler Plates | 1996 | 1 | LS | | $ 3,200.00 | 25 | 25 | $ 3,200.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Pump Station Misc. | 1996 | 1 | LS | | $ 12,058.00 | 25 | 25 | $ 12,058.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| 371.3 | Electrical - Raw Sewage Pumps | 1996 | 1 | LS | | $ 7,641.00 | 25 | 25 | $ 7,641.00 | $ - | 311.0 | 450.00 | 1465.00 | 3.26 | $ - |
| | **Subtotal** | | | | | **$ 142,799.00** | | | | **$ -** | | | | | **$ -** |
| **380.4** | **Treatment & Disp. - WWTP** | | | | | | | | | | | | | | |
| **380.4** | **Preliminary Treatment Building** | | | | | | | | | | | | | | |
| 380.4 | Fine Screen #1 Remaining in Service | 1964 | 1 | EA | $ 542,000.00 | $ 34,376.32 | 25 | 57 | $ 34,376.32 | $ - | 320.0 | 60.00 | 946.00 | 15.77 | $ - |
| 380.4 | Fine Screen #2 Remaining in Service | 1964 | 1 | EA | $ 542,000.00 | $ 34,376.32 | 25 | 57 | $ 34,376.32 | $ - | 320.0 | 60.00 | 946.00 | 15.77 | $ - |
| 380.4 | Install Self Cleaning Wiese-Flo Mechanical Bar Screen & Compa | 1996 | 1 | LS | | $ 56,000.00 | 25 | 25 | $ 56,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Auxiliary Auger for Bar Screen CO#3 | 1996 | 1 | LS | | $ 41,342.37 | 25 | 25 | $ 41,342.37 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Grit Chamber Equipment | 1996 | 1 | LS | | $ 36,000.00 | 25 | 25 | $ 36,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Worthington Air Compressor | 2020 | 1 | LS | $ 450.00 | $ 424.91 | 25 | 1 | $ 17.00 | $ 407.91 | 320.0 | 893.25 | 946.00 | 1.06 | $ 432.00 |
| 380.4 | Manning Sampler, Model 6901-DC, #980213AA690102 with ref | 2020 | 1 | LS | $ 1,200.00 | $ 1,133.09 | 25 | 1 | $ 45.32 | $ 1,087.76 | 320.0 | 893.25 | 946.00 | 1.06 | $ 1,152.00 |
| 380.4 | Chlorine Gas Monitoring System - Siemens W&T Acute 35 with | 2020 | 1 | LS | $ 3,600.00 | $ 3,399.26 | 25 | 1 | $ 135.97 | $ 3,263.29 | 320.0 | 893.25 | 946.00 | 1.06 | $ 3,456.00 |
| 380.4 | Chlorination System - 2 chlorinators/regulators, 1-Halogen Valve System, 2 - Chlorinators and wiring and controls | 2020 | 1 | LS | $ 7,000.00 | $ 6,609.67 | 25 | 1 | $ 264.39 | $ 6,345.29 | 320.0 | 893.25 | 946.00 | 1.06 | $ 6,720.00 |
| 380.4 | Exhaust Fan, Thru-Wall, 1/3 HP complete with conduit and wiring | 2020 | 1 | LS | $ 150.00 | $ 141.64 | 25 | 1 | $ 5.67 | $ 135.97 | 320.0 | 893.25 | 946.00 | 1.06 | $ 144.00 |
| 380.4 | ROOTS Connerville Blower, Type FF-Size 610 | 2020 | 1 | LS | $ 1,500.00 | $ 1,416.36 | 25 | 1 | $ 56.65 | $ 1,359.70 | 320.0 | 893.25 | 946.00 | 1.06 | $ 1,440.00 |
| 380.4 | **Primary Settling Tanks 1,2 & 3** | | 3 | EA | | | | | | | | | | | |
| 380.4 | Install Weir/Troughs Ex Prim | 1996 | 1 | LS | | $ 36,500.00 | 25 | 25 | $ 36,500.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Oxidation Towers 1** | | | | | | | | | | | | | | |
| 380.4 | Install Media EX tower | 1974 | 1 | LS | | $ 155,974.50 | 25 | 47 | $ 155,974.50 | $ - | 320.0 | 118.00 | 946.00 | 8.02 | $ - |
| 380.4 | Rotary Distributors | 1974 | 1 | LS | | $ 23,907.00 | 25 | 47 | $ 23,907.00 | $ - | 320.0 | 118.00 | 946.00 | 8.02 | $ - |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1974 | 1 | LS | $ 17,067.49 | $ 2,128.93 | 25 | 47 | $ 2,128.93 | $ - | 320.0 | 118.00 | 946.00 | 8.02 | $ - |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 380.4 | **Oxidation Towers 2** | | | | | | | | | | | | | | |
| 380.4 | Install Syn Media New Tower | 1996 | 1 | LS | | $ 205,000.00 | 25 | 25 | $ 205,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Rotary Distributors | 1996 | 1 | LS | | $ 65,400.00 | 25 | 25 | $ 65,400.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Oxidation Tower Recycle Control Valve | 1996 | 1 | LS | | $ 8,000.00 | 25 | 25 | $ 8,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Final Settling Tanks 1 and 2** | | | | | | | | | | | | | | |
| 380.4 | Equipment for Final Settling Tanks 1 & 2 | 1974 | 1 | LS | | $ 92,435.00 | 25 | 47 | $ 92,435.00 | $ - | 320.0 | 118.00 | 946.00 | 8.02 | $ - |
| 380.4 | **Final Settling Tanks 3, 4 &5** | | | | | | | | | | | | | | |
| 380.4 | Install Fiberglass Troughs/Weirs | 1996 | 1 | LS | | $ 36,500.00 | 25 | 25 | $ 36,500.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Elec and Manual Telescoping Valves | 1996 | 1 | LS | | $ 18,000.00 | 25 | 25 | $ 18,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Sluice Gates | 1996 | 1 | LS | | $ 19,000.00 | 25 | 25 | $ 19,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Collectors Final Clarifiers piping | 1996 | 1 | LS | | $ 120,000.00 | 25 | 25 | $ 120,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Chlorine Contact Tanks 1 & 2 Remaining in Service** | | 2 | EA | | | | | | | | | | | |
| 380.4 | 1-ton cylinder/scale - Remaining in Service | 1996 | 1 | EA | $ 3,500.00 | $ 1,355.97 | 25 | 25 | $ 1,355.97 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | 150# cylinders and scale - Remaining in Service | 1996 | 4 | EA | $ 2,500.00 | $ 968.55 | 25 | 25 | $ 968.55 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Anaerobic Digesters 1&2** | | 2 | EA | | | | | | | | | | | |
| 380.4 | Install Digester Meters | 1996 | 1 | LS | | $ 11,000.00 | 25 | 25 | $ 11,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Comp Heater & Heat Exchanger (Envirex) | 1996 | 1 | LS | | $ 76,000.00 | 25 | 25 | $ 76,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Duo Deck Conversion | 1996 | 1 | LS | | $ 110,000.00 | 25 | 25 | $ 110,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Digester Mixer | 1996 | 1 | LS | | $ 48,000.00 | 25 | 25 | $ 48,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Polytron 2XP Digital Meter | 1996 | 1 | LS | $ 250.00 | $ 96.86 | 25 | 25 | $ 96.86 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Polysonic Hydra SX40 DFD Flowmeter, Digital Readout | 1996 | 1 | LS | $ 2,600.00 | $ 1,007.29 | 25 | 25 | $ 1,007.29 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Siemens Hydra Ranger 200 Flow meter, Digital Readout | 1996 | 1 | LS | $ 1,900.00 | $ 736.10 | 25 | 25 | $ 736.10 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Maxus Air Compressor, Model EX840100AJ, #10/16/06-00340, 3.2 HP, 60 Gallon Capacity Vertical Tank With Wiring and Controls | 1996 | 1 | LS | $ 550.00 | $ 213.08 | 25 | 25 | $ 213.08 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Sludge Holding Tank** | | | | | | | | | | | | | | |
| 380.4 | Sludge Holding Tank aeration system | 1996 | 1 | LS | | $ 28,500.00 | 25 | 25 | $ 28,500.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Blower System | 1996 | 1 | LS | | $ 33,600.00 | 25 | 25 | $ 33,600.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | **Belt Filter Press Building** | | | | | | | | | | | | | | |
| 380.4 | 1.2 meter Roediger Belt Filter Press | 1996 | 1 | LS | | $ 165,000.00 | 25 | 25 | $ 165,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Belt Filter Press Conveyors | 1996 | 1 | LS | | $ 67,000.00 | 25 | 25 | $ 67,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Kent Taylor Mag Master Flow Meter, Digital Readout | 1996 | | | $ 800.00 | $ 309.94 | 25 | 25 | $ 309.94 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Polymer Feed & Chlorination Equipment | 1996 | 1 | LS | | $ 63,800.00 | 25 | 25 | $ 63,800.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Floor Drains - Grit Washer | 1996 | 1 | LS | | $ 1,500.00 | 25 | 25 | $ 1,500.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Scum & Grease Floatation/Removal System | 1996 | 1 | LS | | $ 47,600.00 | 25 | 25 | $ 47,600.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Grit Separation Classification System | 1996 | 1 | LS | | $ 52,000.00 | 25 | 25 | $ 52,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Sewage Sump Simplex system | 1996 | 1 | LS | | $ 12,400.00 | 25 | 25 | $ 12,400.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Sewage Sump Duplex system | 1996 | 1 | LS | | $ 18,900.00 | 25 | 25 | $ 18,900.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Trickling Filter Tank | 1996 | 1 | LS | | $ 89,000.00 | 25 | 25 | $ 89,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install submersible Mixer | 1996 | 1 | LS | | $ 20,000.00 | 25 | 25 | $ 20,000.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Install Odor Control Scrubber System | 1996 | 1 | LS | | $ 28,500.00 | 25 | 25 | $ 28,500.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Scrubber at Sludge Storage Tank | 1996 | 1 | LS | | $ 2,600.00 | 25 | 25 | $ 2,600.00 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Exhaust Hood CO#5 | 1996 | 1 | LS | | $ 1,843.84 | 25 | 25 | $ 1,843.84 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | PFT Gas Burner | 1996 | 1 | EA | $ 2,400.00 | $ 929.81 | 25 | 25 | $ 929.81 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ - |
| 380.4 | Equipment for Secondary Pumping Station | 1974 | 1 | LS | | $ 29,910.00 | 25 | 47 | $ 29,910.00 | $ - | 320.0 | 118.00 | 946.00 | 8.02 | $ - |
| | **Subtotal** | | | | | **$ 1,910,836.80** | | | | **$ 12,599.92** | | | | | **$ 13,344.00** |
| **381.4** | **Plant Sewers - WWTP** | | | | | | | | | | | | | | |
| 381.4 | 6" Thickened Sludge Line | 1996 | 1 | LS | | $ 1,400.00 | 75 | 25 | $ 466.67 | $ 933.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,510.01 |
| 381.4 | 24" DIP Oxidation Tower 2 FM | 1996 | 1 | LS | | $ 33,500.00 | 75 | 25 | $ 11,166.67 | $ 22,333.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 60,061.01 |
| 381.4 | 24" & 30" DIP Oxidation Tower Effluent | 1996 | 1 | LS | | $ 37,100.00 | 75 | 25 | $ 12,366.67 | $ 24,733.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 66,515.33 |
| 381.4 | 16" DIP Oxidation Tower Recirculation | 1996 | 1 | LS | | $ 11,000.00 | 75 | 25 | $ 3,666.67 | $ 7,333.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 19,721.53 |
| 381.4 | 24" DIP Overflow | 1996 | 1 | LS | | $ 9,700.00 | 75 | 25 | $ 3,233.33 | $ 6,466.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 17,390.80 |
| 381.4 | 24" DIP Final Sed. Tank 3,4&5 Effluent | 1996 | 1 | LS | | $ 4,300.00 | 75 | 25 | $ 1,433.33 | $ 2,866.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 7,709.32 |
| 381.4 | 30" DIP Final Sed. Tank Effluent | 1996 | 1 | LS | | $ 26,000.00 | 75 | 25 | $ 8,666.67 | $ 17,333.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 46,614.51 |
| 381.4 | 6" Scum Drain/Final Settling Tanks | 1996 | 1 | LS | | $ 1,300.00 | 75 | 25 | $ 433.33 | $ 866.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,330.73 |
| 381.4 | 6" DIP Primary Sludge to Sludge Holding Tank | 1996 | 1 | LS | | $ 5,200.00 | 75 | 25 | $ 1,733.33 | $ 3,466.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 9,322.90 |
| 381.4 | 6" DIP Primary Sludge from aerated S1 to digesters | 1996 | 1 | LS | | $ 7,700.00 | 75 | 25 | $ 2,566.67 | $ 5,133.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 13,805.07 |
| 381.4 | 6" DIP Primary Sludge Well Decant | 1996 | 1 | LS | | $ 1,900.00 | 75 | 25 | $ 633.33 | $ 1,266.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,406.45 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 381.4 | 6" DIP Primary Sludge Pump Suction | 1996 | 1 | LS | | $ 2,600.00 | 75 | 25 | $ 866.67 | $ 1,733.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,661.45 |
| 381.4 | 6" DIP Primary Sludge pump Discharge | 1996 | 1 | LS | | $ 4,200.00 | 75 | 25 | $ 1,400.00 | $ 2,800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 7,530.04 |
| 381.4 | 6" DIP Secondary Sludge Discharge | 1996 | 1 | LS | | $ 6,300.00 | 75 | 25 | $ 2,100.00 | $ 4,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 11,295.06 |
| 381.4 | 8" DIP Secondary Sludge Suction | 1996 | 1 | LS | | $ 8,300.00 | 75 | 25 | $ 2,766.67 | $ 5,533.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 14,880.79 |
| 381.4 | Ex. 8" DIP Tank Drain | 1996 | 1 | LS | | $ 9,000.00 | 75 | 25 | $ 3,000.00 | $ 6,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 16,135.79 |
| 381.4 | 8" DIP Tank Drain | 1996 | 1 | LS | | $ 11,100.00 | 75 | 25 | $ 3,700.00 | $ 7,400.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 19,900.81 |
| 381.4 | 6" & 4" DIP Oxidation Tower FM drain | 1996 | 1 | LS | | $ 3,400.00 | 75 | 25 | $ 1,133.33 | $ 2,266.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,095.74 |
| 381.4 | 4" DIP Grit Slurry Discharge | 1996 | 1 | LS | | $ 1,900.00 | 75 | 25 | $ 633.33 | $ 1,266.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,406.45 |
| 381.4 | 8" DIP Utility Water Service | 1996 | 1 | LS | | $ 3,300.00 | 75 | 25 | $ 1,100.00 | $ 2,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,916.46 |
| 381.4 | Scum Concentrator/Grit Washer Drains | 1996 | 1 | LS | | $ 4,750.00 | 75 | 25 | $ 1,583.33 | $ 3,166.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 8,516.11 |
| 381.4 | Scum Concentrator frm existing line | 1996 | 1 | LS | | $ 2,106.00 | 75 | 25 | $ 702.00 | $ 1,404.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,775.78 |
| 381.4 | 8" PVC Storm Sewer | 1996 | 1 | LS | | $ 4,400.00 | 75 | 25 | $ 1,466.67 | $ 2,933.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 7,888.61 |
| 381.4 | 6" PVC Storm Sewer | 1996 | 1 | LS | | $ 2,700.00 | 75 | 25 | $ 900.00 | $ 1,800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,840.74 |
| 381.4 | 4" , 3", 2" PVC Utility Water | 1996 | 1 | LS | | $ 8,600.00 | 75 | 25 | $ 2,866.67 | $ 5,733.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 15,418.65 |
| 381.4 | 2" PVC Potable Water | 1996 | 1 | LS | | $ 1,500.00 | 75 | 25 | $ 500.00 | $ 1,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,689.30 |
| 381.4 | Scum Drain to Final Tank Drain | 1996 | 1 | LS | | $ 2,000.00 | 75 | 25 | $ 666.67 | $ 1,333.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,585.73 |
| 381.4 | Belt Filter Press Feed Pump Suction | 1996 | 1 | LS | | $ 7,700.00 | 75 | 25 | $ 2,566.67 | $ 5,133.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 13,805.07 |
| 381.4 | Belt Filter Press Feed Discharge | 1996 | 1 | LS | | $ 6,000.00 | 75 | 25 | $ 2,000.00 | $ 4,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 10,757.20 |
| 381.4 | Belt Filter Press Filtrate | 1996 | 1 | LS | | $ 3,100.00 | 75 | 25 | $ 1,033.33 | $ 2,066.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,557.88 |
| 381.4 | Thickened Sludge Pump suction | 1996 | 1 | LS | | $ 1,450.00 | 75 | 25 | $ 483.33 | $ 966.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,599.66 |
| 381.4 | 8" DIP Belt Filter Press Building Drain, 4" DIP Dumpster Area Drain, 4" DIP Garage/Lab Area Drain, 6" DIP Primary Sludge tank drain & 10" DIP drain | 1996 | 1 | LS | | $ 9,500.00 | 75 | 25 | $ 3,166.67 | $ 6,333.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 17,032.23 |
| 381.4 | Digester Sludge frm Ex to Belt Press Pumps | 1996 | 1 | LS | | $ 3,700.00 | 75 | 25 | $ 1,233.33 | $ 2,466.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,633.60 |
| 381.4 | Grit Pump Suction/Discharge | 1996 | 1 | LS | | $ 2,800.00 | 75 | 25 | $ 933.33 | $ 1,866.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,020.02 |
| 381.4 | Grit Washer Overflow | 1996 | 1 | LS | | $ 1,600.00 | 75 | 25 | $ 533.33 | $ 1,066.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,868.59 |
| 381.4 | Scum Conc. Influent | 1996 | 1 | LS | | $ 1,400.00 | 75 | 25 | $ 466.67 | $ 933.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,510.01 |
| 381.4 | Scum Conc. Drain | 1996 | 1 | LS | | $ 1,200.00 | 75 | 25 | $ 400.00 | $ 800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,151.44 |
| 381.4 | Scum Conc. Effluent | 1996 | 1 | LS | | $ 1,200.00 | 75 | 25 | $ 400.00 | $ 800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,151.44 |
| 381.4 | Replacement Drain | 1996 | 1 | LS | | $ 1,600.00 | 75 | 25 | $ 533.33 | $ 1,066.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,868.59 |
| 381.4 | Secondary Sludge to Sludge Holding Tank | 1996 | 1 | LS | | $ 2,200.00 | 75 | 25 | $ 733.33 | $ 1,466.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,944.31 |
| 381.4 | Primary Effluent Pump Suction | 1996 | 1 | LS | | $ 9,100.00 | 75 | 25 | $ 3,033.33 | $ 6,066.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 16,315.08 |
| 381.4 | Primary Effluent Pump Discharge | 1996 | 1 | LS | | $ 16,000.00 | 75 | 25 | $ 5,333.33 | $ 10,666.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 28,685.85 |
| 381.4 | Manhole A | 1996 | 1 | LS | | $ 3,300.00 | 75 | 25 | $ 1,100.00 | $ 2,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,916.46 |
| 381.4 | Sludge Recirc Pumps Suction | 1996 | 1 | LS | | $ 1,800.00 | 75 | 25 | $ 600.00 | $ 1,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,227.16 |
| 381.4 | Sludge Recirc Pumps Discharge | 1996 | 1 | LS | | $ 2,900.00 | 75 | 25 | $ 966.67 | $ 1,933.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,199.31 |
| 381.4 | Thickened/Primary Sludge (Dwg 53) | 1996 | 1 | LS | | $ 1,400.00 | 75 | 25 | $ 466.67 | $ 933.33 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,510.01 |
| 381.4 | Aerated Sludge Blowers Intakes | 1996 | 1 | LS | | $ 7,300.00 | 75 | 25 | $ 2,433.33 | $ 4,866.67 | 331.0 | 338.75 | 911.00 | 2.69 | $ 13,087.92 |
| 381.4 | Aerated Sludge Blowers Discharge | 1996 | 1 | LS | | $ 3,600.00 | 75 | 25 | $ 1,200.00 | $ 2,400.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,454.32 |
| 381.4 | 16 yard Hydrants and Gate Valves | 1996 | 1 | LS | | $ 19,800.00 | 75 | 25 | $ 6,600.00 | $ 13,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 35,498.75 |
| 381.4 | 27-inch VCP Plant Infl Sewer | 1974 | 300 | LF | $ 60,000.00 | $ 7,244.79 | 75 | 47 | $ 4,540.07 | $ 2,704.72 | 331.0 | 110.00 | 911.00 | 8.28 | $ 22,400.00 |
| 381.4 | 24-inch DIP Primary Sedimentation Tank Effluent | 1974 | 92 | LF | $ 18,400.00 | $ 2,221.73 | 75 | 47 | $ 1,392.29 | $ 829.45 | 331.0 | 110.00 | 911.00 | 8.28 | $ 6,869.33 |
| 381.4 | 18-inch DIP Oxidation Tower Force Main | 1974 | 178 | LF | $ 35,600.00 | $ 4,298.57 | 75 | 47 | $ 2,693.77 | $ 1,604.80 | 331.0 | 110.00 | 911.00 | 8.28 | $ 13,290.67 |
| 381.4 | 24-inch DIP Oxidation Tower Effluent | 1974 | 20 | LF | $ 4,000.00 | $ 482.99 | 75 | 47 | $ 302.67 | $ 180.31 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,493.33 |
| 381.4 | 24-inch DIP Overflow | 1974 | 26 | LF | $ 5,200.00 | $ 627.88 | 75 | 47 | $ 393.47 | $ 234.41 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,941.33 |
| 381.4 | 24-inch DIP Final Sedimentation Tanks Effluent | 1974 | 20 | LF | $ 4,000.00 | $ 482.99 | 75 | 47 | $ 302.67 | $ 180.31 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,493.33 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent | 1974 | 266 | LF | $ 53,200.00 | $ 6,423.71 | 75 | 47 | $ 4,025.53 | $ 2,398.19 | 331.0 | 110.00 | 911.00 | 8.28 | $ 19,861.33 |
| 381.4 | 24-inch DIP Chlorine Contact Tank Effluent Overflow | 1974 | 30 | LF | $ 6,000.00 | $ 724.48 | 75 | 47 | $ 454.01 | $ 270.47 | 331.0 | 110.00 | 911.00 | 8.28 | $ 2,240.00 |
| 381.4 | 6-inch DIP Primary Sludge Decant | 1974 | 25 | LF | $ 3,750.00 | $ 452.80 | 75 | 47 | $ 283.75 | $ 169.05 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,400.00 |
| 381.4 | 8-inch DIP Secondary Sludge Suction | 1974 | 8 | LF | $ 1,200.00 | $ 144.90 | 75 | 47 | $ 90.80 | $ 54.09 | 331.0 | 110.00 | 911.00 | 8.28 | $ 448.00 |
| 381.4 | 8-inch DIP Scum Suction | 1974 | 56 | LF | $ 8,400.00 | $ 1,014.27 | 75 | 47 | $ 635.61 | $ 378.66 | 331.0 | 110.00 | 911.00 | 8.28 | $ 3,136.00 |
| 381.4 | 8-inch DIP Tank Drain | 1974 | 88 | LF | $ 13,200.00 | $ 1,593.85 | 75 | 47 | $ 998.81 | $ 595.04 | 331.0 | 110.00 | 911.00 | 8.28 | $ 4,928.00 |
| 381.4 | 4-inch DIP Force Main Drain | 1974 | 22 | LF | $ 3,300.00 | $ 398.46 | 75 | 47 | $ 249.70 | $ 148.76 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,232.00 |
| 381.4 | 8-inch DIP Digested Sludge Discharge | 1974 | 195 | LF | $ 29,250.00 | $ 3,531.83 | 75 | 47 | $ 2,213.28 | $ 1,318.55 | 331.0 | 110.00 | 911.00 | 8.28 | $ 10,920.00 |
| 381.4 | 6-inch DIP Scum Discharge | 1974 | 61 | LF | $ 9,150.00 | $ 1,104.83 | 75 | 47 | $ 692.36 | $ 412.47 | 331.0 | 110.00 | 911.00 | 8.28 | $ 3,416.00 |
| 381.4 | 2.5-inch PVC Chlorine Solution Discharge | 1974 | 114 | LF | $ 11,400.00 | $ 1,376.51 | 75 | 47 | $ 862.61 | $ 513.90 | 331.0 | 110.00 | 911.00 | 8.28 | $ 4,256.00 |
| 381.4 | 10-inch DIP Sewer from Digester Building and Drying Beds | 1937 | 29 | LF | $ 4,350.00 | $ 100.27 | 75 | 84 | $ 100.27 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |
| 381.4 | 8-inch DIP Sewer from Digester Building and Drying Beds | 1937 | 51 | LF | $ 7,650.00 | $ 176.34 | 75 | 84 | $ 176.34 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |
| 381.4 | 8-inch DIP Digester Supernatant Drain | 1937 | 5 | LF | $ 750.00 | $ 17.29 | 75 | 84 | $ 17.29 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 381.4 | 4-inch DIP Sanitary Drain | 1937 | 7 | LF | $ 1,050.00 | $ 24.20 | 75 | 84 | $ 24.20 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |
| 381.4 | 8-inch DIP Sludge Drying Bed Drain | 1937 | 73 | LF | $ 10,950.00 | $ 252.41 | 75 | 84 | $ 252.41 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |
| 381.4 | 8-inch DIP Potable Water Main | 1974 | 107 | LF | $ 16,050.00 | $ 1,937.98 | 75 | 47 | $ 1,214.47 | $ 723.51 | 331.0 | 110.00 | 911.00 | 8.28 | $ 5,992.00 |
| 381.4 | 6-inch Potable Water Main | 1974 | 262 | LF | $ 39,300.00 | $ 4,745.33 | 75 | 47 | $ 2,973.74 | $ 1,771.59 | 331.0 | 110.00 | 911.00 | 8.28 | $ 14,672.00 |
| 381.4 | 4-inch Potable Water Main to Main Equipment Building | 1974 | 110 | LF | $ 16,500.00 | $ 1,992.32 | 75 | 47 | $ 1,248.52 | $ 743.80 | 331.0 | 110.00 | 911.00 | 8.28 | $ 6,160.00 |
| 381.4 | 4-inch Potable Water Main to Primary Effluent Pump Station | 1974 | 301 | LF | $ 45,150.00 | $ 5,451.70 | 75 | 47 | $ 3,416.40 | $ 2,035.30 | 331.0 | 110.00 | 911.00 | 8.28 | $ 16,856.00 |
| 381.4 | 24-inch DIP Plant Bypass | 1974 | 45 | LF | $ 9,000.00 | $ 1,086.72 | 75 | 47 | $ 681.01 | $ 405.71 | 331.0 | 110.00 | 911.00 | 8.28 | $ 3,360.00 |
| 381.4 | 24-inch Primary Tank Bypass | 1974 | 26 | LF | $ 5,200.00 | $ 627.88 | 75 | 47 | $ 393.47 | $ 234.41 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,941.33 |
| 381.4 | 24-inch Abandoned Plant Effluent | 1974 | 19 | LF | $ 3,800.00 | $ 458.84 | 75 | 47 | $ 287.54 | $ 171.30 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,418.67 |
| 381.4 | 24-inch DIP Plant/Primary Tank Bypass | 1974 | 67 | LF | $ 13,400.00 | $ 1,618.00 | 75 | 47 | $ 1,013.95 | $ 604.05 | 331.0 | 110.00 | 911.00 | 8.28 | $ 5,002.67 |
| 381.4 | 24-inch Storm Sewer Line | 1974 | 42 | LF | $ 7,350.00 | $ 887.49 | 75 | 47 | $ 556.16 | $ 331.33 | 331.0 | 110.00 | 911.00 | 8.28 | $ 2,744.00 |
| 381.4 | 18-inch Storm Sewer Line | 1974 | 18 | LF | $ 2,700.00 | $ 326.02 | 75 | 47 | $ 204.30 | $ 121.71 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,008.00 |
| 381.4 | 8-inch Storm Sewer Line | 1974 | 25 | LF | $ 2,500.00 | $ 301.87 | 75 | 47 | $ 189.17 | $ 112.70 | 331.0 | 110.00 | 911.00 | 8.28 | $ 933.33 |
| 381.4 | **Plug Valves** | | | | | | | | | | | | | | |
| 381.4 | Raw Sewage Pump Suction | 1996 | 1 | LS | | $ 4,500.00 | 50 | 25 | $ 2,250.00 | $ 2,250.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,050.92 |
| 381.4 | Raw Pump Sewage Discharge | 1996 | 1 | LS | | $ 3,500.00 | 50 | 25 | $ 1,750.00 | $ 1,750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,706.27 |
| 381.4 | Primary Sludge Pump | 1996 | 1 | LS | | $ 2,700.00 | 50 | 25 | $ 1,350.00 | $ 1,350.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,630.55 |
| 381.4 | Primary Sludge Pump Header | 1996 | 1 | LS | | $ 1,500.00 | 50 | 25 | $ 750.00 | $ 750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,016.97 |
| 381.4 | Primary Sludge Pump Drain | 1996 | 1 | LS | | $ 2,200.00 | 50 | 25 | $ 1,100.00 | $ 1,100.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,958.23 |
| 381.4 | Primary Sludge Pump Holding Tank | 1996 | 1 | LS | | $ 2,400.00 | 50 | 25 | $ 1,200.00 | $ 1,200.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,227.16 |
| 381.4 | Primary/Secondary Sludge Connection | 1996 | 1 | LS | | $ 1,700.00 | 50 | 25 | $ 850.00 | $ 850.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,285.90 |
| 381.4 | Grit Pump (6") | 1996 | 1 | LS | | $ 1,500.00 | 50 | 25 | $ 750.00 | $ 750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,016.97 |
| 381.4 | Grit Pump (3") | 1996 | 1 | LS | | $ 1,200.00 | 50 | 25 | $ 600.00 | $ 600.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 1,613.58 |
| 381.4 | Scum/Ex Concentrator Feed | 1996 | 1 | LS | | $ 2,800.00 | 50 | 25 | $ 1,400.00 | $ 1,400.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,765.02 |
| 381.4 | Scum/Drain | 1996 | 1 | LS | | $ 1,600.00 | 50 | 25 | $ 800.00 | $ 800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,151.44 |
| 381.4 | Scum Cone/Influent | 1996 | 1 | LS | | $ 1,500.00 | 50 | 25 | $ 750.00 | $ 750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,016.97 |
| 381.4 | Scum Cone/Drain | 1996 | 1 | LS | | $ 1,200.00 | 50 | 25 | $ 600.00 | $ 600.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 1,613.58 |
| 381.4 | Secondary Sludge Pump | 1996 | 1 | LS | | $ 2,800.00 | 50 | 25 | $ 1,400.00 | $ 1,400.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,765.02 |
| 381.4 | Secondary Sludge/Header | 1996 | 1 | LS | | $ 1,600.00 | 50 | 25 | $ 800.00 | $ 800.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,151.44 |
| 381.4 | Secondary Sludge/Line | 1996 | 1 | LS | | $ 2,200.00 | 50 | 25 | $ 1,100.00 | $ 1,100.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,958.23 |
| 381.4 | Effluent Pump/Suction | 1996 | 1 | LS | | $ 12,000.00 | 50 | 25 | $ 6,000.00 | $ 6,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 16,135.79 |
| 381.4 | Effluent Pump/Discharge | 1996 | 1 | LS | | $ 8,000.00 | 50 | 25 | $ 4,000.00 | $ 4,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 10,757.20 |
| 381.4 | Oxidation Twr Force Mn | 1996 | 1 | LS | | $ 9,000.00 | 50 | 25 | $ 4,500.00 | $ 4,500.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 12,101.85 |
| 381.4 | Ox Twr Force Main Drain | 1996 | 1 | LS | | $ 2,200.00 | 50 | 25 | $ 1,100.00 | $ 1,100.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,958.23 |
| 381.4 | Final Tank Drain-off | 1996 | 1 | LS | | $ 8,500.00 | 50 | 25 | $ 4,250.00 | $ 4,250.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 11,429.52 |
| 381.4 | Utility Water | 1996 | 1 | LS | | $ 1,500.00 | 50 | 25 | $ 750.00 | $ 750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,016.97 |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | | $ 3,700.00 | 50 | 25 | $ 1,850.00 | $ 1,850.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,975.20 |
| 381.4 | Belt Press Feed Header | 1996 | 1 | LS | | $ 2,600.00 | 50 | 25 | $ 1,300.00 | $ 1,300.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,496.09 |
| 381.4 | Heat Exchanger Sludge Recirc | 1996 | 1 | LS | | $ 3,500.00 | 50 | 25 | $ 1,750.00 | $ 1,750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,706.27 |
| 381.4 | Overflow Supernatent at Digester | 1996 | 1 | LS | | $ 12,000.00 | 50 | 25 | $ 6,000.00 | $ 6,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 16,135.79 |
| 381.4 | Digested Sludge (8") | 1996 | 1 | LS | | $ 2,100.00 | 50 | 25 | $ 1,050.00 | $ 1,050.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,823.76 |
| 381.4 | Digested Sludge (6") | 1996 | 1 | LS | | $ 1,800.00 | 50 | 25 | $ 900.00 | $ 900.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,420.37 |
| 381.4 | Pumping Station: 14-inch DIP eccentric plug valve | 1974 | 1 | EA | $ 5,000.00 | $ 603.73 | 50 | 47 | $ 567.51 | $ 36.22 | 331.0 | 110.00 | 911.00 | 8.28 | $ 300.00 |
| 381.4 | **Check Valves** | | | | | | | | | | | | | | |
| 381.4 | Raw Sewage Pump Discharge | 1996 | 1 | LS | | $ 4,700.00 | 50 | 25 | $ 2,350.00 | $ 2,350.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,319.85 |
| 381.4 | Primary Sludge Pump Discharge | 1996 | 1 | LS | | $ 2,300.00 | 50 | 25 | $ 1,150.00 | $ 1,150.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,092.69 |
| 381.4 | Secondary Sludge Pumps | 1996 | 1 | LS | | $ 2,300.00 | 50 | 25 | $ 1,150.00 | $ 1,150.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,092.69 |
| 381.4 | Primary Effluent Pumps | 1996 | 1 | LS | | $ 12,000.00 | 50 | 25 | $ 6,000.00 | $ 6,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 16,135.79 |
| 381.4 | Belt Press Pumps | 1996 | 1 | LS | | $ 2,300.00 | 50 | 25 | $ 1,150.00 | $ 1,150.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,092.69 |
| 381.4 | Thickened Sludge Pumps | 1996 | 1 | LS | | $ 2,300.00 | 50 | 25 | $ 1,150.00 | $ 1,150.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,092.69 |
| 381.4 | Recirculated Pumps | 1996 | 1 | LS | | $ 1,900.00 | 50 | 25 | $ 950.00 | $ 950.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,554.83 |
| 381.4 | Air Cushioned Check Valves | 1974 | 1 | LS | | $ 2,228.00 | 50 | 47 | $ 2,094.32 | $ 133.68 | 331.0 | 110.00 | 911.00 | 8.28 | $ 1,107.11 |
| 381.4 | **Air Check Valves** | | | | | | | | | | | | | | |
| 381.4 | Blower Discharges | 1996 | 1 | LS | | $ 2,500.00 | 50 | 25 | $ 1,250.00 | $ 1,250.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,361.62 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Wastewater Treatment Plant**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 381.4 | **Mud Valves** | | | | | | | | | | | | | | |
| 381.4 | Final Tank Scum Box | 1996 | 1 | LS | | $ 2,000.00 | 50 | 25 | $ 1,000.00 | $ 1,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,689.30 |
| 381.4 | Chlorine Tank Drains | 1996 | 1 | LS | | $ 3,500.00 | 50 | 25 | $ 1,750.00 | $ 1,750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,706.27 |
| 381.4 | Utility Water | 1996 | 1 | LS | | $ 2,000.00 | 50 | 25 | $ 1,000.00 | $ 1,000.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,689.30 |
| 381.4 | Aeration Sludge Hldg Tank | 1996 | 1 | LS | | $ 4,500.00 | 50 | 25 | $ 2,250.00 | $ 2,250.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 6,050.92 |
| 381.4 | **Butterfly Valves** | | | | | | | | | | | | | | |
| 381.4 | Ox Twr Recycle Line | 1996 | 1 | LS | | $ 6,200.00 | 50 | 25 | $ 3,100.00 | $ 3,100.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 8,336.83 |
| 381.4 | **Hydrostatic PRV's** | | | | | | | | | | | | | | |
| 381.4 | Final Tanks | 1996 | 1 | LS | | $ 2,800.00 | 50 | 25 | $ 1,400.00 | $ 1,400.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 3,765.02 |
| 381.4 | **Gate Valves** | | | | | | | | | | | | | | |
| 381.4 | Final Tank Drains | 1996 | 1 | LS | | $ 3,300.00 | 50 | 25 | $ 1,650.00 | $ 1,650.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 4,437.34 |
| 381.4 | Sludge Drain-Off From Final Tanks | 1996 | 1 | LS | | $ 4,200.00 | 50 | 25 | $ 2,100.00 | $ 2,100.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,647.53 |
| 381.4 | Pumping Station- Gate Valve | 1974 | 1 | EA | $ 5,000.00 | $ 603.73 | 50 | 47 | $ 567.51 | $ 36.22 | 331.0 | 110.00 | 911.00 | 8.28 | |
| 381.4 | **Butterfly Air Line Valves** | | | | | | | | | | | | | | |
| 381.4 | Blower Intakes | 1996 | 1 | LS | | $ 2,100.00 | 50 | 25 | $ 1,050.00 | $ 1,050.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,823.76 |
| 381.4 | Blower Discharge | 1996 | 1 | LS | | $ 1,400.00 | 50 | 25 | $ 700.00 | $ 700.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 1,882.51 |
| 381.4 | Air Header at Sludge Tank | 1996 | 1 | LS | | $ 1,500.00 | 50 | 25 | $ 750.00 | $ 750.00 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,016.97 |
| 381.4 | Reinsulate pipe at Digester Control Bldg CO#1 | 1996 | 1 | LS | | $ 4,092.50 | 50 | 25 | $ 2,046.25 | $ 2,046.25 | 331.0 | 338.75 | 911.00 | 2.69 | $ 5,502.98 |
| 381.4 | Gas Line CO#2 | 1996 | 1 | LS | | $ 6,367.59 | 50 | 25 | $ 3,183.80 | $ 3,183.80 | 331.0 | 338.75 | 911.00 | 2.69 | $ 8,562.18 |
| 381.4 | Water Line CO#2 | 1996 | 1 | LS | | $ 5,827.66 | 50 | 25 | $ 2,913.83 | $ 2,913.83 | 331.0 | 338.75 | 911.00 | 2.69 | $ 7,836.16 |
| 381.4 | Decant Line CO#2 | 1996 | 1 | LS | | $ 1,940.27 | 50 | 25 | $ 970.14 | $ 970.14 | 331.0 | 338.75 | 911.00 | 2.69 | $ 2,608.98 |
| 381.4 | Replace 24" Pipe From Primary Tanks CO#3 | 1996 | 1 | LS | | $ 11,429.52 | 50 | 25 | $ 5,714.76 | $ 5,714.76 | 331.0 | 338.75 | 911.00 | 2.69 | $ 15,368.70 |
| 381.4 | Piping to Provide Water for Mech Screen CO#3 | 1996 | 1 | LS | | $ 9,544.15 | 50 | 25 | $ 4,772.08 | $ 4,772.08 | 331.0 | 338.75 | 911.00 | 2.69 | $ 12,833.54 |
| 381.4 | Sampler Valves CO#5 | 1996 | 1 | LS | | $ 8,933.43 | 50 | 25 | $ 4,466.72 | $ 4,466.72 | 331.0 | 338.75 | 911.00 | 2.69 | $ 12,012.33 |
| 381.4 | Pumping Station: 20-inch DIP | 1974 | 11 | LF | $ 880.00 | $ 106.26 | 50 | 47 | $ 99.88 | $ 6.38 | 331.0 | 110.00 | 911.00 | 8.28 | $ 52.80 |
| 381.4 | Pumping Station: 18-inch C.I. | 1974 | 3 | LF | $ 225.00 | $ 27.17 | 50 | 47 | $ 25.54 | $ 1.63 | 331.0 | 110.00 | 911.00 | 8.28 | $ 13.50 |
| 381.4 | Pumping Station: 14-inch DIP | 1974 | 2 | LF | $ 140.00 | $ 16.90 | 50 | 47 | $ 15.89 | $ 1.01 | 331.0 | 110.00 | 911.00 | 8.28 | $ 8.40 |
| 381.4 | Control Building: 4-inch sludge feed line | 1974 | 1 | LF | $ 50.00 | $ 6.04 | 50 | 47 | $ 5.68 | $ 0.36 | 331.0 | 110.00 | 911.00 | 8.28 | $ 3.00 |
| 381.4 | Primary Sedimentation Tank: 2.5-inch chlorine feed line | 1974 | 67 | LF | $ 1,675.00 | $ 202.25 | 50 | 47 | $ 190.12 | $ 12.14 | 331.0 | 110.00 | 911.00 | 8.28 | $ 100.50 |
| 381.4 | Chlorine Contact Tank: 8-inch DIP drain | 1974 | 18 | LF | $ 1,800.00 | $ 217.34 | 50 | 47 | $ 204.30 | $ 13.04 | 331.0 | 110.00 | 911.00 | 8.28 | $ 108.00 |
| 381.4 | Secondary Pump Station Process Piping, Chlorine Tanks, Final Settling Tanks 1 & 2, Oxidation Tower No. 1 Exterior Piping | 1974 | 1 | LS | | $ 71,673.00 | 50 | 47 | $ 67,372.62 | $ 4,300.38 | 331.0 | 110.00 | 911.00 | 8.28 | $ 35,614.97 |
| 381.4 | Sluice Gates | 1974 | 1 | LS | | $ 21,995.00 | 50 | 47 | $ 20,675.30 | $ 1,319.70 | 331.0 | 110.00 | 911.00 | 8.28 | $ 10,929.52 |
| 381.4 | Misc. Sewage Treatment Plant Equipment | 1974 | 1 | LS | | $ 13,335.00 | 50 | 47 | $ 12,534.90 | $ 800.10 | 331.0 | 110.00 | 911.00 | 8.28 | $ 6,626.28 |
| | **Subtotal** | | | | | **$ 700,784.80** | | | | **$ 348,714.35** | | | | | **$ 1,082,396.25** |
| **382.4** | **Outfall Sewer Lines - WWTP** | | | | | | | | | | | | | | |
| 382.4 | 24-inch DIP | 1937 | 827 | LF | $ 149,794.51 | $ 3,453.00 | 75 | 84 | $ 3,453.00 | $ - | 331.0 | 21.00 | 911.00 | 43.38 | $ - |
| | **Subtotal** | | | | | **$ 3,453.00** | | | | **$ -** | | | | | **$ -** |
| **389.4** | **Other Plant & Misc. Equip. - WWTP** | | | | | | | | | | | | | | |
| 389.4 | Asbestos Abatement | 1996 | 1 | LS | | $ 12,490.27 | 15 | 25 | $ 12,490.27 | $ - | 320.0 | 366.50 | 946.00 | 2.58 | $ 317.42 |
| 389.4 | Asbestos Abatement | 2021 | 1 | LS | | $ 15,000.00 | 15 | 0 | $ - | $ 15,000.00 | 320.0 | 946.00 | 946.00 | 1.00 | $ 15,000.00 |
| | **Subtotal** | | | | | **$ 27,490.27** | | | | **$ 15,000.00** | | | | | **$ 15,317.42** |
| | | | | **TOTALS** | | **$ 7,732,596.25** | | | | **$ 2,333,769.90** | | | | | **$ 5,740,128.81** |

**City of Beaver Falls Wastewater System**

**Cost Approach**

**Pumping Station**

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **353.3** | **Land & ROW** | | | | | | | | | | | | | | | |
| 353.3 | Land & ROW - Pumping Station | | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| **354.3** | **Structures & Imp. - Pumping Station** | | | | | | | | | | | | | | | |
| 354.3 | Trash Basket and Hoist Assembly | 2006 | 1 | LS | $ 6,468.00 | | $ 6,468.00 | 50 | 15 | $ 1,940.40 | $ 4,527.60 | 304 | 466.25 | 815.00 | 1.7 | $ 7,914.20 |
| 354.3 | 12-inch Drain in front of PS | 2006 | 1 | LS | $ 6,125.00 | | $ 6,125.00 | 50 | 15 | $ 1,837.50 | $ 4,287.50 | 304 | 466.25 | 815.00 | 1.7 | $ 7,494.50 |
| 354.3 | Pump Station Pit Conversion | 2006 | 1 | LS | $ 4,500.00 | | $ 4,500.00 | 50 | 15 | $ 1,350.00 | $ 3,150.00 | 304 | 466.25 | 815.00 | 1.7 | $ 5,506.17 |
| 354.3 | Sandblasting/Painting of Pump Station Wet Well | 2006 | 1 | LS | $ 18,200.00 | | $ 18,200.00 | 50 | 15 | $ 5,460.00 | $ 12,740.00 | 304 | 466.25 | 815.00 | 1.7 | $ 22,269.38 |
| 354.3 | 16" SDR 35 PVC | 2006 | 10 | LF | $ 300.00 | | $ 3,000.00 | 50 | 15 | $ 900.00 | $ 2,100.00 | 304 | 466.25 | 815.00 | 1.7 | $ 3,670.78 |
| 354.3 | 16" SDR 35 PVC 45° elbow | 2006 | 1 | EA | $ 650.00 | | $ 650.00 | 50 | 15 | $ 195.00 | $ 455.00 | 304 | 466.25 | 815.00 | 1.7 | $ 795.34 |
| 354.3 | 1" Copper Tube | 2006 | 100 | LF | $ 17.00 | | $ 1,700.00 | 50 | 15 | $ 510.00 | $ 1,190.00 | 304 | 466.25 | 815.00 | 1.7 | $ 2,080.11 |
| 354.3 | Water Service Connection | 2006 | 1 | LS | $ 1,000.00 | | $ 1,000.00 | 50 | 15 | $ 300.00 | $ 700.00 | 304 | 466.25 | 815.00 | 1.7 | $ 1,223.59 |
| 354.3 | Yard Hydrants, Lockable | 2006 | 1 | EA | $ 375.00 | | $ 375.00 | 50 | 15 | $ 112.50 | $ 262.50 | 304 | 466.25 | 815.00 | 1.7 | $ 458.85 |
| 354.3 | Natural Gas Service | 2006 | 1 | LS | $ 1,000.00 | | $ 1,000.00 | 50 | 15 | $ 300.00 | $ 700.00 | 304 | 466.25 | 815.00 | 1.7 | $ 1,223.59 |
| 354.3 | 1-1/2 " Gas Line | 2006 | 100 | LF | $ 25.00 | | $ 2,500.00 | 50 | 15 | $ 750.00 | $ 1,750.00 | 304 | 466.25 | 815.00 | 1.7 | $ 3,058.98 |
| 354.3 | Fencing | 2006 | 150 | LF | $ 75.00 | | $ 11,250.00 | 50 | 15 | $ 3,375.00 | $ 7,875.00 | 304 | 466.25 | 815.00 | 1.7 | $ 13,765.42 |
| 354.3 | Site Preparation | 2006 | 1 | LS | $ 5,000.00 | | $ 5,000.00 | 50 | 15 | $ 1,500.00 | $ 3,500.00 | 304 | 466.25 | 815.00 | 1.7 | $ 6,117.96 |
| 354.3 | Bituminous Pavement/Driveway Restoration | 2006 | 60 | LF | $ 55.00 | | $ 3,300.00 | 50 | 15 | $ 990.00 | $ 2,310.00 | 304 | 466.25 | 815.00 | 1.7 | $ 4,037.86 |
| 354.3 | Final Seeding, grading, mulching | 2006 | 1 | LS | $ 2,500.00 | | $ 2,500.00 | 50 | 15 | $ 750.00 | $ 1,750.00 | 304 | 466.25 | 815.00 | 1.7 | $ 3,058.98 |
| 354.3 | Portable Bypass Pump System | 2006 | 1 | LS | $ 42,000.00 | | $ 42,000.00 | 50 | 15 | $ 12,600.00 | $ 29,400.00 | 304 | 466.25 | 815.00 | 1.7 | $ 51,390.88 |
| 354.3 | Bypass pumping | 2006 | 60 | Days | $ 325.00 | | $ 19,500.00 | 50 | 15 | $ 5,850.00 | $ 13,650.00 | 304 | 466.25 | 815.00 | 1.7 | $ 23,860.05 |
| 354.3 | Erosion and Sedimentation Control | 2006 | 1 | LS | $ 4,100.00 | | $ 4,100.00 | 50 | 15 | $ 1,230.00 | $ 2,870.00 | 304 | 466.25 | 815.00 | 1.7 | $ 5,016.73 |
| | **Subtotal** | | | | | | **$ 133,168.00** | | | | **$ 93,217.60** | | | | | **$ 162,943.37** |
| **355.3** | **Power Gen. Equip. - Pumping Station** | | | | | | | | | | | | | | | |
| 355.3 | Kohler Generator 7KW with transfer switch | 2020 | 1 | EA | | $ 5,200.00 | $ 3,842.18 | 15 | 1 | $ 256.15 | $ 3,586.04 | TG | 548.25 | 742.00 | 1.4 | $ 4,853.33 |
| | **Subtotal** | | | | | | **$ 3,842.18** | | | | **$ 3,586.04** | | | | | **$ 4,853.33** |
| **371.3** | **Pumping Equip. - Pumping Station** | | | | | | | | | | | | | | | |
| 371.3 | Gorman Rupp Package Pump Unt consisting of 2-self priming pumps, model T6A3s-B/WWS, #1355279, 15 Hp, belt dirven, backup natural gas engine, 4 cylinder with cntrols, related piping and 1 control panel model D4-11174, JPP No. GR-8103-1, #06-990-AR4 | 2006 | 1 | LS | | | $ 221,670.00 | 25 | 15 | $ 133,002.00 | $ 88,668.00 | 311 | 624.25 | 1465.00 | 2.3 | $ 208,087.50 |
| 371.3 | Electrical Service | 2006 | 1 | LS | | | $ 12,000.00 | 25 | 15 | $ 7,200.00 | $ 4,800.00 | 311 | 624.25 | 1465.00 | 2.3 | $ 11,264.72 |
| 371.3 | Hach Sigma 950 rain gauge/controller monitor with wiring | 2006 | 1 | LS | | $ 2,600.00 | $ 1,107.88 | 25 | 15 | $ 664.73 | $ 443.15 | 311 | 624.25 | 1465.00 | 2.3 | $ 1,040.00 |
| 371.3 | Mission RTU Unit | 2006 | 1 | EA | | $ 2,000.00 | $ 852.22 | 25 | 15 | $ 511.33 | $ 340.89 | 311 | 624.25 | 1465.00 | 2.3 | $ 800.00 |
| 371.3 | Stainless Steel Davit Crane | 2006 | 1 | EA | | $ 500.00 | $ 213.05 | 25 | 15 | $ 127.83 | $ 85.22 | 311 | 624.25 | 1465.00 | 2.3 | $ 200.00 |
| | **Subtotal** | | | | | | **$ 235,843.16** | | | | **$ 94,337.26** | | | | | **$ 221,392.21** |
| | | | | **TOTALS** | | | **$372,854.34** | | | | **$191,141.90** | | | | | **$389,189.91** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Collection Force - Sewers**

| NARUC Account | Description | Year | Quantity | Unit | Unit Price | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360.0 | 8" Ductile Iron Pipe | 2006 | 600 | LF | $ 44.00 | $ 26,400.00 | 75 | 15 | $ 5,280.00 | $ 21,120.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 38,538.45 |
| 360.0 | 8" DIP 90 Degree Long Radius Bends | 2006 | 2 | EA | $ 500.00 | $ 1,000.00 | 75 | 15 | $ 200.00 | $ 800.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 1,459.79 |
| 360.0 | 8" DIP 45 Degree Bends | 2006 | 4 | EA | $ 480.00 | $ 1,920.00 | 75 | 15 | $ 384.00 | $ 1,536.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 2,802.80 |
| 360.0 | 8" DIP 22.5 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | 75 | 15 | $ 196.00 | $ 784.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 1,430.59 |
| 360.0 | 8" DIP 11.25 Degree Bends | 2006 | 2 | EA | $ 490.00 | $ 980.00 | 75 | 15 | $ 196.00 | $ 784.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 1,430.59 |
| 360.0 | 8" DI Pipe (with mc-urethane primer) | 2006 | 800 | LF | $ 130.00 | $ 104,000.00 | 75 | 15 | $ 20,800.00 | $ 83,200.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 151,818.13 |
| 360.0 | 8"x 6" DIP Tee (with mc-urethane primer) | 2006 | 1 | EA | $ 1,500.00 | $ 1,500.00 | 75 | 15 | $ 300.00 | $ 1,200.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 2,189.68 |
| 360.0 | 8"x 8" Cross Fittings (with mc-urethane primer) | 2006 | 2 | EA | $ 1,750.00 | $ 3,500.00 | 75 | 15 | $ 700.00 | $ 2,800.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 5,109.26 |
| 360.0 | Concrete Pedestals | 2006 | 2 | EA | $ 2,800.00 | $ 5,600.00 | 75 | 15 | $ 1,120.00 | $ 4,480.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 8,174.82 |
| 360.0 | Manhole Connection | 2006 | 1 | EA | $ 1,000.00 | $ 1,000.00 | 75 | 15 | $ 200.00 | $ 800.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 1,459.79 |
| 360.0 | Expansion Joints | 2006 | 2 | EA | $ 3,500.00 | $ 7,000.00 | 75 | 15 | $ 1,400.00 | $ 5,600.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 10,218.53 |
| 360.0 | Pipe Guide Hangers | 2006 | 150 | EA | $ 175.00 | $ 26,250.00 | 75 | 15 | $ 5,250.00 | $ 21,000.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 38,319.48 |
| 360.0 | Pipe Insulation Assembly | 2006 | 40 | LF | $ 50.00 | $ 2,000.00 | 75 | 15 | $ 400.00 | $ 1,600.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 2,919.58 |
| 360.0 | Painting DIP | 2006 | 1 | LS | $ 37,000.00 | $ 37,000.00 | 75 | 15 | $ 7,400.00 | $ 29,600.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 54,012.22 |
| 360.0 | Air/Vacuum Breaker Valves | 2006 | 3 | EA | $ 2,600.00 | $ 7,800.00 | 75 | 15 | $ 1,560.00 | $ 6,240.00 | 331.0 | 499.25 | 911.00 | 1.82 | $ 11,386.36 |
| 360.0 | Additional Cost for Deep Bury for Force Main | 2006 | 1 | LS | | $ 7,612.22 | 75 | 15 | $ 1,522.44 | $ 6,089.78 | 331.0 | 499.25 | 911.00 | 1.82 | $ 11,112.24 |
| | | | | | **TOTAL** | **$ 234,542.22** | | | | **$ 187,633.78** | | | | | **$ 342,382.31** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Collection Sewers - Gravity**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 10010100006 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 10010101000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 10020200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 10030203000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 10030303000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20020102000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20020105000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20020713000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20020800000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030101000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030313000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030314000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030315000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030317000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030318000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030416000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030417000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030419000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20030431000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20050107000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060300000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060301000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060302000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060303000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060305000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060600000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060700000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060702000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060902000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 20060923000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 40020600000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 40030104000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 40030109000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 40040103000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50010100001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 05001010000E | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50040200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50040308000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50040400000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50040604000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50050100002 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50050200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 50050314000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Collection Sewers - Gravity**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 05006010000E | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60020301000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60030702000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60050100000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 06005040000E | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60060901000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60061402000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60061901000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60070601000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 60070602000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70010202000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70010300000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70021510001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70021510002 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70021600000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70021610000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022000000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022002000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022100001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022101000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022102000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022102001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022102002 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70022102003 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 07002220000E | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030101000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030101001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030103000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030105000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030108000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030112000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030115000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030123000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030124000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030125000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030126000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030137000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030138000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030250000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030251000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030252000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030253000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030254000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030255000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030256000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Collection Sewers - Gravity**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 353.2 | Land & ROW: Parcel 70030257000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030258000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030259000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030260000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030261000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70030262000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70041400000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70041900000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70042000000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70042009000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 07004230000E | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050200000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050201000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050203000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050208000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050209001 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050209002 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050209003 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| 353.2 | Land & ROW: Parcel 70050500000 | 1936-38 | 1 | EA | $ 1.00 | | $ 1.00 | NA | NA | $ - | $ 1.00 | NA | NA | NA | NA | $ 1.00 |
| | **Subtotal** | | | | | | **$ 109.00** | | | | **$ 109.00** | | | | | **$ 109.00** |
| 361 | 8-inch VCP Sewer | 1937 | 145,990 | LF | $ 165.00 | $ 24,088,350.00 | $ 555,274.81 | 75 | 84 | $ 555,274.81 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | 8-inch PVC Sewer | 1990 | 1,800 | LF | $ 165.00 | $ 297,000.00 | $ 132,611.76 | 75 | 31 | $ 54,812.86 | $ 77,798.90 | 331.00 | 210.75 | 472.00 | 2.24 | $ 174,240.00 |
| 361 | 8-inch PVC Sewer | 1993 | 370 | LF | $ 165.00 | $ 61,050.00 | $ 24,963.24 | 75 | 28 | $ 9,319.61 | $ 15,643.63 | 331.00 | 193.00 | 472.00 | 2.45 | $ 38,258.00 |
| 361 | 8-inch PVC Sewer | 1998 | 815 | LF | $ 165.00 | $ 134,475.00 | $ 61,396.95 | 75 | 23 | $ 18,828.40 | $ 42,568.56 | 331.00 | 215.50 | 472.00 | 2.19 | $ 93,236.00 |
| 361 | 8-inch CIP Sewer | 1998 | 2,700 | LF | $ 165.00 | $ 445,500.00 | $ 165,979.53 | 75 | 23 | $ 50,900.39 | $ 115,079.14 | 331.00 | 364.00 | 977.00 | 2.68 | $ 308,880.00 |
| 361 | 8-inch CIP Sewer | 2008 | 2,100 | LF | $ 165.00 | $ 346,500.00 | $ 207,385.75 | 75 | 13 | $ 35,946.86 | $ 171,438.88 | 331.00 | 584.75 | 977.00 | 1.67 | $ 286,440.00 |
| 361 | 8-inch CIP Sewer | 2011 | 300 | LF | $ 165.00 | $ 49,500.00 | $ 33,629.09 | 75 | 10 | $ 4,483.88 | $ 29,145.21 | 331.00 | 663.75 | 977.00 | 1.47 | $ 42,900.00 |
| 361 | 10-inch VCP Sewer | 1937 | 4,000 | LF | $ 180.00 | $ 720,000.00 | $ 16,597.15 | 75 | 84 | $ 16,597.15 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | 12-inch VCP Sewer | 1937 | 1,400 | LF | $ 195.00 | $ 273,000.00 | $ 6,293.08 | 75 | 84 | $ 6,293.08 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | 12-inch PVC Sewer | 1991 | 4,800 | LF | $ 195.00 | $ 936,000.00 | $ 395,618.64 | 75 | 30 | $ 158,247.46 | $ 237,371.19 | 331.00 | 199.50 | 472.00 | 2.37 | $ 561,600.00 |
| 361 | 12-inch PVC Sewer | 1993 | 960 | LF | $ 195.00 | $ 187,200.00 | $ 76,545.76 | 75 | 28 | $ 28,577.08 | $ 47,968.68 | 331.00 | 193.00 | 472.00 | 2.45 | $ 117,312.00 |
| 361 | 15-inch VCP Sewer | 1937 | 4,200 | LF | $ 225.00 | $ 945,000.00 | $ 21,783.75 | 75 | 84 | $ 21,783.75 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | 15-inch PVC Sewer | 1990 | 1,700 | LF | $ 225.00 | $ 382,500.00 | $ 170,787.87 | 75 | 31 | $ 70,592.32 | $ 100,195.55 | 331.00 | 210.75 | 472.00 | 2.24 | $ 224,400.00 |
| 361 | 18-inch SDR 35 PVC Sewer | 1996 | 7,700 | LF | | | $ 638,937.00 | 75 | 25 | $ 212,979.00 | $ 425,958.00 | 331.00 | 211.25 | 472.00 | 2.23 | $ 951,726.28 |
| 361 | 24-inch SDR 35 PVC Sewer | 1996 | 11,607 | LF | | | $ 1,036,038.00 | 75 | 25 | $ 345,346.00 | $ 690,692.00 | 331.00 | 211.25 | 472.00 | 2.23 | $ 1,543,226.62 |
| 361 | Brick Manholes | 1937 | 536 | EA | $ 5,100.00 | $ 2,733,600.00 | $ 63,013.83 | 75 | 84 | $ 63,013.83 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | Concrete Manholes | 1937 | 138 | EA | $ 5,100.00 | $ 703,800.00 | $ 16,223.71 | 75 | 84 | $ 16,223.71 | $ - | 331.00 | 21.00 | 911.00 | 43.38 | $ - |
| 361 | Project Development | 1996 | 1 | LS | | | $ 257,761.25 | 75 | 25 | $ 85,920.42 | $ 171,840.83 | 331.00 | 338.75 | 911.00 | 2.69 | $ 462,131.36 |
| | **Subtotal** | | | | | | **$ 3,880,841.19** | | | | **$ 2,125,700.57** | | | | | **$ 4,804,350.26** |
| | | | | | **TOTALS** | | **$ 3,880,950.19** | | | | **$ 2,125,809.57** | | | | | **$ 4,804,459.26** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Services to Customers**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Cost Per Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 363 | 6-inch Sanitary Service Laterals | 1937 | 60,318 | LF | $ 150.00 | $9,047,700.00 | $ 171,404.33 | 20 | 84 | $ 171,404.33 | $ - | 333.00 | 14.00 | 739.00 | 52.79 | $ - |
| | **TOTAL** | | | | | | **$ 171,404.33** | | | | **$ -** | | | | | **$ -** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Flow Measuring Device**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | Handy Whitman Code | Handy Whitman In-Service | Handy Whitman Current | Handy Whitman Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 364.3 | Chart Recorder for Flow Meters (Secondary PS) | 2012 | 1 | EA | | $ 2,738.00 | 10 | 9 | $ 2,464.20 | $ 273.80 | 334.00 | 379.25 | 485.00 | 1.28 | $ 350.15 |
| 364.3 | Healy-Ruff Co. Depthin feet indicator, #45279-1 with steel tape unit | 2020 | 1 | EA | $ 100.00 | $ 95.98 | 10 | 1 | $ 9.60 | $ 86.38 | 334.00 | 465.50 | 485.00 | 1.04 | $ 90.00 |
| 364.3 | Endress+Hauser Flow Rate Meter | 2020 | 1 | EA | $ 3,000.00 | $ 2,879.38 | 10 | 1 | $ 287.94 | $ 2,591.44 | 334.00 | 465.50 | 485.00 | 1.04 | $ 2,700.00 |
| 364.3 | Analog Level Meter with Tape | 2020 | 1 | EA | $ 100.00 | $ 95.98 | 10 | 1 | $ 9.60 | $ 86.38 | 334.00 | 465.50 | 485.00 | 1.04 | $ 90.00 |
| 364.3 | Seimens Sitrans LUT400 Flow Meter Digital Readout | 2020 | 1 | EA | $ 4,700.00 | $ 4,511.03 | 10 | 1 | $ 451.10 | $ 4,059.93 | 334.00 | 465.50 | 485.00 | 1.04 | $ 4,230.00 |
| 364.3 | Echo Flow Hunter II flow and level indicator with Transducer and Wiring | 2020 | 1 | EA | $ 2,600.00 | $ 2,495.46 | 10 | 1 | $ 249.55 | $ 2,245.92 | 334.00 | 465.50 | 485.00 | 1.04 | $ 2,340.00 |
| 364.4 | Electrical Flow Meter | 1996 | 1 | LS | | $ 1,555.00 | 10 | 25 | $ 1,555.00 | $ - | 334.00 | 206.75 | 485.00 | 2.35 | $ - |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | | $ 10,070.00 | 10 | 25 | $ 10,070.00 | $ - | 334.00 | 206.75 | 485.00 | 2.35 | $ - |
| 364.4 | Electrical Level Transmitter | 1996 | 1 | LS | | $ 4,315.00 | 10 | 25 | $ 4,315.00 | $ - | 334.00 | 206.75 | 485.00 | 2.35 | $ - |
| 364.4 | Electrical Flow Meters - 2 | 1996 | 1 | LS | | $ 10,070.00 | 10 | 25 | $ 10,070.00 | $ - | 334.00 | 206.75 | 485.00 | 2.35 | $ - |
| 364.4 | Electrical Level Transmitter | 1998 | 1 | LS | | $ 4,315.00 | 10 | 23 | $ 4,315.00 | $ - | 334.00 | 197.00 | 485.00 | 2.46 | $ - |
| 364.4 | Eastvale PS Flow Meters and Chart Recorder | 2006 | 1 | LS | | $ 14,000.00 | 10 | 15 | $ 14,000.00 | $ - | 334.00 | 247.75 | 485.00 | 1.96 | $ - |
| | | | | **TOTAL** | | **$ 57,140.84** | | | | **$ 9,343.85** | | | | | **$ 9,800.15** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Office Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390.7 | Office Furniture and fixtures - workstations | 2020 | 1 | LS | $ 2,500.00 | $ 2,478.84 | 10 | 1 | $ 247.88 | $ 2,230.95 | 264.64 | 266.90 | 1.01 | $ 2,250.00 |
| 390.7 | Computers, laptops, printers, etc. | 2020 | 1 | LS | $ 5,000.00 | $ 4,998.16 | 5 | 1 | $ 999.63 | $ 3,998.52 | 62.08 | 62.11 | 1.00 | $ 4,000.00 |
| 390.7 | Miscellaneous EDP Equipment, computers, printers | 2020 | 1 | LS | $ 1,500.00 | $ 1,499.45 | 5 | 1 | $ 299.89 | $ 1,199.56 | 62.08 | 62.11 | 1.00 | $ 1,200.00 |
| | **TOTAL** | | | | | **$ 8,976.44** | | | | **$ 7,429.03** | | | | **$ 7,450.00** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Transportation Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 391.7 | Ford F250 4x4 Truck, 1,466 miles. | 2020 | EA | 1 | | $ 42,707.00 | 10 | 1 | $ 4,270.70 | $ 38,436.30 | 111.24 | 114.46 | 1.03 | $ 39,549.45 |
| 391.7 | Ford F150 4x4 Truck, VIN NO. 1FTMF1EM4EKG07810, 36,779 Miles | 2014 | EA | 1 | | $ 25,656.00 | 10 | 7 | $ 17,959.20 | $ 7,696.80 | 105.61 | 114.46 | 1.08 | $ 8,342.16 |
| 391.7 | Ford F350 1-ton Dump Truck YEAR 1992, VIN No. 1FDKF37GXNNA08298, 90,687Miles, Manual Transmission | 1992 | EA | 1 | $ 70,000.00 | $ 34,593.69 | 15 | 29 | $ 34,593.69 | $ - | 316.29 | 640.00 | 2.02 | $ - |
| 391.7 | Case Backhoe/Loader Model 580 SUPER L EXTEND-A-HOE, #JJG0195825, 5,828 Hrs, 4 X 4 | 1998 | EA | 1 | $ 100,000.00 | $ 59,375.00 | 15 | 23 | $ 59,375.00 | $ - | 380.00 | 640.00 | 1.68 | $ - |
| 391.7 | Bobcat Skid Steer Loader, Model 553 C Series, #513012370, 864 Hrs. | 1999 | EA | 1 | $ 40,000.00 | $ 23,812.50 | 15 | 22 | $ 23,812.50 | $ - | 381.00 | 640.00 | 1.68 | $ - |
| 391.7 | Car Mate Trailer VIN NO. 5A3Y510S12L003959, 5 X 10, 13" Sidewalls | 2002 | EA | 1 | $ 5,900.00 | $ 3,249.78 | 15 | 19 | $ 3,249.78 | $ - | 155.56 | 282.42 | 1.82 | $ - |
| 391.7 | Mansfield Flatbed Trailer, VIN NO. 1M9BU142X6M620139, 6 X 10 Diamond Plate Deck, Tandem Axle | 2006 | EA | 1 | $ 7,500.00 | $ 4,900.55 | 15 | 15 | $ 4,900.55 | $ - | 184.53 | 282.42 | 1.53 | $ - |
| | | | | **TOTAL** | | **$ 194,294.52** | | | | **$ 46,133.10** | | | | **$ 47,891.61** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Stores Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 392.7 | Misc | 1996 | 1 | LS | $ 5,000.00 | $ 2,797.24 | 15 | 25 | $ 2,797.24 | $ - | 102.56 | 183.32 | 1.79 | $ - |
| 392.7 | Chlorine Scales | 1996 | 2 | LS | $ 15,000.00 | $ 8,391.72 | 15 | 25 | $ 8,391.72 | $ - | 102.56 | 183.32 | 1.79 | $ - |
| 392.6 | Lockers | 1996 | 3 | LS | $ 2,000.00 | $ 1,118.90 | 15 | 25 | $ 1,118.90 | $ - | 102.56 | 183.32 | 1.79 | $ - |
| 392.8 | Shelving | 1996 | 4 | LS | $ 5,000.00 | $ 2,797.24 | 15 | 25 | $ 2,797.24 | $ - | 102.56 | 183.32 | 1.79 | $ - |
| 392.9 | Storage bins | 1996 | 5 | LS | $ 5,000.00 | $ 2,797.24 | 15 | 25 | $ 2,797.24 | $ - | 102.56 | 183.32 | 1.79 | $ - |
| | | | | **TOTAL** | | **$ 17,902.33** | | | | **$ -** | | | | **$ -** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Tools, Shop, and Garage Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | CPI In-Service | CPI Current | CPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 393.7 | Gorman-Rupp Trailer Mounted Pump | 2020 | 1 | EA | $ 18,000.00 | $ 17,396.24 | 5 | 1 | $ 3,479.25 | $ 13,916.99 | 92.57 | 95.78 | 1.03 | $ 14,400.00 |
| 393.7 | Cub Cadet Zero Turn Mower | 2020 | 1 | EA | $ 5,000.00 | $ 4,832.29 | 5 | 1 | $ 966.46 | $ 3,865.83 | 92.57 | 95.78 | 1.03 | $ 4,000.00 |
| 393.7 | Lawn Tractor, Toro Wheel Horse Model 73542, #000000111, Hydrostatic, 1071 HRS | 2020 | 1 | EA | $ 10,600.00 | $ 10,244.45 | 5 | 1 | $ 2,048.89 | $ 8,195.56 | 92.57 | 95.78 | 1.03 | $ 8,480.00 |
| 393.7 | Capital Equipment TP300 Industrial Trash Pump, 3", Gas 208 CC Engine | 2020 | 1 | EA | $ 2,000.00 | $ 1,932.92 | 5 | 1 | $ 386.58 | $ 1,546.33 | 92.57 | 95.78 | 1.03 | $ 1,600.00 |
| | Industrial Plus Industrial Trash Pump, 3", 8HP, Gas Fired | 2020 | 1 | EA | $ 2,000.00 | $ 1,932.92 | 5 | 1 | $ 386.58 | $ 1,546.33 | 92.57 | 95.78 | 1.03 | $ 1,600.00 |
| 393.7 | Drill Press DELTA ModelL 17-900, #8810 | 2020 | 1 | EA | $ 1,500.00 | $ 1,449.69 | 5 | 1 | $ 289.94 | $ 1,159.75 | 92.57 | 95.78 | 1.03 | $ 1,200.00 |
| 393.7 | Miller MIG Welder, Multimatic 220 | 2020 | 1 | EA | $ 3,000.00 | $ 2,899.37 | 5 | 1 | $ 579.87 | $ 2,319.50 | 92.57 | 95.78 | 1.03 | $ 2,400.00 |
| 393.7 | Lincoln Welder, Gas Fired | 2020 | 1 | EA | $ 1,200.00 | $ 1,159.75 | 5 | 1 | $ 231.95 | $ 927.80 | 92.57 | 95.78 | 1.03 | $ 960.00 |
| 393.7 | Capital Equipment PW3000 Industrial Pressure Washer | 2020 | 1 | EA | $ 1,000.00 | $ 966.46 | 5 | 1 | $ 193.29 | $ 773.17 | 92.57 | 95.78 | 1.03 | $ 800.00 |
| 393.7 | Stihl TS800 Cutoff Saw with 16-inch wheel | 2020 | 1 | EA | $ 1,700.00 | $ 1,642.98 | 5 | 1 | $ 328.60 | $ 1,314.38 | 92.57 | 95.78 | 1.03 | $ 1,360.00 |
| 393.7 | Toro CCR3650 Snow blower 6Hp | 2020 | 1 | EA | $ 1,700.00 | $ 1,642.98 | 5 | 1 | $ 328.60 | $ 1,314.38 | 92.57 | 95.78 | 1.03 | $ 1,360.00 |
| 393.7 | I-R Air Compressor, Gas Fired T10 Series | 2020 | 1 | EA | $ 700.00 | $ 676.52 | 5 | 1 | $ 135.30 | $ 541.22 | 92.57 | 95.78 | 1.03 | $ 560.00 |
| 393.7 | Capital Equipment 7500D Portable Generator, Diesel Fired, 10 Hrs | 2020 | 1 | EA | $ 2,200.00 | $ 2,126.21 | 5 | 1 | $ 425.24 | $ 1,700.97 | 92.57 | 95.78 | 1.03 | $ 1,760.00 |
| 393.7 | I-R Portable Air Compressor, Gas Fired, T10 SERIES | 2020 | 1 | EA | $ 300.00 | $ 289.94 | 5 | 1 | $ 57.99 | $ 231.95 | 92.57 | 95.78 | 1.03 | $ 240.00 |
| 393.7 | Porter Cable Portable Air Compressor, Jet Stream Series, Model CPL55GH810, 55HP Gas Engine, 8 Gallon Tank | 2020 | 1 | EA | $ 850.00 | $ 821.49 | 5 | 1 | $ 164.30 | $ 657.19 | 92.57 | 95.78 | 1.03 | $ 680.00 |
| 393.7 | BOSCH Brute Electric Demolition Jackhammer with hand truck and tooling | 2020 | 1 | EA | $ 950.00 | $ 918.13 | 5 | 1 | $ 183.63 | $ 734.51 | 92.57 | 95.78 | 1.03 | $ 760.00 |
| 393.7 | HONDA Portable Generator, 8HP, 4000 Watt | 2020 | 1 | EA | $ 1,700.00 | $ 1,642.98 | 5 | 1 | $ 328.60 | $ 1,314.38 | 92.57 | 95.78 | 1.03 | $ 1,360.00 |
| 393.7 | Ridgid KOLLMANN K1500 Sectional Sewer Cleaning Machine | 2020 | 1 | EA | $ 2,600.00 | $ 2,512.79 | 5 | 1 | $ 502.56 | $ 2,010.23 | 92.57 | 95.78 | 1.03 | $ 2,080.00 |
| 393.7 | WEN Construction Zone Series Plate Compactor, 212 CC Gas Engine | 2020 | 1 | EA | $ 700.00 | $ 676.52 | 5 | 1 | $ 135.30 | $ 541.22 | 92.57 | 95.78 | 1.03 | $ 560.00 |
| 393.7 | I-R Air Compressor, Model TS5, #NAR10524662, 5HP, Vertical Tank With Wiring, Control and Hose Reel | 2020 | 1 | EA | $ 2,000.00 | $ 1,932.92 | 5 | 1 | $ 386.58 | $ 1,546.33 | 92.57 | 95.78 | 1.03 | $ 1,600.00 |
| 393.7 | Shop Crane | 2020 | 1 | EA | $ 250.00 | $ 241.61 | 5 | 1 | $ 48.32 | $ 193.29 | 92.57 | 95.78 | 1.03 | $ 200.00 |
| 393.7 | VENTUR Electric Truck Bed | 2020 | 1 | EA | $ 300.00 | $ 289.94 | 5 | 1 | $ 57.99 | $ 231.95 | 92.57 | 95.78 | 1.03 | $ 240.00 |
| 393.7 | Rotary Automotive Lift, Model DP10AN100BBL, #NEP11E0057, 10,000# Capacity with Wiring and Controls | 2020 | 1 | EA | $ 3,700.00 | $ 3,575.89 | 5 | 1 | $ 715.18 | $ 2,860.71 | 92.57 | 95.78 | 1.03 | $ 2,960.00 |
| 393.7 | Western Snowplow Model ProPlow$60390, 8' with mount | 2020 | 1 | EA | $ 3,600.00 | $ 3,479.25 | 5 | 1 | $ 695.85 | $ 2,783.40 | 92.57 | 95.78 | 1.03 | $ 2,880.00 |
| 393.7 | Minor Equipment - shelves, fire ext., time clock, vacuum, floor machine, valet, spare motors, lockers, fans, etc. | 2020 | 1 | LS | $ 5,000.00 | $ 4,832.29 | 5 | 1 | $ 966.46 | $ 3,865.83 | 92.57 | 95.78 | 1.03 | $ 4,000.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 120.00 | $ 115.97 | 5 | 1 | $ 23.19 | $ 92.78 | 92.57 | 95.78 | 1.03 | $ 96.00 |
| 393.7 | Fairbanks Morse, No. 27 Platform Scale, Twin Beams, 4 x 5 Platform with Mettler Toledo Digital Readout | 2020 | 1 | LS | $ 1,200.00 | $ 1,159.75 | 5 | 1 | $ 231.95 | $ 927.80 | 92.57 | 95.78 | 1.03 | $ 960.00 |
| 393.7 | Minor Equipment consisting of fire extinguisher and shelving | 2020 | 1 | LS | $ 400.00 | $ 386.58 | 5 | 1 | $ 77.32 | $ 309.27 | 92.57 | 95.78 | 1.03 | $ 320.00 |
| 393.7 | Minor Equipment - Fire extinguisher , ladder, etc. | 2020 | 1 | LS | $ 150.00 | $ 144.97 | 5 | 1 | $ 28.99 | $ 115.97 | 92.57 | 95.78 | 1.03 | $ 120.00 |
| 393.7 | Minor Equipment - Trucks, chairs, Fire extinguisher , etc. | 2020 | 1 | LS | $ 260.00 | $ 251.28 | 5 | 1 | $ 50.26 | $ 201.02 | 92.57 | 95.78 | 1.03 | $ 208.00 |
| 393.7 | Minor Equipment | 2020 | 1 | LS | $ 120.00 | $ 115.97 | 5 | 1 | $ 23.19 | $ 92.78 | 92.57 | 95.78 | 1.03 | $ 96.00 |
| 393.7 | Minor Equipment yard tools, cabinets, vacuum, shelf/Cabinet, respirators | 2020 | 1 | LS | $ 1,600.00 | $ 1,546.33 | 5 | 1 | $ 309.27 | $ 1,237.07 | 92.57 | 95.78 | 1.03 | $ 1,280.00 |
| 393.7 | Confined Space Set complete with tripod and lift | 2020 | 1 | LS | $ 2,000.00 | $ 1,932.92 | 5 | 1 | $ 386.58 | $ 1,546.33 | 92.57 | 95.78 | 1.03 | $ 1,600.00 |
| 393.7 | Kellogg-America Air Compressor, single stage, 5HP with vertical 60 gallong capacity Tank, complete with piping, connectins, wiring and controls | 2020 | 1 | LS | $ 800.00 | $ 773.17 | 5 | 1 | $ 154.63 | $ 618.53 | 92.57 | 95.78 | 1.03 | $ 640.00 |
| 393.7 | Continental Shop Press Model HV100, #10776, 30 ton capacity, hydraulic | 2020 | 1 | LS | $ 500.00 | $ 483.23 | 5 | 1 | $ 96.65 | $ 386.58 | 92.57 | 95.78 | 1.03 | $ 400.00 |
| 393.7 | Minor equipment consisting of hand tools, power tools, jack, racks, fire extinguisher, etc. | 2020 | 1 | LS | $ 2,900.00 | $ 2,802.73 | 5 | 1 | $ 560.55 | $ 2,242.18 | 92.57 | 95.78 | 1.03 | $ 2,320.00 |
| 393.7 | Rigid 535 Pipe Threader with tooling | 2020 | 1 | LS | $ 2,400.00 | $ 2,319.50 | 5 | 1 | $ 463.90 | $ 1,855.60 | 92.57 | 95.78 | 1.03 | $ 1,920.00 |
| 393.7 | Steel shop table, 8 x 5 with Jib Crane, Vise and Pipe Vise | 2020 | 1 | LS | $ 800.00 | $ 773.17 | 5 | 1 | $ 154.63 | $ 618.53 | 92.57 | 95.78 | 1.03 | $ 640.00 |
| 393.7 | Proto tool chest, 4x2x5 1/2 with hand tools | 2020 | 1 | LS | $ 7,000.00 | $ 6,765.20 | 5 | 1 | $ 1,353.04 | $ 5,412.16 | 92.57 | 95.78 | 1.03 | $ 5,600.00 |
| 393.7 | Lincoln Idealarc 250 Welder | 2020 | 1 | LS | $ 800.00 | $ 773.17 | 5 | 1 | $ 154.63 | $ 618.53 | 92.57 | 95.78 | 1.03 | $ 640.00 |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Tools, Shop, and Garage Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | CPI In-Service | CPI Current | CPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 393.7 | Jet Drill Press Model JDP-20MF, #14046692 | 2020 | 1 | LS | $ 850.00 | $ 821.49 | 5 | 1 | $ 164.30 | $ 657.19 | 92.57 | 95.78 | 1.03 | $ 680.00 |
| 393.7 | Jet Horizontal Band Saw, Model HBS-916W, #414468 | 2020 | 1 | LS | $ 2,900.00 | $ 2,802.73 | 5 | 1 | $ 560.55 | $ 2,242.18 | 92.57 | 95.78 | 1.03 | $ 2,320.00 |
| 393.7 | Minor Equipment - Fire extinguisher , fan, pump, etc. | 2020 | 1 | LS | $ 300.00 | $ 289.94 | 5 | 1 | $ 57.99 | $ 231.95 | 92.57 | 95.78 | 1.03 | $ 240.00 |
| 393.7 | Minor Equipment - Desk, Chair, File, Bookcase, Vaccum, Fire extinguisher , air conditioner, etc. | 2020 | 1 | LS | $ 1,800.00 | $ 1,739.62 | 5 | 1 | $ 347.92 | $ 1,391.70 | 92.57 | 95.78 | 1.03 | $ 1,440.00 |
| 393.7 | Minor equipment consisting of ladder, yard tools and fire extinguisher, etc. | 2020 | 1 | LS | $ 180.00 | $ 173.96 | 5 | 1 | $ 34.79 | $ 139.17 | 92.57 | 95.78 | 1.03 | $ 144.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Devicefor Primary Settling Tanks | 2020 | 1 | LS | $ 600.00 | $ 579.87 | 5 | 1 | $ 115.97 | $ 463.90 | 92.57 | 95.78 | 1.03 | $ 480.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device ffor Final Settling Tanks 1 & 2 | 2020 | 1 | LS | $ 400.00 | $ 386.58 | 5 | 1 | $ 77.32 | $ 309.27 | 92.57 | 95.78 | 1.03 | $ 320.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for Final Settling Tanks 3, 4 and 5 | 2020 | 1 | LS | $ 600.00 | $ 579.87 | 5 | 1 | $ 115.97 | $ 463.90 | 92.57 | 95.78 | 1.03 | $ 480.00 |
| 393.7 | Minor equipment consisting of life ring, floatation Device for chlorine tanks | 2020 | 1 | LS | $ 400.00 | $ 386.58 | 5 | 1 | $ 77.32 | $ 309.27 | 92.57 | 95.78 | 1.03 | $ 320.00 |
| 393.7 | Minor equipment consisting of battery chargers. Drum pumps, airless painter, counters, sprayers, ladders, pressure washer, space heaters, air compressor, hand and power tools, hand trucks, fire extinguishers, shop lights, jacks, refrigerators, chain saw, leaf blowers, string trimmers, utility cart, sandblaster, yard tools, files credenza, chairs, vacuum, safety cabinets | 2020 | 1 | LS | $ 8,000.00 | $ 7,731.66 | 5 | 1 | $ 1,546.33 | $ 6,185.33 | 92.57 | 95.78 | 1.03 | $ 6,400.00 |
| | | | | **TOTAL** | | **$ 105,952.76** | | | | **$ 84,762.21** | | | | **$ 87,704.00** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Laboratory Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Replacement Value Today | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 394 | Orio Ph/ RDO/DO meter | 1996 | 1 | LS | $ 2,500.00 | $ 1,824.04 | 10 | 25 | $ 1,824.04 | $ - | 118.40 | 162.28 | 1.37 | $ - |
| 394 | Glassware | 1996 | 1 | LS | $ 2,000.00 | $ 1,459.23 | 10 | 25 | $ 1,459.23 | $ - | 118.40 | 162.28 | 1.37 | $ - |
| 394 | Refrigerator | 1996 | 1 | LS | $ 1,000.00 | $ 729.61 | 10 | 25 | $ 729.61 | $ - | 118.40 | 162.28 | 1.37 | $ - |
| 394 | Manning effluent composite sampler | 2021 | 1 | LS | $ 6,581.00 | $ 6,581.00 | 10 | 0 | $ - | $ 6,581.00 | 162.28 | 162.28 | 1.00 | $ 6,581.00 |
| 394 | Process Control Equipment | 1996 | 1 | LS | $ 10,000.00 | $ 7,296.14 | 10 | 25 | $ 7,296.14 | $ - | 118.40 | 162.28 | 1.37 | $ - |
| 394 | Lab Equip & Furniture | 1996 | 1 | LS | $ 85,000.00 | $ 62,017.22 | 10 | 25 | $ 62,017.22 | $ - | 118.40 | 162.28 | 1.37 | $ - |
| | | | | **TOTAL** | | **$ 79,907.25** | | | | **$ 6,581.00** | | | | **$ 6,581.00** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Communication Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Unit Cost | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 396.7 | iPhone XR's | 2021 | 2 | EA | $ 500.00 | $ 1,000.00 | 5 | 0 | $ - | $ 1,000.00 | 94.33 | 94.33 | 1.00 | $ 1,000.00 |
| 396.7 | iPads (4G) | 2021 | 5 | EA | $ 400.00 | $ 2,000.00 | 5 | 0 | $ - | $ 2,000.00 | 94.33 | 94.33 | 1.00 | $ 2,000.00 |
| 396.7 | NEC Master Telephone System With PA, Amplifier and phones | 2020 | 1 | LS | $ 8,600.00 | $ 8,600.00 | 5 | 1 | $ 1,720.00 | $ 6,880.00 | 93.66 | 94.33 | 1.01 | $ 6,929.58 |
| | **TOTAL** | | | | | **$ 11,600.00** | | | | **$ 9,880.00** | | | | **$ 9,929.58** |

**City of Beaver Falls Wastewater System**
**Cost Approach**
**Miscellaneous Equipment**

| NARUC Account | Description | Year | Quantity | Unit | Original Cost | Useful Life | Age | Depreciation | Net Book Value | PPI In-Service | PPI Current | PPI Ratio | Replacement Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 397.9 | Surveillance System - 4-cameras, 2-monitor, 1-controller | 2020 | 1 | LS | $ 1,400.00 | 5 | 1 | $ 280.00 | $ 1,120.00 | 123.82 | 127.92 | 1.03 | $ 1,157.09 |
| 397.9 | DVR Recorder | 2018 | 2 | LS | $ 600.00 | 5 | 3 | $ 360.00 | $ 240.00 | 120.83 | 127.92 | 1.06 | $ 254.09 |
| | | | | **TOTAL** | **$ 2,000.00** | | | | **$ 1,360.00** | | | | **$ 1,411.18** |

**City of Beaver Falls Wastewater System**
**Conclusion of Value using the Market Approach**

Application of Purchase Price to Customer Multiples to Customer

| Average Multiple | PA Average Multiple |
|---|---|
| 39,667,838.98 | 62,260,397.97 |

| Recommended Value | |
|---|---|
| $ | 50,964,118 |

| Recommended Weight |
|---|
| 90% |

Application of Market Value of Invested Capital to Net Plant

| Recommended Value | |
|---|---|
| $ | 9,496,121 |

| Recommended Weight |
|---|
| 10% |

Conclusion of Value using the Market Approach and

| | |
|---|---|
| **$** | **46,817,319** |

**City of Beaver Falls Wastewater System**
**Market Value of Invested Capital to Net Plant of Publicly-Traded Water Utilities**
**as of December 31, 2020**

| Company Name | Market Value of Invested Capital to Net PP&E at December 31, 2020 |
|---|---|
| American States Water Company | 2.4940 |
| American Water Works Company, Inc. | 2.0108 |
| California Water Service Group | 1.3723 |
| Essential Utilities Inc. | 1.8853 |
| Middlesex Water Company | 1.7917 |
| SJW Group | 1.5210 |
| The York Water Company | 2.2092 |
| Average | 1.8978 |
| Median | 1.8853 |
| Low | 1.3723 |
| High | 2.4940 |

Source: Bloomberg Professional Services, Company Annual Reports

**City of Beaver Falls Wastewater System**
**Application of Market Value of Invested Captial to**
**the Net Sewer Plant of the Beaver Falls Municipal Sewer System**

| | | Net Plant |
|---|---|---|
| Net Position | $ | 5,003,844 |
| Average Market Value Invested Captial to Net Plant of Publicly-Traded Water Utilities | | 1.898 |
| High Market Value Invested Captial to Net Plant of Publicly-Traded Water Utilities | | 2.494 |
| Low Market Value Invested Captial to Net Plant of Publicly-Traded Water Utilities | | 1.372 |
| Indicated Market Value of Net Plant Based on Average Market Value Invested Capital to Net Plant Ratio: | $ | 9,496,121 |
| Indicated Market Value of Net Plant Based on High Market Value Invested Capital to Net Plant Ratio: | $ | 12,479,523 |
| Indicated Market Value of Net Plant Based on Low Market Value Invested Capital to Net Plant Ratio: | $ | 6,866,665 |

**City of Beaver Falls Wastewater System**
**Market Approach - Comparable Water and Sewer Transactions**
**2016 to Present**

| Target State | Target | Buyer | Water Connections | Wastewater Connections | Implied Enterprise Value ($000) | Implied Enterprise Value ($000)/Customer | Date |
|---|---|---|---|---|---|---|---|
| PA | Superior Water Company, Inc. | Aqua America, Inc. | 3,868 | | 16,800 | 4.34 | 1/4/2016 |
| IL | Dana/Long Point/Reading/Ancona Public Water District System | Illinois American | 150 | | 1,075 | 7.17 | 1/26/2016 |
| TX | Latigo Ranch | Bandera East Utility, LP | 20 | | 80 | 4.00 | 4/11/2016 |
| IL | Village of Ransom | Illinois American | 170 | | 175 | 1.03 | 4/26/2016 |
| PA | Tobyhanna Township | Aqua Pennsylvania | | 800 | 5,500 | 6.88 | 4/30/2016 |
| PA | Borough of New Cumberland Wastewater Assets | Pennsylvania-American Water Company, Inc. | | 3,100 | 23,000 | 7.42 | 5/5/2016 |
| AZ | Willow Valley Water Company | EPCOR Water Arizona Inc. | 1,600 | | 2,270 | 1.42 | 5/9/2016 |
| TX | Brushy Creek Municipal Utility District | Aqua Texas, Inc. | 207 | | 50 | 0.24 | 6/17/2016 |
| IN | White Oak Sewage Treatment, LLC | Aqua Indiana, Inc. | 52 | | 10 | 0.19 | 7/1/2016 |
| TX | Westwood Utility Corporation | City of Fairfield | 420 | | 3,000 | 7.14 | 7/5/2016 |
| IN | Wedgewood Park Water Company, Inc. | Aqua Indiana, Inc. | 216 | | 210 | 0.97 | 7/11/2016 |
| PA | McKeesport Wastewater System | Pennsylvania-American Water Company, Inc. | | 22,000 | 159,000 | 7.23 | 9/9/2016 |
| PA | Scranton Sewer Authority | Pennsylvania-American Water Company, Inc. | | 31,000 | 195,000 | 6.29 | 12/29/2016 |
| CT | The Heritage Village Water Company | Connecticut Water Service Inc. | 4,700 | 3,000 | 20,700 | 2.69 | 2/27/2017 |
| NJ | Shorelands Water Company | New Jersey-American Water Company, Inc. | 11,000 | | 33,000 | 3.00 | 4/3/2017 |
| TX | Oak Hollow Utility Company, Inc. | Utilities Investment Company, Inc. | 690 | | 897 | 1.30 | 4/20/2017 |
| MO | Village of Wardsville | Missouri-American Water Company, Inc. | 475 | 406 | 2,750 | 3.12 | 5/23/2017 |
| PA | New Garden Township | Aqua Pennsylvania | | 2,100 | 29,500 | 14.05 | 6/14/2017 |
| CT | The Avon Water Company | Connecticut Water Service Inc. | 4,800 | | 40,100 | 8.35 | 7/7/2017 |
| IL | Piasa Township Sanitary District | Illinois American | | 120 | 60 | 0.50 | 8/25/2017 |
| IN | Georgetown Water | Indiana American | 1,300 | | 6,400 | 4.92 | 11/15/2017 |
| CT | Aquarion Water Company | Eversource Energy | 226,000 | | 1,675,000 | 7.41 | 12/4/2017 |
| TX | Deer Creek Ranch Water Co., LLC | SJWTX, Inc. | 756 | | 2,700 | 3.57 | 12/20/2017 |
| TX | Dal-High Water LLC | Monarch Utilities I, L.P. | 46 | | 55 | 1.20 | 1/3/2018 |
| KY | Eastern Rockcastle Water Association | Kentucky American Water Co. | 610 | | 770 | 1.26 | 1/19/2018 |
| IN | Town of Sheridan | Indiana American | 1,261 | 1,233 | 10,750 | 4.31 | 2/16/2018 |
| IN | Charlestown Water System | Indiana American | 2,900 | | 13,404 | 4.62 | 3/14/2018 |
| IL | City of Farmington | Illinois American | 1,125 | | 3,750 | 3.33 | 3/21/2018 |
| IL | Village of Fisher | Illinois American | 850 | | 6,800 | 8.00 | 3/28/2018 |
| IL | Alton Regional Wastewater System | Illinois American | | 23,000 | 53,800 | 2.34 | 4/13/2018 |
| IL | Sundale Utilities | Illinois American | 475 | 1,415 | 2,000 | 1.06 | 5/2/2018 |
| TX | Patton Village Water Company, Inc. | City of Patton Village | 550 | | 900 | 1.64 | 6/8/2018 |
| TX | Mustang Creek Estates PWS | Crest Water Company/Shelcon Services | 79 | | 50 | 0.63 | 7/2/2018 |
| PA | Cheltenham Township | Aqua Pennsylvania | | 10,500 | 50,250 | 4.79 | 7/4/2018 |
| IL | Village of Manteno | Aqua Illinois, Inc. | | 3,800 | 25,000 | 6.58 | 7/5/2018 |
| TX | J&S Water Company, LLC | Nerro Supply, LLC | 533 | 333 | 1,485 | 1.71 | 7/18/2018 |
| TX | Summit Ridge, LLC | Bandera East Utility, LP | 17 | | 100 | 5.88 | 7/24/2018 |
| TX | Chambers Meadow Estate Water Company | HILCO United Services, Inc. | 57 | | 45 | 0.79 | 7/25/2018 |
| TX | Aqua Texas, Inc. | Town of Buffalo Gap, Texas | 269 | | 397.5 | 1.48 | 8/2/2018 |
| CT | Connecticut Water Service, Inc. | SJW Group | 139,574 | 3,000 | 1,100,000 | 7.72 | 8/5/2018 |
| PA | Limerick Township | Aqua Pennsylvania | | 5,400 | 75,100 | 13.91 | 8/8/2018 |
| MO | Lawson Water and Wastewater Systems | Missouri-American Water Company, Inc. | 968 | 913 | 4,000 | 2.13 | 8/27/2018 |
| PA | Delaware Sewer Company | Pennsylvania-American Water Company, Inc. | | 40 | 62 | 1.54 | 9/19/2018 |
| TX | Kamira Water System | Arimak Water Supply Corporation | 34 | | 12 | 0.35 | 9/19/2018 |
| IL | Peotone Village | Aqua Illinois, Inc. | 3,000 | | 12,300 | 4.10 | 10/2/2018 |
| TX | Brookshires Camp Joy | TWS Holdings | 119 | | 90 | 0.76 | 11/9/2018 |
| PA | East Norriton Township | Aqua Pennsylvania | | 4,950 | 21,000 | 4.24 | 11/13/2018 |
| ID | Eagle Water Company | Suez Water Idaho | 4,200 | | 10,000 | 2.38 | 12/10/2018 |
| PA | East Bradford Township | Aqua Pennsylvania | | 1,250 | 5,000 | 4.00 | 12/13/2018 |
| TX | Ponder Enterprises, Inc. | Lone Star Water Company | 332 | | 1,345.0 | 4.05 | 2/15/2019 |
| TX | Beverly Lee Minaldi | Simply Aquatics Inc | 47 | | 35.0 | 0.74 | 2/15/2019 |
| PA | Sadsbury Township | Pennsylvania-American Water Company, Inc. | | 1,000 | 8,600 | 8.60 | 3/7/2019 |
| PA | Mahoning Township | SUEZ | 1,200 | | 9,500 | 7.92 | 4/3/2019 |
| TX | San Antonio Water System | Yancey Water Supply Corporation | 269 | | 750 | 2.79 | 4/8/2019 |
| NJ | Borough of Mount Ephraim | New Jersey-American Water Company, Inc. | | 1,800 | 1,400 | 0.78 | 7/3/2019 |
| TX | Paul B Hill | Megan Estes | 50 | | 112.5 | 2.25 | 7/9/2019 |
| TX | Stephenville MHP, Ltd. | HB Shady Oaks TX, LP | 200 | 200 | 2,000 | 5.00 | 7/24/2019 |
| PA | Turbotville Borough | Pennsylvania-American Water Company, Inc. | 320 | 290 | 1,000 | 1.64 | 7/25/2019 |
| OH | City of Campbell, Mahoning County | Aqua Ohio, Inc. | 3,200 | | 7,500 | 2.34 | 8/5/2019 |
| WV | Boone-Raleigh Public Service District | West Virginia-American Water Company | 470 | | 115 | 0.24 | 8/8/2019 |
| WV | Town of Glasgow | West Virginia-American Water Company | 300 | | 200 | 0.67 | 9/6/2019 |
| PA | Delaware County Regional Water Quality Control Authority | Aqua Pennsylvania | | 165,000 | 276,500 | 1.68 | 9/17/2019 |
| IL | Village of Glasford | Illinois American | 492 | 482 | 1,900 | 1.95 | 9/19/2019 |
| IL | Village of Godfrey | Illinois American | | 6,200 | 13,550 | 2.19 | 10/2/2019 |
| PA | Steelton Borough Authority | Pennsylvania-American Water Company, Inc. | 2,400 | | 21,750 | 9.06 | 10/9/2019 |
| TX | Castle Water | Horseshoe Bend Water Company | 507 | | 500.0 | 0.99 | 10/10/2019 |
| IN | Lake Station Water System | Indiana American | 3,270 | | 20,680 | 6.32 | 10/22/2019 |
| TX | Madera Valley WSC | Town of Pecos City | 66 | | 968.3 | 14.67 | 10/23/2019 |

**City of Beaver Falls Wastewater System**
**Market Approach - Comparable Water and Sewer Transactions**
**2016 to Present**

| Target State | Target | Buyer | Water Connections | Wastewater Connections | Implied Enterprise Value ($000) | Implied Enterprise Value ($000)/Customer | Date |
|---|---|---|---|---|---|---|---|
| PA | Exeter Township Wastewater | Pennsylvania-American Water Company, Inc. | | 9,000 | 93,500 | 10.39 | 10/24/2019 |
| IL | Fox River Waer Reclamation District (Skyline) | Aqua Illinois, Inc. | 376 | 376 | 3,500 | 4.65 | 11/1/2019 |
| TX | Wolfforth Place Water System | City of Wolfforth | 183 | | 200.0 | 1.09 | 11/6/2019 |
| PA | Borough of Kane Authority | Pennsylvania-American Water Company, Inc. | | 2,100 | 17,500 | 8.33 | 11/14/2019 |
| TX | Clear Water Estates Water System LLC | SJWTX, Inc. | 230 | | 1,500 | 6.52 | 11/15/2019 |
| NY | New York American Water | Liberty Utilities Co. | 125,000 | | 608,000 | 4.86 | 11/20/2019 |
| TX | Twin Creek Park Water System | Creedmoor-Maha Water Supply Corp | 92 | | 210.0 | 2.28 | 11/22/2019 |
| IL | Village of Grant Park | Aqua Illinois, Inc. | | 540 | 2,300 | 4.26 | 12/1/2019 |
| PA | Phoenixville Borough | Aqua Pennsylvania | 535 | | 3,500 | 6.54 | 12/4/2019 |
| TX | City of Kaufman | College Mound Special Utility District | 153 | | 75.0 | 0.49 | 12/11/2019 |
| PA | Royersford Borough | Pennsylvania-American Water Company, Inc. | | 1,600 | 13,000 | 8.13 | 12/18/2019 |
| PA | Valley Township | Pennsylvania-American Water Company, Inc. | 1,700 | 3,100 | 21,275 | 4.43 | 12/18/2019 |
| IL | City of Jerseyville | Illinois American | 4,100 | 4,100 | 43,250 | 5.27 | 12/20/2019 |
| IL | Granite City | Illinois American | | 12,500 | 18,000 | 1.44 | 12/26/2019 |
| NJ | Township of Long Hill | New Jersey-American Water Company, Inc. | | 2,800 | 12,700 | 4.54 | 1/2/2020 |
| CA | Fruitridge Vista Water Company | California-American Water Company, Inc. | 4,800 | | 20,750 | 4.32 | 2/5/2020 |
| TX | Hammond Mound Utilities, Inc. | Rosehill Utilities, Inc. | 18 | 15 | 70 | 2.12 | 4/3/2020 |
| DE | Town of Frankford Water System | Artesian Water Co. | 350 | | 3,600 | 10.29 | 4/14/2020 |
| IL | Village of Sidney Water System | Illinois American | 560 | | 2,300 | 4.11 | 4/17/2020 |
| IL | Village of Leonore | Illinois American | 68 | | 100 | 1.47 | 4/22/2020 |
| PA | Upper Pottsgrove Township | Pennsylvania-American Water Company, Inc. | | 1,600 | 13,750 | 8.59 | 4/28/2020 |
| IL | Village of Shiloh Wastewater System | Illinois American | | 1,515 | 3,600 | 2.38 | 5/15/2020 |
| IL | Village of Andalusia | Illinois American | 480 | 480 | 3,300 | 3.44 | 5/27/2020 |
| IL | City of Rosiclare | Illinois American | | 377 | 600 | 1.59 | 5/29/2020 |
| FL | Pasco Aqua Utility | Pasco County | 3,600 | 3,100 | 29,300 | 4.37 | 6/29/2020 |
| TX | The Commons Water Supply, Inc. | Aqua Texas, Inc. | 992 | | 4,000 | 4.03 | 8/3/2020 |
| DE | Delaware City Water System | Artesian Water Co. | 800 | | 2,100 | 2.63 | 8/7/2020 |
| PA | Brentwood Borough Wastewater System | Pennsylvania-American Water Company, Inc. | | 4,100 | 19,000 | 4.63 | 12/8/2020 |
| TN | Jasper Highlands Water Distribution System | Tennessee American Water Company | 600 | | 2,400 | 4.00 | 12/31/2020 |
| PA | East Whiteland Township | Aqua Pennsylvania | | 8,200 | 55,000 | 6.71 | 1/13/2021 |
| PA | York City Sewer Authority | Pennsylvania-American Water Company | | 45,000 | 235,000 | 5.22 | 1/20/2021 |
| PA | Willistown Township | Aqua Pennsylvania | | 2,300 | 17,500 | 7.61 | 1/31/2021 |
| WV | Town of East Bank's Water Distribution System | West Virginia-American Water Company | 400 | | 760 | 1.90 | 2/3/2021 |
| IL | Concordia Water Cooperative Water Distribution System | Illinois American Water Company | 150 | | 1,700 | 11.33 | 2/11/2021 |
| CT | New England Service Company, Inc | Aquarion Water Company | 10,000 | | 40,500 | 4.05 | 4/8/2021 |
| IN | River's Edge | Indiana American | 100 | 80 | 420 | 2.33 | 8/12/2021 |
| IL | Village of Bourbonnais | Aqua Illinois, Inc. | | 6,500 | 32,100 | 4.94 | 9/20/2021 |
| PA | Lower Makefield Township | Aqua Pennsylvania | | 11,000 | 53,000 | 4.82 | 3/4/2022 |
| IL | Village of Hardin | Illinois American Water Company | 435 | 405 | 3,300 | 3.93 | 6/7/2022 |

107

Nationwide Average: 4.22

Pennsylvania Average: 6.63

| | Target | Buyer | Water Connections | Wastewater Connections | Implied Enterprise Value ($000) Based on Nationwide Transaction Multiple | Implied Enterprise Value ($000) Based on Pennsylvania Transaction Multiple |
|---|---|---|---|---|---|---|
| PA | City of Beaver Falls | Aqua Pennsylvania, Inc. | | 9,392 | $ 39,667.839 | $ 62,260.398 |

**City of Beaver Falls Wastewater System**
**Potential Purchase - DCF Analysis**
**Traditionally Financed Investor-Owned Entity**

Assumptions:

| | |
|---|---|
| WACC | 6.62% |
| Inflation | 2.25% |
| Rate Increasees 2023-2032 | 10.00% |
| Rate Increases 2033 Onwards | 3.00% |

| | ACTUAL | | | | | | PROJECTED | PROJECTED | PROJECTED |
|---|---|---|---|---|---|---|---|---|---|
| | 2018 | | 2019 | | 2020 | | 2021 | 2022 | 2023 |
| | | | | | | | Rate Increase | Rate Increase | Rate Increase |
| REVENUES | | | | | | | | | |
| City Sewer Users | $ 1,446,894 | 47.35% | $ 1,589,785 | 50.30% | $ 1,506,821 | 49.75% | $ 1,552,026 | $ 1,598,586 | $ 1,758,445 |
| Joint Sewer Users | 1,607,524 | 52.60% | 1,557,579 | 49.28% | 1,516,345 | 50.06% | 1,561,835 | 1,608,690 | 1,769,559 |
| Tap-In Fees | - | 0.00% | 11,700 | 0.37% | 3,510 | 0.12% | 3,615 | 3,724 | 4,096 |
| Miscellaneous Income | 1,577 | 0.05% | 1,337 | 0.04% | 2,249 | 0.07% | 2,316 | 2,386 | 2,625 |
| Total Operating Revenues | $ 3,055,995 | | $ 3,160,401 | | $ 3,028,925 | | $ 3,119,793 | $ 3,213,387 | $ 3,534,725 |
| EXPENSES | | | | | | | | | |
| Contractual Services | $ 705,420 | 23.08% | $ 704,155 | 22.28% | $ 676,100 | 22.32% | $ 691,312 | $ 706,867 | $ 722,771 |
| Wages and Benefits | 730,461 | 23.90% | 893,120 | 28.26% | 926,870 | 30.60% | 947,725 | 969,048 | 990,852 |
| Administrative | 221,053 | 7.23% | 209,507 | 6.63% | 270,210 | 8.92% | 276,290 | 282,506 | 288,863 |
| Office | 3,533 | 0.12% | 1,947 | 0.06% | 5,315 | 0.18% | 5,435 | 5,557 | 5,682 |
| Repair and Maintenance | 115,042 | 3.76% | 246,620 | 7.80% | 193,667 | 6.39% | 252,169 | 257,843 | 263,644 |
| Billing Expense | 20,187 | 0.66% | 18,635 | 0.59% | 20,015 | 0.66% | 20,465 | 20,926 | 21,397 |
| Engineering | 9,394 | 0.31% | 6,387 | 0.20% | 7,574 | 0.25% | 7,744 | 7,919 | 8,097 |
| Utilities | 134,647 | 4.41% | 134,699 | 4.26% | 137,700 | 4.55% | 140,798 | 143,966 | 147,205 |
| Chemicals/Chlorine | 24,827 | 0.81% | 29,195 | 0.92% | 24,286 | 0.80% | 24,832 | 25,391 | 25,962 |
| Sludge/Grit Removal | 56,054 | 1.83% | 55,940 | 1.77% | 61,270 | 2.02% | 62,649 | 64,058 | 65,499 |
| Janitorial Supplies | 2,589 | 0.08% | 3,349 | 0.11% | 2,995 | 0.10% | 3,062 | 3,131 | 3,202 |
| Gas and Oil | 6,533 | 0.21% | 2,211 | 0.07% | 1,721 | 0.06% | 1,760 | 1,799 | 1,840 |
| Equipment | 5,732 | 0.19% | 16,674 | 0.53% | 8,195 | 0.27% | 8,379 | 8,568 | 8,761 |
| Small Tools | 40 | 0.00% | - | 0.00% | 4,745 | 0.16% | 4,852 | 4,961 | 5,073 |
| Uniforms | 2,244 | 0.07% | 2,586 | 0.08% | 2,317 | 0.08% | 2,369 | 2,422 | 2,477 |
| Permits and Testing | 14,542 | 0.48% | 22,996 | 0.73% | 16,650 | 0.55% | 17,025 | 17,408 | 17,799 |
| Certification & Training | 480 | 0.02% | 1,359 | 0.04% | 440 | 0.01% | 450 | 460 | 470 |
| Insurance | 30,273 | 0.99% | 30,273 | 0.96% | 30,273 | 1.00% | 30,954 | 31,651 | 32,363 |
| Line Rental Expense | 40,000 | 1.31% | 40,000 | 1.27% | 40,000 | 1.32% | 40,900 | 41,820 | 42,761 |
| Sewer Line Reimbursement | 100,000 | 3.27% | 200,000 | 6.33% | 200,000 | 6.60% | 200,000 | | |
| Miscellaneous | 1,048 | 0.03% | 598 | 0.02% | 351 | 0.01% | 359 | 367 | 375 |
| TOTAL OPERATING EXPENSES | $ 2,224,099 | 72.78% | $ 2,620,251 | 82.91% | $ 2,630,694 | 86.85% | $ 2,739,529 | $ 2,596,668 | $ 2,655,094 |
| Income Before Taxes | | | | | | | $ 380,264 | $ 616,718 | $ 879,632 |
| TOTAL CAPITAL EXPENDITURES | | | | | | | | $ 569,250 | $ 830,500 |
| CASH FLOW | | | | | | | | $ 47,468 | $ 49,132 |
| Period | | | | | | | | 0.5 | 1.5 |
| PW Factor | | | | | | | | 0.9685 | 0.9083 |
| PWCF | | | | | | | | 45,971 | 44,628 |
| Value - Perpetuity | | | | | | | | **39,970,803** | |

**City of Beaver Falls Wastewater System**
**Potential Purchase - DCF Analysis**
**Traditionally Financed Investor-Owned Entity**

Assumptions:

| | |
|---|---|
| WACC | 6.62% |
| Inflation | 2.25% |
| Rate Increasees 2023-2032 | 10.00% |
| Rate Increases 2033 Onwards | 3.00% |

| | PROJECTED 2024 Rate Increase | PROJECTED 2025 Rate Increase | PROJECTED 2026 Rate Increase | PROJECTED 2027 Rate Increase | PROJECTED 2028 Rate Increase | PROJECTED 2029 Rate Increase | PROJECTED 2030 Rate Increase | PROJECTED 2031 Rate Increase | PROJECTED 2032 Rate Increase | PROJECTED 2033 Rate Increase | PROJECTED 2034 Rate Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|
| REVENUES | | | | | | | | | | | |
| City Sewer Users | $ 1,934,290 | $ 2,127,718 | $ 2,340,490 | $ 2,574,539 | $ 2,651,776 | $ 2,731,329 | $ 2,813,269 | $ 2,897,667 | $ 2,984,597 | $ 3,074,135 | $ 3,166,359 |
| Joint Sewer Users | 1,946,515 | 2,141,167 | 2,355,284 | 2,590,812 | 2,668,536 | 2,748,592 | 2,831,050 | 2,915,982 | 3,003,461 | 3,093,565 | 3,186,372 |
| Tap-In Fees | 4,506 | 4,956 | 5,452 | 5,997 | 6,177 | 6,362 | 6,553 | 6,750 | 6,952 | 7,161 | 7,376 |
| Miscellaneous Income | 2,887 | 3,176 | 3,493 | 3,843 | 3,958 | 4,077 | 4,199 | 4,325 | 4,455 | 4,588 | 4,726 |
| Total Operating Revenues | $ 3,888,198 | $ 4,277,017 | $ 4,704,719 | $ 5,175,191 | $ 5,330,447 | $ 5,490,360 | $ 5,655,071 | $ 5,824,723 | $ 5,999,465 | $ 6,179,449 | $ 6,364,832 |
| EXPENSES | | | | | | | | | | | |
| Contractual Services | $ 739,034 | $ 755,662 | $ 772,664 | $ 790,049 | $ 807,825 | $ 826,001 | $ 844,586 | $ 863,590 | $ 883,020 | $ 902,888 | $ 923,203 |
| Wages and Benefits | 1,013,146 | 1,035,942 | 1,059,251 | 1,083,084 | 1,107,453 | 1,132,371 | 1,157,849 | 1,183,901 | 1,210,539 | 1,237,776 | 1,265,626 |
| Administrative | 295,362 | 302,008 | 308,803 | 315,751 | 322,855 | 330,120 | 337,547 | 345,142 | 352,908 | 360,848 | 368,967 |
| Office | 5,810 | 5,940 | 6,074 | 6,211 | 6,351 | 6,493 | 6,640 | 6,789 | 6,942 | 7,098 | 7,258 |
| Repair and Maintenance | 269,576 | 275,642 | 216,457 | 221,328 | 226,307 | 231,399 | 236,606 | 241,929 | 247,373 | 252,939 | 258,630 |
| Billing Expense | 21,878 | 22,370 | 22,874 | 23,388 | 23,915 | 24,453 | 25,003 | 25,565 | 26,141 | 26,729 | 27,330 |
| Engineering | 8,279 | 8,465 | 8,656 | 8,851 | 9,050 | 9,253 | 9,461 | 9,674 | 9,892 | 10,115 | 10,342 |
| Utilities | 150,518 | 153,904 | 157,367 | 160,908 | 164,528 | 168,230 | 172,015 | 175,886 | 179,843 | 183,890 | 188,027 |
| Chemicals/Chlorine | 26,547 | 27,144 | 27,755 | 28,379 | 29,018 | 29,671 | 30,338 | 31,021 | 31,719 | 32,432 | 33,162 |
| Sludge/Grit Removal | 66,973 | 68,480 | 70,021 | 71,596 | 73,207 | 74,854 | 76,539 | 78,261 | 80,022 | 81,822 | 83,663 |
| Janitorial Supplies | 3,274 | 3,347 | 3,423 | 3,500 | 3,579 | 3,659 | 3,741 | 3,826 | 3,912 | 4,000 | 4,090 |
| Gas and Oil | 1,881 | 1,924 | 1,967 | 2,011 | 2,056 | 2,103 | 2,150 | 2,198 | 2,248 | 2,298 | 2,350 |
| Equipment | 8,958 | 9,159 | 9,365 | 9,576 | 9,792 | 10,012 | 10,237 | 10,468 | 10,703 | 10,944 | 11,190 |
| Small Tools | 5,187 | 5,303 | 5,423 | 5,545 | 5,669 | 5,797 | 5,927 | 6,061 | 6,197 | 6,337 | 6,479 |
| Uniforms | 2,533 | 2,590 | 2,648 | 2,708 | 2,768 | 2,831 | 2,894 | 2,960 | 3,026 | 3,094 | 3,164 |
| Permits and Testing | 18,200 | 18,609 | 19,028 | 19,456 | 19,894 | 20,342 | 20,799 | 21,267 | 21,746 | 22,235 | 22,735 |
| Certification & Training | 481 | 492 | 503 | 514 | 526 | 538 | 550 | 562 | 575 | 588 | 601 |
| Insurance | 33,091 | 33,835 | 34,597 | 35,375 | 36,171 | 36,985 | 37,817 | 38,668 | 39,538 | 40,428 | 41,337 |
| Line Rental Expense | 43,723 | 44,707 | 45,713 | 46,742 | 47,793 | 48,869 | 49,968 | 51,092 | 52,242 | 53,417 | 54,619 |
| Sewer Line Reimbursement | | | | | | | | | | | |
| Miscellaneous | 384 | 392 | 401 | 410 | 419 | 429 | 438 | 448 | 458 | 469 | 479 |
| TOTAL OPERATING EXPENSES | $ 2,714,833 | $ 2,775,917 | $ 2,772,989 | $ 2,835,381 | $ 2,899,177 | $ 2,964,408 | $ 3,031,108 | $ 3,099,308 | $ 3,169,042 | $ 3,240,345 | $ 3,313,253 |
| Income Before Taxes | $ 1,173,365 | $ 1,501,101 | $ 1,931,731 | $ 2,339,810 | $ 2,431,270 | $ 2,525,952 | $ 2,623,963 | $ 2,725,416 | $ 2,830,423 | $ 2,939,103 | $ 3,051,579 |
| TOTAL CAPITAL EXPENDITURES | $ 1,100,000 | $ 192,500 | $ 308,000 | $ 2,095,500 | $ 253,000 | $ 110,000 | $ 2,502,500 | $ 165,000 | $ 1,072,500 | $ 727,109 | $ 743,469 |
| CASH FLOW | $ 73,365 | $ 1,308,601 | $ 1,623,731 | $ 244,310 | $ 2,178,270 | $ 2,415,952 | $ 121,463 | $ 2,560,416 | $ 1,757,923 | $ 2,211,994 | $ 2,308,110 |
| Period | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 |
| PW Factor | 0.8519 | 0.7990 | 0.7494 | 0.7029 | 0.6592 | 0.6183 | 0.5799 | 0.5439 | 0.5101 | 0.4785 | 0.4488 |
| PWCF | 62,501 | 1,045,615 | 1,216,858 | 171,723 | 1,436,019 | 1,493,820 | 70,440 | 1,392,653 | 896,796 | 1,058,374 | 1,035,793 |
| Value - Perpetuity | | | | | | | | | | | |

**City of Beaver Falls Wastewater System**
**Potential Purchase - DCF Analysis**
**Traditionally Financed Investor-Owned Entity**

Assumptions:

| | |
|---|---|
| WACC | 6.62% |
| Inflation | 2.25% |
| Rate Increasees 2023-2032 | 10.00% |
| Rate Increases 2033 Onwards | 3.00% |

| | PROJECTED 2035 Rate Increase | PROJECTED 2036 Rate Increase | PROJECTED 2037 Rate Increase | PROJECTED 2038 Rate Increase | PROJECTED 2039 Rate Increase | PROJECTED 2040 Rate Increase | PROJECTED 2041 Rate Increase | PROJECTED 2042 Rate Increase | PROJECTED 2043 Rate Increase | PROJECTED 2044 Rate Increase | PROJECTED 2045 Rate Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|
| REVENUES | | | | | | | | | | | |
| City Sewer Users | $ 3,261,349 | $ 3,359,190 | $ 3,459,966 | $ 3,563,765 | $ 3,670,678 | $ 3,780,798 | $ 3,894,222 | $ 4,011,048 | $ 4,131,380 | $ 4,255,321 | $ 4,382,981 |
| Joint Sewer Users | 3,281,963 | 3,380,422 | 3,481,835 | 3,586,290 | 3,693,878 | 3,804,695 | 3,918,836 | 4,036,401 | 4,157,493 | 4,282,217 | 4,410,684 |
| Tap-In Fees | 7,597 | 7,825 | 8,060 | 8,301 | 8,551 | 8,807 | 9,071 | 9,343 | 9,624 | 9,912 | 10,210 |
| Miscellaneous Income | 4,868 | 5,014 | 5,164 | 5,319 | 5,479 | 5,643 | 5,812 | 5,987 | 6,166 | 6,351 | 6,542 |
| Total Operating Revenues | $ 6,555,777 | $ 6,752,451 | $ 6,955,024 | $ 7,163,675 | $ 7,378,585 | $ 7,599,943 | $ 7,827,941 | $ 8,062,779 | $ 8,304,663 | $ 8,553,802 | $ 8,810,417 |
| EXPENSES | | | | | | | | | | | |
| Contractual Services | $ 943,975 | $ 965,215 | $ 986,932 | $ 1,009,138 | $ 1,031,844 | $ 1,055,060 | $ 1,078,799 | $ 1,103,072 | $ 1,127,891 | $ 1,153,269 | $ 1,179,217 |
| Wages and Benefits | 1,294,102 | 1,323,220 | 1,352,992 | 1,383,434 | 1,414,562 | 1,446,389 | 1,478,933 | 1,512,209 | 1,546,234 | 1,581,024 | 1,616,597 |
| Administrative | 377,269 | 385,758 | 394,437 | 403,312 | 412,386 | 421,665 | 431,153 | 440,854 | 450,773 | 460,915 | 471,286 |
| Office | 7,421 | 7,588 | 7,759 | 7,933 | 8,112 | 8,294 | 8,481 | 8,672 | 8,867 | 9,066 | 9,270 |
| Repair and Maintenance | 264,449 | 270,399 | 276,483 | 282,704 | 289,065 | 295,569 | 302,219 | 309,019 | 315,972 | 323,081 | 330,351 |
| Billing Expense | 27,945 | 28,574 | 29,217 | 29,874 | 30,546 | 31,234 | 31,936 | 32,655 | 33,390 | 34,141 | 34,909 |
| Engineering | 10,575 | 10,813 | 11,056 | 11,305 | 11,559 | 11,819 | 12,085 | 12,357 | 12,635 | 12,919 | 13,210 |
| Utilities | 192,258 | 196,583 | 201,007 | 205,529 | 210,154 | 214,882 | 219,717 | 224,661 | 229,715 | 234,884 | 240,169 |
| Chemicals/Chlorine | 33,908 | 34,671 | 35,451 | 36,249 | 37,065 | 37,899 | 38,751 | 39,623 | 40,515 | 41,426 | 42,358 |
| Sludge/Grit Removal | 85,546 | 87,470 | 89,438 | 91,451 | 93,508 | 95,612 | 97,764 | 99,963 | 102,213 | 104,512 | 106,864 |
| Janitorial Supplies | 4,182 | 4,276 | 4,372 | 4,470 | 4,571 | 4,674 | 4,779 | 4,886 | 4,996 | 5,109 | 5,224 |
| Gas and Oil | 2,403 | 2,457 | 2,512 | 2,569 | 2,627 | 2,686 | 2,746 | 2,808 | 2,871 | 2,936 | 3,002 |
| Equipment | 11,442 | 11,699 | 11,963 | 12,232 | 12,507 | 12,788 | 13,076 | 13,370 | 13,671 | 13,979 | 14,293 |
| Small Tools | 6,625 | 6,774 | 6,926 | 7,082 | 7,242 | 7,405 | 7,571 | 7,742 | 7,916 | 8,094 | 8,276 |
| Uniforms | 3,235 | 3,308 | 3,382 | 3,458 | 3,536 | 3,616 | 3,697 | 3,780 | 3,865 | 3,952 | 4,041 |
| Permits and Testing | 23,247 | 23,770 | 24,305 | 24,852 | 25,411 | 25,982 | 26,567 | 27,165 | 27,776 | 28,401 | 29,040 |
| Certification & Training | 614 | 628 | 642 | 657 | 672 | 687 | 702 | 718 | 734 | 751 | 767 |
| Insurance | 42,267 | 43,218 | 44,191 | 45,185 | 46,202 | 47,241 | 48,304 | 49,391 | 50,502 | 51,639 | 52,801 |
| Line Rental Expense | 55,848 | 57,105 | 58,390 | 59,703 | 61,047 | 62,420 | 63,825 | 65,261 | 66,729 | 68,231 | 69,766 |
| Sewer Line Reimbursement | | | | | | | | | | | |
| Miscellaneous | 490 | 501 | 512 | 524 | 536 | 548 | 560 | 573 | 586 | 599 | 612 |
| TOTAL OPERATING EXPENSES | $ 3,387,801 | $ 3,464,027 | $ 3,541,968 | $ 3,621,662 | $ 3,703,149 | $ 3,786,470 | $ 3,871,666 | $ 3,958,778 | $ 4,047,851 | $ 4,138,927 | $ 4,232,053 |
| Income Before Taxes | $ 3,167,976 | $ 3,288,424 | $ 3,413,057 | $ 3,542,013 | $ 3,675,436 | $ 3,813,473 | $ 3,956,275 | $ 4,104,001 | $ 4,256,812 | $ 4,414,875 | $ 4,578,363 |
| TOTAL CAPITAL EXPENDITURES | $ 760,197 | $ 777,301 | $ 794,791 | $ 812,674 | $ 830,959 | $ 849,655 | $ 868,772 | $ 888,320 | $ 908,307 | $ 928,744 | $ 949,641 |
| CASH FLOW | $ 2,407,779 | $ 2,511,122 | $ 2,618,266 | $ 2,729,340 | $ 2,844,477 | $ 2,963,817 | $ 3,087,503 | $ 3,215,681 | $ 3,348,505 | $ 3,486,131 | $ 3,628,723 |
| Period | 13.5 | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 | 20.5 | 21.5 | 22.5 | 23.5 |
| PW Factor | 0.4209 | 0.3948 | 0.3703 | 0.3473 | 0.3257 | 0.3055 | 0.2865 | 0.2687 | 0.2520 | 0.2364 | 0.2217 |
| PWCF | 1,013,432 | 991,304 | 969,425 | 947,806 | 926,458 | 905,390 | 884,613 | 864,132 | 843,955 | 824,088 | 804,535 |
| Value - Perpetuity | | | | | | | | | | | |

**City of Beaver Falls Wastewater System**
**Potential Purchase - DCF Analysis**
**Traditionally Financed Investor-Owned Entity**

Assumptions:

| | |
|---|---|
| WACC | 6.62% |
| Inflation | 2.25% |
| Rate Increasees 2023-2032 | 10.00% |
| Rate Increases 2033 Onwards | 3.00% |

| | PROJECTED 2046 Rate Increase | PROJECTED 2047 Rate Increase | PROJECTED 2048 Rate Increase | PROJECTED 2049 Rate Increase | PROJECTED Perpetuity Rate Increase |
|---|---|---|---|---|---|
| REVENUES | | | | | |
| City Sewer Users | $ 4,514,470 | $ 4,649,905 | $ 4,789,402 | $ 4,933,084 | $ 5,081,076 |
| Joint Sewer Users | 4,543,005 | 4,679,295 | 4,819,673 | 4,964,264 | 5,113,192 |
| Tap-In Fees | 10,516 | 10,832 | 11,156 | 11,491 | 11,836 |
| Miscellaneous Income | 6,738 | 6,940 | 7,148 | 7,363 | 7,584 |
| Total Operating Revenues | $ 9,074,729 | $ 9,346,971 | $ 9,627,380 | $ 9,916,201 | $ 10,213,687 |
| EXPENSES | | | | | |
| Contractual Services | $ 1,205,750 | $ 1,232,879 | $ 1,260,619 | $ 1,288,983 | $ 1,317,985 |
| Wages and Benefits | 1,652,970 | 1,690,162 | 1,728,191 | 1,767,075 | 1,806,834 |
| Administrative | 481,890 | 492,732 | 503,819 | 515,155 | 526,746 |
| Office | 9,479 | 9,692 | 9,910 | 10,133 | 10,361 |
| Repair and Maintenance | 337,784 | 345,384 | 353,155 | 361,101 | 369,226 |
| Billing Expense | 35,695 | 36,498 | 37,319 | 38,159 | 39,017 |
| Engineering | 13,507 | 13,811 | 14,122 | 14,440 | 14,765 |
| Utilities | 245,573 | 251,098 | 256,748 | 262,525 | 268,431 |
| Chemicals/Chlorine | 43,311 | 44,286 | 45,282 | 46,301 | 47,343 |
| Sludge/Grit Removal | 109,268 | 111,727 | 114,241 | 116,811 | 119,439 |
| Janitorial Supplies | 5,341 | 5,461 | 5,584 | 5,710 | 5,838 |
| Gas and Oil | 3,069 | 3,138 | 3,209 | 3,281 | 3,355 |
| Equipment | 14,615 | 14,944 | 15,280 | 15,624 | 15,975 |
| Small Tools | 8,462 | 8,653 | 8,847 | 9,046 | 9,250 |
| Uniforms | 4,132 | 4,225 | 4,320 | 4,417 | 4,517 |
| Permits and Testing | 29,693 | 30,362 | 31,045 | 31,743 | 32,457 |
| Certification & Training | 785 | 802 | 820 | 839 | 858 |
| Insurance | 53,989 | 55,203 | 56,445 | 57,715 | 59,014 |
| Line Rental Expense | 71,336 | 72,941 | 74,582 | 76,260 | 77,976 |
| Sewer Line Reimbursement | | | | | |
| Miscellaneous | 626 | 640 | 654 | 669 | 684 |
| TOTAL OPERATING EXPENSES | $ 4,327,274 | $ 4,424,638 | $ 4,524,192 | $ 4,625,987 | $ 4,730,071 |
| Income Before Taxes | $ 4,747,455 | $ 4,922,333 | $ 5,103,188 | $ 5,290,215 | $ 5,483,616 |
| TOTAL CAPITAL EXPENDITURES | $ 971,008 | $ 992,855 | $ 1,015,195 | $ 1,038,036 | $ 1,061,392 |
| CASH FLOW | $ 3,776,447 | $ 3,929,478 | $ 4,087,993 | $ 4,252,178 | $ 4,422,224 |
| | | | | | 101,195,053 |
| Period | 24.5 | 25.5 | 26.5 | 27.5 | 28.5 |
| PW Factor | 0.2079 | 0.1950 | 0.1829 | 0.1716 | 0.1609 |
| PWCF | 785,300 | 766,388 | 747,800 | 729,538 | 16,995,449 |
| Value - Perpetuity | | | | | |

**City of Beaver Falls Wastewater System**

**Potential Purchase - DCF Analysis**

**Capital Expenditures**

| System Component | Description | 2023 Year 1 | 2024 Year 2 | 2025 Year 3 | 2026 Year 4 | 2027 Year 5 | 2028 Year 6 | 2029 Year 7 | 2030 Year 8 | 2031 Year 9 | 2032 Year 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Safety Measures (Safety) | Miscellaneous | $ 75,000 | | | | | | | | | | $ 75,000 |
| Collection (Compliance) | MH Inspections / GIS Based Map Creation | $ 80,000 | | | | | | | | | | $ 80,000 |
| Collection (Compliance) | Temporary Metering Program | $ 100,000 | | | | | | | | | | $ 100,000 |
| Collection (Compliance) | CCTV Main Inspections | | | | $ 125,000 | $ 125,000 | $ 125,000 | | | | | $ 375,000 |
| Collection (Compliance) | MH Rehabilitation | | | | | | | | $ 100,000 | $ 100,000 | $ 200,000 | $ 400,000 |
| Collection (Compliance) | Prioritized Main Rehabilitaton and replacement | | | | $ 30,000 | $ 30,000 | $ 30,000 | | $ 1,300,000 | | $ 650,000 | $ 2,040,000 |
| Collection | New Customer Connections | | $ 25,000 | | $ 25,000 | | $ 25,000 | | $ 25,000 | | $ 25,000 | $ 125,000 |
| Collection (Compliance) | Existing Lateral Repairs | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 500,000 |
| Treatment (Safety / Compliance) | Replace Trickling Filter Tower #1 | | $ 125,000 | $ 125,000 | | | | | | | | $ 250,000 |
| Treatment (Safety) | HVAC Upgrades in Headworks | $ 175,000 | | | | | | | | | | $ 175,000 |
| Treatment (Safety) | Headwork Room Upgrades | | $ 250,000 | | | | | | | | | $ 250,000 |
| Treatment (Safety / Compliance) | Screen Replacement | | | | | $ 350,000 | | | | | | $ 350,000 |
| Treatment (Safety / Compliance) | Electrical Upgrades / Arc Flash remediation | | $ 250,000 | | | $ 750,000 | | | $ 750,000 | | | $ 1,750,000 |
| Treatment (Safety) | Convert from Cl Gas to Hypo | | | | | $ 300,000 | | | | | | $ 300,000 |
| | | | | | | | | | | | | $ - |
| Treatment (Compliance) | Replace primary clarifier sludge collector gear drives | | | | | $ 250,000 | | | | | | $ 250,000 |
| Treatment (Compliance) | SCADA System | $ 50,000 | $ 250,000 | | | | | | | | | $ 300,000 |
| Treatment (Compliance) | Miscellaneous Repairs | $ 50,000 | $ 50,000 | | $ 50,000 | $ 50,000 | | $ 50,000 | $ 50,000 | | $ 50,000 | $ 350,000 |
| | | | | | | | | | | | | $ - |
| Transportation | Replace Dump Truck (if needed) | $ 75,000 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 75,000 |
| Safety Measures (Safety) | PHASE II Site Assess | $ 100,000 | | | | | | | | | | $ 100,000 |
| | Sum Before Contingency | $ 755,000 | $ 1,000,000 | $ 175,000 | $ 280,000 | $ 1,905,000 | $ 230,000 | $ 100,000 | $ 2,275,000 | $ 150,000 | $ 975,000 | $ 7,845,000 |
| Contingency 10% | 10% of items above | $ 75,500 | $ 100,000 | $ 17,500 | $ 28,000 | $ 190,500 | $ 23,000 | $ 10,000 | $ 227,500 | $ 15,000 | $ 97,500 | $ 784,500 |
| | **TOTALS** | **$ 830,500** | **$ 1,100,000** | **$ 192,500** | **$ 308,000** | **$ 2,095,500** | **$ 253,000** | **$ 110,000** | **$ 2,502,500** | **$ 165,000** | **$ 1,072,500** | **$ 8,629,500** |

# EXHIBIT R

# CITY OF BEAVER FALLS
## WASTEWATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

DECEMBER 31, 2021

Prepared by:

GANNETT FLEMING

**Gannett Fleming**
**Valuation and Rate Consultants, LLC**

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
**P** 717.763.7211 | **F** 717.763.8150

gannettfleming.com

August 10, 2022

Via email to CJones@beaverfallspa.org

Mr. Charles R. Jones, Jr., City Manager
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Dear Mr. Jones:

Fair Market Value Appraisal

In accordance with your request, we have prepared a fair market value appraisal of the City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." (The International Glossary of Business Valuation Standards)

Based on our analysis, as described in the attached appraisal report, the estimate of the fair market value of the Wastewater System, as of December 31, 2021, is $44,292,000 (rounded).

Our appraisal was developed consistent with the Uniform Standards of Professional Appraisal Practices. Our fair market value appraisal of the Wastewater System was based on the Cost, Market, and Income Approaches to valuation. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

The attached narrative appraisal presents our findings and conclusions regarding the fair market value of the Wastewater System's assets of December 31, 2021. The report describes the valuation methodologies employed and the Exhibits that present the valuation results.

The results of the analyses and calculations completed for each applicable approach are detailed throughout the report and the Exhibits and are summarized as follows:

| Valuation Approach | Indicated Value |
|---|---|
| Cost Approach | $32,994,154 |
| Income Approach | 45,450,675 |
| Market Approach | 50,664,671 |

We thank the City of Beaver Falls for this opportunity to provide valuation services in connection with the fair market value appraisal of the Wastewater System's assets.

Respectfully Submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

HAROLD WALKER, III
Manager, Financial Studies

HW:mle

TABLE OF CONTENTS

INTRODUCTION ..... 1
Introduction and Summary ..... 1
Description of the Assignment ..... 1
Standard and Premise of Value ..... 1
Subject Interest ..... 2
Intended Use of the Valuation ..... 2
Client and Users ..... 2
Jurisdictional Exceptions ..... 2
Extraordinary Assumptions ..... 3
Hypothetical Conditions ..... 3
Limiting Conditions ..... 3
Site Inspection ..... 3
Fiduciary Duty ..... 4
Sources of Information ..... 4
Description of the City of Beaver Falls ..... 5
Description of the Wastewater System ..... 5
Demographics and Growth for the Wastewater System ..... 8
HISTORY AND NATURE OF THE BUSINESS ..... 10
Economic Outlook ..... 10
Industry Review ..... 11
QUANTITATIVE AND QUALITATIVE ANALYSIS ..... 14
Comparison Review ..... 14
Financial Review ..... 16
Financial Benchmark Analysis ..... 17
Risk Analysis ..... 17
Property Plant & Equipment Analysis ..... 20
Property Plant & Equipment Analysis for Contributions ..... 20
Capital Expenditures Analysis ..... 21
Growth Rate Analyses ..... 21
Profit Margin Analyses ..... 22
VALUATION ..... 22
The Cost Approach ..... 23
The Original Cost Method ..... 25
The Replacement Cost Method ..... 26
Benchmark Metrics ..... 28
Accrued Depreciation and Obsolescence ..... 29
Cost Approach Conclusion ..... 31
The Income Approach ..... 33
The Capitalization of Earnings Method ..... 36
The DCF Method ..... 38
The Market Approach ..... 41
The Market Multiples Method ..... 41
The Selected Transactions Method ..... 45
Wall Street Transactions ..... 48

Market Value of Ultimate Wholesale Customers ..... 50
Conclusion ..... 51
APPENDIX A - QUALIFICATIONS ..... 53
COMPLIANCE & APPRAISAL CERTIFICATION ..... 58
EXHIBITS ..... 59

INTRODUCTION

Introduction and Summary. The following narrative report presents our findings and conclusions regarding the fair market value of the wastewater system assets of the City of Beaver Falls as of December 31, 2021. The report describes the valuation methodologies employed and the Exhibits that present the valuation results. Based upon the analyses, we believe the fair market value of the City of Beaver Falls' wastewater system assets is $44.3 million ($44,292,000 rounded). This conclusion is based upon the values suggested by the Cost, Income, and Market approaches. During our analysis we found indications of value that ranged from $33.0 million to $50.7 million. However, most of the appropriate indicated values approximated $44.3 million.

Description of the Assignment. Gannett Fleming Valuation and Rate Consultants, LLC was retained by City of Beaver Falls ("Beaver Falls") to estimate the fair market value of City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

Standard and Premise of Value. The fair market value appraisal of the Wastewater System complies with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."[1]

As stated, the standard of value for this engagement is fair market value. The premise of value is the going concern. The going concern premise of business value assumes that the business

1 The International Glossary of Business Valuation Standards

will continue running normally using all its assets to produce income and will continue operating beyond the valuation date.

We valued the Wastewater System's assets as a group under the premise that the assets collectively comprise an ongoing operating business enterprise. Additionally, in accordance with 66 Pa. C.S. Section 1329, the original source of funding for any part of the Wastewater System's assets was not relevant to the determination of the value of said assets.

Subject Interest. The consideration in this transaction is a 100% interest in Beaver Falls' wastewater operations, which means that the buyer would be able to control the Wastewater System's operations going forward. This subject interest is marketable but is not a liquid interest. The binding agreement governing this transaction is the asset purchase agreement.

Intended Use of the Valuation. The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Although our appraisal is intended to estimate fair market value, we assume no responsibility for the inability of the seller or buyer to obtain a sale or purchase contract at that price.

Client and Users. The client is the City of Beaver Falls. The intended users of the valuation are the City of Beaver Falls, Aqua Pennsylvania Wastewater, Inc., and the Pennsylvania Public Utility Commission ("PUC").

Jurisdictional Exceptions. In accordance with 66 Pa. C.S. Section 1329, and PUC rules, the acquiring public utility and selling utility jointly retain a licensed engineer to conduct an assessment of the tangible assets of the system ("Engineering Assessment") to be acquired. The Engineering Assessment is required to be used by the appraiser in determining fair market value.

The Engineering Assessment provides both a condition assessment and original cost inventory of the assets.

Extraordinary Assumptions. There were no extraordinary assumptions required for this appraisal.

Hypothetical Conditions. There were no hypothetical conditions assumed for this appraisal.

Limiting Conditions. We accepted all information and data provided by the City of Beaver Falls as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verified any data, engineering assessment, financial record or operating data provided for this assignment. We assumed all title to all assets included in the appraisal is good and marketable, no hidden defects in the property or soil and no hazardous conditions or materials exist which could affect the assets. We are not an environmental consultant or auditor, and we take no responsibility for any actual or potential environmental liabilities. We have not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.

The economic and industry information and data included in this report have been obtained from various printed or electronic reference sources that we believe to be reliable. We have not performed any corroborating procedures to substantiate that information and data.

Site Inspection. Wastewater engineers from our affiliated company viewed or observed the Wastewater System's facilities on February 26, 2021, August 20, 2021, January 28, 2022, and other dates unknown**.** We also relied on engineering assessment of the Wastewater System's facilities report, "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of

Wastewater System Assets" dated June 9, 2022, and related files prepared by Gannett Fleming, Inc., to confirm the condition of the Wastewater System's property and equipment.

Fiduciary Duty. Gannett Fleming has a fiduciary duty to, and does provide a thorough, objective, and fair market valuation using the cost, market, and income approaches in accordance with 66 Pa. C.S. Section 1329 and Pennsylvania laws.

Gannett Fleming attests that it does not derive any material financial benefit from the sale of, or purchase of, a selling utility other than fees for services rendered. Gannett Fleming also verifies it does not have any immediate family members who are directors, officers or employees of either an acquiring public utility, entity or selling utility within a 12-month period of the date of hire to perform this appraisal. We further affirm that Gannett Fleming is not directly or indirectly owned, partnered or in any way affiliated with a water/wastewater distribution company.

Sources of Information. The following sources of information were reviewed during the assignment:

"City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets," dated June 9, 2022, and related files prepared by Gannett Fleming, Inc.;

City provided electronic files (e.g., PDF and Excel);

Wastewater System's Customer data;

Wastewater System's Fee Schedule;

Wastewater System's 537 Plan;

Wastewater System's Chapter 94 Reports;

Wastewater System's Permits;

DEP's Inspection and Discharge Monitoring Reports;

Wastewater System's Sewage Service and Treatment Agreements;

Asset Purchase Agreement;

City of Beaver Falls' Audited Financials (2017 - 2020);

City of Beaver Falls' Corrective Action Plans;

City of Beaver Falls' Sewer Ordinances;

Blue Chip Financial Forecasts;

US Census Bureau, various data files;

Value Line Investment Survey; and

S&P Capital IQ.

Description of the City of Beaver Falls. City of Beaver Falls is located near the center of Beaver County, in western Pennsylvania. City of Beaver Falls lies along the western side of the Beaver River and borders Eastvale Borough on the other side of the Beaver River, West Mayfield Borough to the northwest, White Township to the west, and Patterson Heights Borough and Patterson Township to the southwest. City of Beaver Falls is the 26th largest land mass of Beaver County's 53 municipalities and was the 5th most populous with 8,661 people (2015) and 4,183 housing units (2015). City of Beaver Falls consists of 2.1 square miles and lies approximately 40 miles northwest of Pittsburgh, Pennsylvania. According to U.S. Census figures, City of Beaver Falls' population grew 0.2% from 2010 to 2020, while population in Pennsylvania grew 2.4% and -1.4% (negative) in Beaver County.

Description of the Wastewater System. City of Beaver Falls owns and operates the Wastewater System which consists of a wastewater treatment plant ("WWTP"), a pump station, about 36 miles of mains, approximately 674 manholes, 3,252 services, associated infrastructure and appurtenances, and related land and land rights.

The Wastewater System's WWTP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Each municipality is responsible for their own collection system.

The Wastewater System WWTP is a 4.7 million gallons per day ("MGD") capacity plant. In 2020, the WWTP's average daily flow was 2.10 MGD. The WWTP has with three primary settling tanks, two biological contact oxidation towers, five secondary settling tanks, two chlorine disinfection tanks, two anaerobic sludge digesters, a belt filter press, a grit separator, a grease separator, with various piping, pumps, blowers, controls, and an onsite emergency power generator. The dewatered sludge and process residuals are disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026883 (effective November 1, 2018 and expires October 31, 2023).

The Wastewater System owns and maintains the Eastvale Pump Station, located in neighboring Eastvale Borough. The Eastvale Pump Station's force main is 8-inches in diameter and approximately 1,400 linear feet. The force main consists of ductile iron ("DIP") pipe, which was installed in 2006.

The Wastewater System's 190,442 linear feet of gravity sewer collection and trunk mains consist of 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch and 24-inch diameter pipe which was installed between 1937 to 2011.[2] About 82% of the gravity mains were installed in 1937, 16% between 1990 and 1998, and 1% between 2008 and 2011. The mains consist of vitrified clay ("VCP") pipe and cured in place ("CIP") VCP, and polyvinyl chloride ("PVC") SDR 35 pipe.

2 The Engineering Assessment listed installation date of 1936-1938 was assumed to be 1937 for appraisal purposes.

Only about 6% of the mains installed in 1937 have had to be replaced or lined. There are 674 brick and concrete manholes and 3,252 services laterals in the system. All manholes and services laterals were installed in 1937, and none have been replaced.

The City of Beaver Falls utilizes two enterprise funds to account for the Wastewater System's operations. The City of Beaver Falls' audited financial statements reflect the use of modified accrual accounting, a combination of cash basis and full accrual basis. Modified accrual accounting measures revenues when they become available and measurable and, with a few exceptions, records expenditures when liabilities are incurred, regardless of the timing of related cash flows. For the year ended December 31, 2020, (shown on Exhibit 1) the Wastewater System had reported revenues of $3.025 million and expenses of $2.870 million. At the same point in time, the Wastewater System was capitalized with $8.146 million of fund equity and no City of Beaver Falls' long-term debt was attributable to the Wastewater System. At the same point in time, the Wastewater System had total assets of $8.238 million, including $6.026 net utility plant.

The Wastewater System is exempt from PUC regulation as a municipal utility. The Wastewater System's rate requirements are established by the needed funds to run the system. Most municipalities, including Wastewater System, use a Government Accounting Standards Board ("GASB") process of accounting or the PA Department of Community and Economic Development ("DCED") versus Financial Accounting Standards Board ("FASB") method of accounting used by investor-owned utilities ("IOU"). Municipalities are not typically concerned with the return on and the return of their investments of their utility systems since they deem they are providing a public service to their taxpayers. Municipalities typically expense (i.e., maintenance expense) renewals replacement, and customer collection services capital expenditures and they do not typically fully account for the replacement of all capital assets which

are all typically capitalized (i.e., construction of capital asset, construction expenditure, etc.) and "booked" at original cost by IOUs. For these reasons, we do not believe Wastewater System's financial statements should be fully relied upon without recognizing their limitations.

As shown on page 1 of Exhibit 2, the Wastewater System provides service directly to 3,259 customers ("domestic customers"). The Wastewater System's domestic customers include 3,252 retail customers located in the City of Beaver Falls and seven wholesale customers whose flows are transported and treated at the WWTP.[3] The Wastewater System's seven wholesale customers service 3,767 customers whose flows are ultimately transported and treated at the WWTP ("ultimate wholesale customers"). In total, the Wastewater System provides wastewater service directly and indirectly to 7,019 customers ("ultimate customers"). The Wastewater System's 7,019 ultimate customers are comprised of 3,252 retail customers and 3,767 ultimate wholesale customers as shown on Exhibit 2, page 1.

The Wastewater System provides service to a population of 15,580 people and services to approximately 5,107 Equivalent Dwelling Units ("EDU"). EDUs are estimated to increase by 25 EDUs through 2025.

Demographics and Growth for the Wastewater System. As shown on Exhibit 3, Table 3.1, according to U.S. Census figures, the U.S. population grew 7.4% from 2010 to 2020, and the population in Pennsylvania grew 2.4%. During this same period, Beaver County's population decreased by 1.4%, the City of Beaver Falls' population grew 0.2%, and the population of all eight municipalities that are provided service by the WWTP decreased by 0.7% (Exhibit 3, Table 3.2). City of Beaver Falls' population growth was ranked 963 of the 2,572 municipalities in

3 The Wastewater System's seven wholesale customers include: Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority.

Pennsylvania and the eight municipalities that are provided service by the WWTP's population growth rate would be ranked 1,083 of the 2,572 municipalities in Pennsylvania.

The Census Bureau and planning agencies provide population projections for future time periods. Population projections are a primary indicator of expected future growth, and they help determine predictable demand for utility services, housing, roads, business services and facilities. The Southwestern Pennsylvania Commission ("SPC") is the regional planning agency serving the 10-county Southwestern Pennsylvania region. The 10-county Southwestern Pennsylvania region includes the counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland, and the City of Pittsburgh. The SPC publishes population projections and employment projections for the 10-county Southwestern Pennsylvania region and the municipalities which comprise the counties, which include the Wastewater System's service area.

As shown on Page 2 of Exhibit 3, Table 3.3, the City of Beaver Falls' population growth is projected to be about 62% of the growth rate projected for the total SPC Region during each five-year period from 2020 through 2045. The City of Beaver Falls' projected population growth places them in the upper 60 percent or 60th percentile of the 586 municipalities analyzed by SPC. The eight municipalities that are provided service by the WWTP's population growth rate would be ranked 243 of the 586 municipalities, equal to the upper 59 percent, or 59th percentile of the 586 municipalities analyzed by SPC.

Page 3 of Exhibit 3, Table 3.4 shows the City of Beaver Falls' employment growth is projected to be -2.2% (negative), which ranks them 375 and places them in the lower 36 percent, or 36th percentile of the 586 municipalities analyzed by SPC. The eight municipalities that are provided service by the WWTP's employment growth rate would be ranked 387 and place them

in the lower 34 percent, or 34th percentile of the 586 municipalities analyzed by SPC.

Currently, there are approximately 21,859 people (Exhibit 2) in the Wastewater System's service area 20,743 people in households. There are 9,069 occupied housing units in the Wastewater System's service area, and the ratio of people to households is 2.29 persons per household. The Wastewater System's service area density is 4.8 people per customer based on an estimated service area population of 15,580 and 3,259 domestic customers.[4] The Wastewater System's service area density is higher than the 3.6 per customer density of water and wastewater systems (see Table 2 in this report) indicating lower market penetration.

HISTORY AND NATURE OF THE BUSINESS

Economic Outlook. The valuation date (December 31, 2021) is the specific date at which the value of the Wastewater System is based. Generally, only the circumstances existing at the valuation date and events occurring up to the valuation date are considered. Events which could affect the value may occur after the valuation date.

An outbreak of a new strain of coronavirus was first reported in Wuhan, China in late 2019 and quickly spread around the world. A coronavirus is a kind of common virus that causes an infection in sinuses, or upper throat. The World Health Organization ("WHO") declared the spread of the infection a pandemic. The WHO named the virus SARS-CoV-2, and the disease COVID-19.

We do not believe the appraised value of the long-lived Water System assets is materially impacted by COVID-19 or its related relatively short-term events and does not significantly affect the determination of value as of the specified valuation date of December 31, 2021. In the valuation

4 The service area density for ultimate customers is 2.2 people per customer.

of any company, the general economic outlook as of the valuation date is important since it influences how investors perceive alternative investment opportunities at that point in time. As part of our analysis, we considered the forecasts for the U.S. economy that prevailed as of December 31, 2021. We focused on the forecasts and economic commentary presented in Blue Chip Financial Forecasts in the December 1, 2021 edition. Some of these economic forecasts are presented in Table 1.

Economic Indicators

| | Latest Qtr | Consensus Forecasts | |
|---|---|---|---|
| | 3Q 2021 | 4Q 2021 | 1Q 2022 |
| Key Assumptions | | | |
| Real GDP | 2.1 | 5.1 | 4.4 |
| GDP Price Index | 5.9 | 4.6 | 3.4 |
| Consumer Price Index | 6.6 | 5.6 | 3.3 |
| Interest Rates | | | |
| 3-mo. Treasury Bills | 0.05 | 0.1 | 0.1 |
| 10 Year Notes | 1.32 | 1.6 | 1.7 |
| 30 Year Notes | 1.93 | 2.1 | 2.2 |
| Aaa Corporate Bond Yield | 2.72 | 2.7 | 2.9 |
| Baa Corporate Bond Yield | 3.16 | 3.4 | 3.6 |
| State & Local Bonds | 2.64 | 2.4 | 2.6 |
| Home Mortgage Rate | 2.87 | 3.1 | 3.2 |

**Table 1**

Industry Review. A review of the industry in which the company operates is important in determining value. The trends and stability of the specific economic environment affecting operations need to be reviewed to gain further insight regarding the prospects and risks associated

with the industry and each company.

The wastewater utility industry has a Standard Industrial Classification ("SIC") code of 4952 (Sewerage Systems), has sewer utilities, and includes establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided. There are currently 2,041 U.S. Businesses with a SIC code of 4952.

The wastewater utility industry is a fragmented industry, although not as fragmented as the water supply industry. According to the U.S. Environmental Protection Agency's ("EPA") most recent survey of publicly owned wastewater treatment facilities in 2012, there are approximately 15,000 such facilities in the nation, serving approximately 76% of the U.S. population. Eighty percent of domestic wastewater systems are government owned rather than IOUs. Currently, there are no wastewater utility companies that have actively traded stock.

A comparative industry to the wastewater utility industry is the water supply industry. The water utility industry has a Standard Industrial Classification ("SIC") code of 4941 (Water Supply), has water utilities, and includes establishments primarily engaged in distributing water for sale for residential, commercial, and industrial uses. Government controlled establishments such as municipal service districts and public utilities dominate the industry. Private companies or IOUs are active in the construction and improvement of water supply facilities and infrastructure. There are currently 11,137 U.S. Businesses with a SIC code of 4941.

The water supply industry is the most fragmented of the major utility industries with more than 53,000 community water systems in the U.S. (82% of which serve less than 3,300 customers). The nation's water systems range in size from large municipally owned systems, such as the New York City water system that serves approximately 9 million people, to small systems, where a few

customers share a common well.

An estimated 14% of all water suppliers are managed or owned by IOUs. IOUs consist of companies with common stock that is either actively traded or inactively traded, as well as companies that are closely held, or not publicly traded. Currently (December 31, 2021), there are only about nine investor-owned water utility companies with publicly traded stock in the U.S.

The water utility industry and wastewater utility industry's increased compliance with state and federal water purity levels and large infrastructure replacements are driving consolidation of the wastewater utility and water utility industries. Because many wastewater utility and water utility operations do not have the means to finance the significant capital expenditures needed to comply with these requirements, many have been selling their operations to larger, financially stronger operations.

The larger IOUs have been following an aggressive acquisition program to expand their operations by acquiring smaller wastewater and water systems. Generally, they enter a new market by acquiring one or several wastewater or water utilities. After their initial entry into a new market, the larger investor-owned water utility companies continually seek to expand their market share and services through the acquisition of wastewater and water utility businesses and operations that can be integrated with their existing operations. Such acquisitions may allow a company to expand market share and increase asset utilization by eliminating duplicate management, administrative, and operational functions.

Acquisitions of small, independent utilities can often add earning assets without necessarily incurring the costs associated with the Safe Drinking Water Act ("SDWA") if such acquisitions are contiguous to the potential purchaser.

In summary, the result of increased capital spending, to meet the SDWA requirements[5] and to replace the aging infrastructure of many systems, has moved the wastewater and water industries toward consolidation. Moreover, Federal and State regulations and controls concerning water quality are still in the process of being developed and it is not possible to predict the scope or the enforceability of regulations or standards which may be established in the future, or the cost and effect of existing and potential regulations and legislation upon the sewer and water systems. However, as a small to medium sized wastewater system, the Wastewater System faces the cost of compliance with significantly limited financial resources, competing for financial needs against other municipal services and the general unwillingness of elected officials to raise taxes when compared to larger IOU water utilities.

QUANTITATIVE AND QUALITATIVE ANALYSIS

Comparison Review. The comparison review considers the financial and operating statistics for the Wastewater System, and a group of companies ("Comparable Group") that operate in the same basic or similar industry as the Wastewater System. Since no marketplace exists for the common stock of the Wastewater System, an alternative to estimate the value of the Wastewater System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are like the Wastewater System. We list the Comparable Group chosen for study in Table 2.

The companies in the Comparable Group were selected based upon: (1) the availability of

5 The SDWA, or Safe Drinking Water Act, is the principal federal law in the United States intended to ensure safe drinking water for the public. Pursuant to the act, the EPA is required to set standards for drinking water quality and oversee all states, localities, and water suppliers who implement these standards. The CWA, or Clean Water Act, is the primary federal law in the United States governing water pollution. The CWA's objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

financial information; (2) inclusion in the S&P Capital IQ database; (3) a December 31, 2021 market value of common stock, the product of multiplying the closing stock price by the number of common shares outstanding, greater than $200.0 million; (4) a December 31, 2021 total enterprise value (the sum of market value, preferred stock and total debt) greater than $450.0 million; (5) were not the subject of a known acquisition at December 31, 2021; (6) with a Standard Industrial Classification (SIC) of 4941 (i.e., Water Supply Facilities and Infrastructure) and (7) with a North American Industry Classification System (NAICS) of 221310 (i.e., Water Supply and Irrigation Systems). The eight companies ("Comparable Group") that met the criteria for selection are listed in Table 2.

| | Acquisition Date Size Statistics | | | |
|---|---|---|---|---|
| | Revenues (Mill. $) | Customers | Population | Customer Density |
| City of Beaver Falls Wastewater System Assets | $3.025 | 3,259 | 15,580 | 4.8 |
| Comparable Group | | | | |
| American States Water Co | $488.243 | 286,341 | 1,000,000 | 3.5 |
| American Water Works Co Inc | 3,777.000 | 3,496,000 | 15,000,000 | 4.3 |
| Artesian Resources -CL A | 88.141 | 95,640 | 300,000 | 3.1 |
| California Water Service Gp | 794.307 | 543,000 | 2,000,000 | 3.7 |
| Essential Utilities, Inc. | 1,462.698 | 1,798,803 | 5,000,000 | 2.8 |
| Middlesex Water Co | 141.592 | 122,200 | 500,000 | 4.1 |
| SJW Corp | 564.526 | 389,293 | 1,614,866 | 4.1 |
| York Water Co | 53.852 | 72,681 | 202,000 | 2.8 |
| Median | $526.385 | 337,817 | 1,307,433 | 3.6 |

**Table 2**

We believe that similar economic, industry and business risks have affected the

Comparable Group as those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike. Table 2 presents comparative statistics regarding total revenues, customers, population of the area served, and customer density (population ÷ customers). On average, the Comparable Group are larger than the Wastewater System. The relative size difference between the group and the Wastewater System suggests that the risk of the Wastewater System is greater than the Comparable Group. We will discuss the difference in risk resulting from size later in this report.

Financial Review. We conducted a financial review that considered the financial and operating statistics for the Wastewater System and the Comparable Group for the three-year period, 2018 to 2020. It is our opinion that the economic, industry and business risks affecting the Comparable Group selected are similar to those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike.

The determination of reasonable water rates and sewer rates for the Comparable Group is subject to rate regulation. For the Comparable Group, rate regulation serves as a substitute for competition in the marketplace since utility companies are precluded from exercising complete control over the price to be charged their customers. Under rate regulation, a cost of service formula is used to set the price for service charged to customers. The cost of service formula equates revenues to the sum of annual operating expenses, taxes other than income, depreciation expense, income taxes, and the product of the rate base times a fair rate of return.

It is the responsibility of the utility seeking changes in rates to present sufficient evidence to their regulators in support of their request. Historically, the Wastewater System's rates have not considered a fair rate of return nor taxes. That is, the Wastewater System's rates would have been higher and their financial results would have been healthier if they included a provision for a

fair rate of return and taxes. Consequently the results of the Wastewater System's historical financial performance shown on Exhibits 4 and 6 should be viewed with this knowledge.

Financial Benchmark Analysis. To gain insight into the risk differences between the Wastewater System and the Comparable Group, we reviewed financial ratios and coverages. Unfortunately, there is no single measure that best indicates investment risk from an investor's perspective. However, from a creditor's viewpoint, the best measure of investment risk is debt rating. The debt rating process generally provides a good measure of investment risk for common stockholders because the factors considered in the debt rating process are usually relevant factors that a common stock investor would consider in assessing the risk of an investment.

The types of financial benchmarks applied by credit rating agencies such as Standard and Poor's ("S&P") for rating IOU public utility debt are broader than the traditional measure of financial risk, leverage. Besides reviewing the amounts of leverage employed (i.e., percentage of debt used in the capital structure), S&P also focuses on earnings protection and cash flow adequacy. During the period 2018-2020, the Wastewater System's financial benchmark ratios show (Exhibit 4) lower investment risk than the Comparable Group based on coverage and cash flow.

Risk Analysis. From an operations standpoint, the Wastewater System and the Comparable Group are indistinguishable. Both are required to meet SDWA and CWA requirements and are also required to provide safe and reliable services to their customers.

A basic premise of finance is the tradeoff between risk and return. That is, the higher the perceived risk, the higher the required return. Conversely, the lower the perceived risk, the lower the required return.

As mentioned previously, size is a determinant of risk. Based on size, the Wastewater System's risk is higher than the Comparable Group given Wastewater System's relatively small size. Table 2 details the size difference between the Wastewater System and the Comparable Group. As shown on Table 2, the Wastewater System is many times smaller than the Comparable Group.

Size is a determinant of risk because the loss of a large customer impacts a small company much more than a large company because a large customer of a small company usually accounts for a larger percentage of the small company's sales. Further, a larger company has much more diversification in customer mix, economic conditions, source of supplies, weather, demographic, and financing than the Wastewater System. Because the larger Comparable Group has a more diverse geographic operation than the Wastewater System, it enables them to sustain earnings fluctuations caused by adverse weather conditions in one portion of its service territory. Further, the larger Comparable Group has a more diverse customer base and is less susceptible to local downturns associated with regional economic conditions than the Wastewater System.

Exhibit 5, Table 5.1, provides an illustration which shows company size has been inversely related to returns and the volatility of their common stock. Specifically, Ibbotson Associates sorted 2,966 publicly traded common stocks based on size of market value (market price multiplied by the number of shares) and placed them into four different portfolios (quartiles). The common stock quartile return and the resultant size premium, column B, increased at an increasing rate as you move from a larger stock quartile to a smaller stock quartile. Similarly, the total risk, or standard deviation of annual returns (a measure of risk), also increased with decreasing company size (column C).

The Comparable Group's market value on December 31, 2021, ranged from $435 million to $34,285 million as shown on Table 5.2 of Exhibit 5. Based on their market value, the Comparable Group's median market quartile was 2. Wastewater System's market value would place them in quartile 4 based upon Wastewater System's financial statements and since the largest company in quartile 4 on Table 5.1 had a market value of $453 million.

The change in risk adjusted common stock return rate between quartile 2 and quartile 4 (column J) is 1.92 percentage points (3.68% - 1.76%). The results of the illustration shown on Exhibit 5 suggests the Wastewater System's common equity cost rate could be about 1.92 percentage points higher than the Comparable Group. The history of common stock returns indicates small company stocks are riskier than large company stocks because as one moves from the larger to smaller quartiles, the standard deviation (a measure of risk) of returns increases. Historically, common stock investors have been compensated for taking on this additional risk by the higher returns provided by small company stocks.

In general, it is reasonable to expect small companies to be more risky than large ones. Exhibit 5 shows small company stocks have been riskier over a long period of time than larger company stocks due to the various advantages that larger companies have over smaller companies. For example, small capitalized firms generally have less access to capital and, overall, not as many financial resources. Further, small capitalized stocks have lower trading liquidity than larger ones.

The bond market, particularly the corporate bond market, also differentiates between large and small bond issues, where many large institutional investors such as pension funds and insurance companies require large blocks of bonds for liquidity and performance. Because of

this size preference, smaller bond issuers often pay a cost rate premium when compared to larger bond issuers.

A higher return requirement for companies the size of Wastewater System translates into a higher capitalization rate. All else being equal, a higher capitalization rate will produce a lower value. However, all things are seldom equal as shown by the array of market multiples for the companies that comprise the Comparable Group (Exhibit 17, page 2). As shown on Exhibit 17, the Comparable Group's current market multiples do not suggest a higher capitalization rate due to size as there are numerous other risks affecting the Comparable Group's market values.

Property Plant and Equipment Analysis. The Wastewater System can best be characterized as a fully integrated domestic wastewater system with wholesale customers ("integrated with wholesale").[6] The Wastewater System does not have the number of large treatment facilities that the Comparable Group.[7] The Wastewater System's gross property, plant and equipment is in relatively good condition given its age (Exhibit 6, Table 6.1) with 61% of their gross property, plant and equipment remaining undepreciated while 78% of the Comparable Group's gross property, plant and equipment remained undepreciated.[8]

Property Plant and Equipment Analysis for Contributions. Most regulatory commissions determine rates for utilities based on a cost of service formula reflective of gross plant, property, and equipment less accumulated depreciation (i.e., net property, plant, and equipment) being roughly equal to investor provided capital (i.e., debt and equity capital) plus "cost free" capital such as customer contributions. Under 66 Pa. C.S. Section 1329 (Valuation of Acquired Water

6 A fully integrated domestic wastewater system is characterized as having both collection assets and treatment assets.
7 The Wastewater System derives a larger percentage of its revenues from wholesale customers and treats a larger percentage of flows from wholesale customers than the Comparable Group (Exhibit 2, page 2).
8 The Wastewater System's gross and net property, plant and equipment is developed on Exhibit 7.

and Wastewater Systems), the original source of funding for any part of the assets of a selling utility is not relevant to determining the value of a selling utility's assets.

We found a 19% (100% - 81%) difference between the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital on the valuation date (Exhibit 6, page 1, Table 6.2). The difference between the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital is comprised of "cost free" capital such as customer contributions.[9] This is evidenced by the 19% difference in the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital (Exhibit 6, page 1, Table 6.2). Additionally, we verified known components of the Comparable Group's "cost free" capital by reviewing their individual balance sheets (Exhibit 6, page 1, Table 6.2) at year-end 2020.

We did not analyze the Wastewater System's property, plant, and equipment for "cost free" capital, or customer contributions, because the original source of funding for any part of the assets of a selling utility is irrelevant to the valuation process under 66 Pa. C.S. Section 1329.

Capital Expenditures Analysis. The level of capital expenditures required for business purposes is an indicator of risk. Over the last four years, the Comparable Group had annual capital expenditures of about 9% of net plant (Exhibit 6, page 2, Table 6.3). During this same time, 2018-20, the Wastewater System had annual capital expenditures of about between 0% to 1% of net plant. Therefore, the Wastewater System historical capital spending was below the Comparable Group's median.

Growth Rate Analyses. Higher growth rates are an indication of less risk. A review of

9 Under rate regulation "cost free" capital, such as customer contributions, is subtracted from plant assets in determining the dollar amount of property on which a utility may earn a "fair rate of return" and therefore, "cost free" capital has no economic value to investors.

the growth rates in revenue, operating income plus depreciation and operating income, reveal that the Wastewater System's revenues have been growing less than the Comparable Group (Exhibit 6, page 4, Table 6.4) over the last three years. Similarly, the Wastewater System's operating income plus depreciation and operating income have been growing less than the Comparable Group. Prospectively, the Wastewater System's growth rates should lag the Comparable Group's without increased rates and a higher level of planned capital additions.

Profit Margin Analyses. Higher profit margins are an indication of less risk. We compared earnings before interest and taxes ("EBIT") to revenues to see how successful the Wastewater System's management has been at generating income from the operation of the business. We also compared operating profitability or earnings before interest, tax, depreciation, and amortization ("EBITDA") divided by total revenue to gain a clearer view of the Wastewater System's core profitability. The Wastewater System's EBITDA profit margins are lower than the Comparable Group's indicating more risk. Similarly, the Wastewater System's EBIT profit margins are lower indicating more risk (Exhibit 6, page 5, Table 6.5).

VALUATION

The purpose of this valuation is to comply with 66 Pa. C.S. Section 1329 (Valuation of Acquired Water and Water Systems) and conduct a fair market value appraisal of the Wastewater System's assets as of December 31, 2021 in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Consequently, three basic valuation approaches were considered in this analysis: the cost approach, the income approach, and the market approach.

The Cost Approach. In general terms, the cost approach measures value by determining the amount of money required to replace the future service capability of an asset. The cost approach is based on the premise that an informed purchaser will not pay more for a property than the cost of constructing an equally desirable substitute property, minus applicable depreciation, and assuming no undue delay.

The cost approach can include the use of the: original cost method; trended original cost method; reproduction cost method; and replacement cost method. From these cost bases, the calculated accrued depreciation (accumulated depreciation) is subtracted.

The original cost method begins with determining the original cost new ("OCN") measure of the cost of the assets when first constructed. The OCN is based on (1) a review and summary of the utility's accounting records, contractors' invoices and bid tabulations to determine the most appropriate data sources of each type of asset; (2) and the "pricing out" of assets using unit costs for each vintage year that property was placed in service.

Under the trended cost method, the trended original cost ("TOC") measures the reproduction cost by multiplying the OCN by specific cost indices. The TOC is based on (1) a review and summary of the OCN at each location to determine those elements that would be replaced-in-kind, those that would be replaced with current methods and technologies and those that would not be replaced; (2) the selection of cost indexes and the calculation of trended original cost for those elements that would be replaced-in-kind; and (3) the estimation of the cost to purchase or construct those elements that would be replaced with current methods and technologies. The TOC is a procedure for estimating reproduction cost new of property and is sometimes used as a substitute for reproduction cost method and may be considered a form of the reproduction cost method, though not as precise.

The reproduction cost method begins with determining the reproduction cost new ("RPCN") by determining the current cost of constructing identical new property. The replacement cost method begins with estimating the replacement cost new ("RCN") based on approximating the current cost of replacing service of existing property with similar new property having the nearest equivalent utility to the property being valued (as defined by the *International Glossary of Business Valuation Terms*).

The RPCN and the RCN methods include the research and verification of the inventory of a company's tangible personal property. Upon verification of the inventory, current material costs, current construction costs, engineering costs, administration costs, interest during construction, and entrepreneurial profit[10] are applied to the inventory listing in order to determine the RPCN and to determine the RCN.

The RPCN method assumes the assets would be recreated under the conditions existing at the date certain or valuation date, using the exact materials, standards, design, layout, and quality of workmanship used to create the original assets. The RCN assumes the assets would be recreated under the conditions existing at the date certain or valuation date, using similar materials, current standards, under current conditions with similarly functional property.

From these cost bases (i.e., OCN, TOC, RPCN and RCN), the calculated accrued depreciation (accumulated depreciation) is subtracted ("LD"). The calculated accrued depreciation is based on the assets' attained ages, and the service life of the assets. The cost bases of depreciable assets are reduced annually by the accumulated depreciation to reflect the loss in the service value of the assets since being constructed.

10 The administration costs and entrepreneurial profit are those of the contractors and engineers. The cost of overhead of the entity having the assets constructed can also be included. Generally overhead costs are allocated as part of an asset's cost, and usually represent at least 5% to 15% of infrastructure asset total costs.

Depreciation represents the loss in property value from: physical deterioration; functional obsolescence; and external obsolescence. The accrued depreciation represents the sum of the annual depreciation amounts that would have been charged for depreciation at a point in time. Accrued depreciation is a calculated amount that would be in the book reserve account at a point in time using the current depreciation parameters (i.e., average service life). The average service lives of depreciable assets are based on the materials used for construction and how long the depreciable assets are likely to meet service demands.

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized "survivor curves" known as the Iowa type curves. The accrued depreciation ratio from a survivor curve is a concept that is used to estimate the consumed service capacity of plant at a point in time. The survivor curve is used to find the applicable accrued depreciation factors of the assets to result in the total accumulated depreciation.

The Original Cost Method. For this report, the City of Beaver Falls provided us a copy of the Engineer's assessment report "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets" dated June 9, 2022, and related files prepared by Gannett Fleming, Inc., the Wastewater System's Chapter 94 reports, the system's 537 Plan, the APA, and the Wastewater System's asset replacement history, to confirm the condition of the Wastewater System's property and equipment. We utilized the Engineering Assessment and calculated the Original Cost and Related Accrued Depreciation of the Wastewater System as of December 31, 2021 ("OCNLD Study") shown on Exhibit 7.

Page 1 of Exhibit 7 summarizes the original cost and related accrued depreciation by account for the Wastewater System as of December 31, 2021. The original cost was brought forward from page 2 of Exhibit 7 and the accrued depreciation from page 3 of Exhibit 7.

The original cost of the Wastewater System was determined from the Engineering Assessment and is summarized on page 2 of Exhibit 7. A summarizing analysis of the original cost of the Wastewater System by account and vintage year is shown on Exhibit 10.

The accrued depreciation calculation, shown on page 3 of Exhibit 7, was based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The estimated survivor curves are those used by other Pennsylvania regulated wastewater companies and the material and age of the assets. The average service life procedure was used to apply the methods of depreciation to group properties for which a survivor curve was used to recognize the existence of life dispersion. The detailed calculations of accrued depreciation applicable to original cost by account and vintage are included in Exhibit 8.

The results of the OCNLD Study established that the OCN of the Wastewater System's utility plant in service as of December 31, 2021 was not less than $12.9 million ($12,898,487 rounded). The OCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of $5.0 million ($5,047,800 rounded) as of December 31, 2021. After factoring in the OCNLD Study's accrued depreciation reserve, the OCNLD of Wastewater System's utility plant in service as of December 31, 2021 was determined to be $7.9 million ($12,898,487 - $5,047,800 = $7,850,687).

The Replacement Cost Method. We utilized the OCN to calculate the trended original cost (TOC) measures, or the replacement cost of the depreciable assets (RCN), by multiplying the OCN by specific transition factors.[11] The transition factors included both cost changes measured during TOC process and preliminary obsolescence, so all RPCN values were valued on an RCN

11 We used the TOC method because the mandated use of the Engineering Assessment's original cost essentially dictates the use of TOC over the reproduction cost or the replacement cost methods.

basis. The result of this analysis is shown in the Replacement Cost and Related Accrued Depreciation of the Wastewater System as of December 31, 2021 ("RCNLD Study") shown on Exhibit 9.

Page 1 of Exhibit 9 summarizes the replacement cost new and related accrued depreciation by account for the Wastewater System as of December 31, 2021. The replacement cost new was brought forward from page 2 of Exhibit 9 and the accrued depreciation from page 3 of Exhibit 9.

The replacement cost new of the Wastewater System (see Exhibit 10) was calculated by trending the original cost measures by multiplying the OCN by Handy-Whitman indices and preliminary obsolescence factors.[12] A summarizing analysis of the replacement cost new of the Wastewater System by account and vintage year and related transition factors is shown on Exhibit 10.[13]

The accrued depreciation calculation, shown on page 3 of Exhibit 9, was based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The estimated survivor curves are those used in the OCNLD Study. The average service life procedure was used to apply the methods of depreciation to group properties for which a survivor curve was used to recognize the existence of life dispersion. The detailed calculations of accrued depreciation applicable to replacement cost new by account and vintage are included in Exhibit 11.

The results of the RCNLD Study established that the RCN of the Wastewater System's utility plant in service as of December 31, 2021 was not less than $82.3 million ($82,286,857 rounded). The RCNLD Study also determined a theoretical calculated accrued depreciation

12 See the Accrued Depreciation and Obsolescence section of this report for a further discussion.
13 All land and land rights were valued at original cost.

reserve of the utility plant in service of $49.3 million ($49,292,703 rounded) as of December 31, 2021. After factoring in the RCNLD Study's accrued depreciation reserve, the RCNLD of Wastewater System's utility plant in service as of December 31, 2021 was determined to be $33.0 million ($82,286,857 - $49,292,703 = $32,994,154).

The results of the OCNLD and RCNLD Cost Approaches show a range of value for the Wastewater System of $7.9 million to $33.0 million and collectively, indicated value of $33.0 million ($32,994,154 rounded) for the Wastewater System based on the results of the RCNLD.

Benchmark Metrics. Besides providing an indication of value based upon a cost method, the OCN and OCNLD can also be used to calculate meaningful benchmark metrics. These benchmark metrics are utilized to evaluate the reasonableness of other indications of value produced by alternative valuation methods, including the cost method itself. For example, the Comparable Group's market value of common equity plus minority interest, preferred stock, and total debt net of cash and cash equivalents ("Enterprise Value") is currently 2.03-times (Exhibit 17, page 2) their OCNLD or net property, plant and equipment. Similarly, the Comparable Group's Enterprise Value is currently 1.62-times (Exhibit 17, page 2) their OCN or gross property, plant and equipment.

The above-mentioned property, plant and equipment "multiples" may understate the multiple applicable to the Wastewater System because some of the Comparable Group's property, plant and equipment includes assets that were originally financed with "cost free" capital such as customer contributions.[14] Subtracting customer contributions ("CIAC") from the Comparable Group's property, plant and equipment (Exhibit 17, page 3) based on differences between investor

14 Under rate regulation "cost free" capital, such as customer contributions, is subtracted from plant assets in determining the dollar amount of property on which a utility may earn a "fair rate of return" and therefore, "cost free" capital has no economic value to investors.

provided capital and OCN results in CIAC adjusted multiples of 2.31-times OCNLD and 1.84-times OCN for the Comparable Group.

Multiplying the Wastewater System's OCN of $12.9 million by the Comparable Group's 1.62-times OCN multiple or the 1.84-times contributions adjusted OCN multiple indicates a range of market value of $20.9 million to $23.7 million for the Wastewater System, below the RCNLD of $33.0 million. Further, multiplying the Wastewater System's OCNLD of $7.9 million by the Comparable Group's 2.03-times OCNLD multiple or the 2.31-times contributions adjusted OCNLD multiple indicates a range of market value of $16.0 million to $18.2 million for the Wastewater System, below the RCNLD of $33.0 million.[15] Using a similar technique, we multiplied the Wastewater System's number of domestic customers of 3,259 by the Comparable Group's $10,788-times customer multiple and produced a market value of $35.2 million, which is similar to the RCNLD of $33.0 million.[16] However, this technique does not account for the additional value of the 3,767 ultimate wholesale customers. If the 3,767 ultimate wholesale customers were factored into this technique, we believe the result would be considerably higher than the RCNLD of $33.0 million

Accrued Depreciation and Obsolescence. The accrued depreciation reflects the total loss in value from RCN due to physical deterioration, functional and economic obsolescence. The physical deterioration was accounted for with our determination of average service lives of depreciable assets. The average service lives used in determining the RCNLD reflect the materials

15 The range of benchmark metrics values suggested for the Wastewater System are not a substitute for an appraisal. However, the referenced range of market values for the Wastewater System can be a meaningful metric to evaluate the reasonableness of other indication of value produced by other valuation methods.
16 Customers "multiples" may understate the multiple applicable to the Wastewater System because some of the Comparable Group's property, plant and equipment includes assets that were originally financed with "cost free" capital, such as customer contributions, which diminishes the value of a customer.

used for construction, age, and the average length of time the depreciable assets are likely to meet service demands.

Functional obsolescence ("FO") is a "form of deterioration due to a feature in the property that is no longer useful or functional, resulting in a loss of value for the entire property."[17] FO is sometimes evident due to increased operating costs, increased maintenance costs, lost profits and for a wastewater utility, excess inflow and infiltration (I&I). According to the Engineering Assessment, the Wastewater System's operations staff reported minimal I&I coming from the system's mains and manholes.[18] Additionally, the Engineering Assessment did not find any assets that were no longer useful or functional. Therefore, we conclude no significant FO is suggested.

Economic obsolescence ("EO") refers to the loss of value that is caused by factors that are external to the property. "EO manifests itself in the profit margin of business. If the operating margin of an asset or group of assets is below what provides a sufficient economic return to the supporting assets, and there is a difference between the existing operating level/capacity and a sufficient operating/level capacity, EO may be an issue."[19] To evaluate EO we compared our RCNLD value of $33.0 million to the economic values produced by our Income and Market Approaches, discussed later in this report, and conclude no EO is suggested.

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17 "Physical Deterioration: The loss in value of a real estate property due to the physical wearing out of a building," *Corporate Finance Institute*, Updated October 3, 2021. Accessed 6/20/22. https://corporatefinanceinstitute.com/resources/knowledge/other/physical-deterioration/

18 See pages 6 and 7 of the Engineering Assessment.

19 Mickle, Joseph and Sapnas, Charles. "Perspectives, Economic Obsolescence: Discover Loss of Value Caused by External Factors," *Valuation Research Corporation*. Accessed 6/20/22. https://www.valuationresearch.com/pure-perspectives/economic-obsolescence-determining-loss-value-caused-external-factors/#:~:text=Economic%20obsolescence%20(EO)%20is%20the,companies%20in%20capital%2Dintensive%20industries.

Our RCN and RCNLD, discussed previously, indicated values of $82.3 million and $33.0 million, respectively. The RCNLD's accrued depreciation reflects the total loss in value from RCN due to physical deterioration, functional and economic obsolescence.

Cost Approach Conclusion. Comparing the results of the OCNLD method and RCNLD method to the benchmark metrics indicates that the value indicated by the OCNLD method of $7.9 million is inconsistent with the benchmark metrics. The results of the RCNLD method of $33.0 million ($32,994,154 rounded) form the basis for our Cost Approach conclusion, shown on Exhibit 9, page 4. Based on this result, the Cost Approach to valuation indicates a value of $33.0 million for the Wastewater System's based on the RCNLD method.

We note, the differences of the benchmark metrics to the Wastewater System's OCN, OCNLD, RCN and RCNLD, discussed previously, are somewhat concerning because it suggests either some plant inventory may be unaccounted for and/or understated in value, or other issues may not be accounted for in the Cost Approach.[20] As a result, we did another, more in depth analysis, where we compared the Wastewater System's OCN, OCNLD, RCN and RCNLD on a per customer basis (e.g., OCN ÷ Customers) to similar values calculated for the eight fully integrated systems used in the selected transactions method analysis.[21]

Using only domestic customers, the Wastewater System's per customer OCN ratio and per customer OCNLD ratio were found to be below all eight fully integrated systems' ratios which could be attributable to plant vintage. However, the Wastewater System's per customer RCN ratio and per customer RCNLD ratio were found to be in the lower third to lowest quarter of the eight

20 Other issues may include excessive depreciation, our use of the TOC method, not accounting for the intangible value of ultimate wholesale customers, etc.

21 See the Selection Transactions Method section of this report for a further discussion of the selection transaction method. The transactions included in the selection transaction method include all section 1329 transaction reviewed by the Commission to date.

fully integrated systems' ratios when we used domestic customers. We then considered the impact of including ultimate customers in a similar analysis. When ultimate customers were included in the comparison, we found all Wastewater System's ratios were below all eight fully integrated systems' ratios for OCN, OCNLD, RCN and RCNLD.

We also reviewed the price change for the larger plant accounts typical of fully integrated system assets, shown in Table 3. We did so because the eight fully integrated systems' transactions occurred from 2016 to date, and the RCN and RCNLD values used in the analysis described above were reflective of the time period of each transaction (e.g., a 2016 transaction reflects a 2016 RCN). When the price changes, shown in Table 3, were considered along with the per customer RCN ratios and per customer RCNLD ratios, discussed previously, it was concluded that the Wastewater System's RCN ratios and per customer RCNLD ratios were lower than all eight fully integrated systems' ratios whether domestic customers or ultimate customers were considered.

| | Annual Price Change | | | Cumulative Price Change to 12/31/21 | | |
|---|---|---|---|---|---|---|
| | Structures & Improvements | Large Treatment Plant Equipment | Mains-Average All Types | Structures & Improvements | Large Treatment Plant Equipment | Mains-Average All Types |
| 2016 | - | - | - | - | - | - |
| 2017 | 2% | 3% | 3% | 33% | 33% | 30% |
| 2018 | 4% | 4% | 3% | 31% | 29% | 27% |
| 2019 | 2% | 4% | 3% | 25% | 24% | 23% |
| 2020 | 3% | 5% | 3% | 23% | 19% | 19% |
| 2021 | 11% | 7% | 7% | 20% | 13% | 15% |
| 12/31/2021 | 8% | 6% | 7% | 8% | 6% | 7% |

Source: Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region.

**Table 3**

The results of this analysis which compared the Wastewater System's OCN, OCNLD, RCN and RCNLD on a per customer basis to similar values calculated for the eight fully integrated systems used in the selected transactions method analysis do not alleviate our concerns regarding the results produced by our Cost Approach.

The Income Approach. Capitalizing or discounting a future income stream to a present value provides an indication of the value of a security or asset. The capitalization or discount rate reflects future growth, business risk, economic factors, financial risk, and industry risk of the assets. The theory behind the income approach is that the value of a business is the future economic benefit that ownership will provide.

The two most common methods of the income approach to valuation are the capitalization of earning or cash flow method and the discounted cash flow method ("DCF"). The capitalization of earning method converts a single base economic income number to a value by dividing it by a capitalization rate. The capitalization of earnings is best suited when the future earnings, or cash flow, can be predicted. The implicit assumption in the capitalization of earning method is that the cash flow is a perpetuity, and the capitalization rate is a constant.

The DCF method uses estimates of future free cash flow and discounts them to arrive at a present value or price of the cash flows. Generally, the DCF analysis begins with an estimate of the Debt Free Net Cash Flow over the next five to twenty years along with a terminal value. In each year, the Debt Free Net Cash Flow is comprised of projected EBIT, minus income taxes, plus projected depreciation, and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. The second element of the DCF analysis is the determination of an appropriate discount rate.

The capitalization rate used in the capitalization of earnings method and the discount rate

used in the DCF method are related. The discount rate is the market participant's opportunity cost rate related to the risk of the cash flows. For the Wastewater System's, the market participants are assumed to include IOU and larger regional municipal authority ("MUNI"). For the Wastewater System, the appropriate discount rate is the current municipal revenue bond yield on December 31, 2021 of 2.85%. The appropriate IOU discount rate is the current net of tax overall cost of capital (weighted average cost of capital) on December 31, 2021 and ranges from 6.59% to 8.50%.[22] The capitalization rate is simply the discount rate minus the expected growth rate. If no growth is assumed, the capitalization rate is equal to the discount rate.

The capitalization of earnings method is generally a reasonable approach for valuing the Wastewater System as it is currently owned (i.e., non-IOU) and operated. However, change in ownership of the Wastewater System to a MUNI or IOU produces a myriad of problems for both the capitalization of earnings method and the DCF Method because any future cash flow estimates would be hypothetical or estimated due to the uncertain nature that would accompany new ownership including future rates, future expenses, future capital expenditures, taxes, and regulation.

For a MUNI, the appropriate discount rate is the current municipal revenue bond, 2.85%, because debt is the only major source of capital available to finance an acquisition (Exhibit 22, pages 2-6). Although a MUNI likely carries equity on their books (balance sheet), all existing equity is already invested in other assets and therefore, cannot be used to finance an acquisition.[23]

22 Both the American Society of Appraisers, ASA Business Valuation Standards, 2009, and the National Association of Certified Valuation Analysts, Professional Standards, 2007, use the same definition: "Weighted Average Cost of Capital (WACC). The cost of capital (discount rate) determined by the weighted average, at market values, of the cost of all financing sources in the business enterprise's capital structure."

23 For example, when a municipal or government entity, such as the Commonwealth of Pennsylvania, finance construction of a road or bridge, they only consider the marginal debt cost despite having "equity" reflected on their books (balance sheet).

For valuation purposes, an embedded cost of debt, or the historical cost of all debt issuances outstanding is not used because this capital is already invested in assets. Whereas the marginal cost of debt, 2.85%, at the valuation date is used in accordance with accepted valuation practices and used for market valuation purposes.

As discussed previously, for an IOU, the appropriate discount rate is the net of tax overall cost of capital (weighted average cost of capital), 6.59% to 8.50% (Exhibit 22, pages 2-8). In this instance, the net of tax overall cost of capital (weighted average cost of capital) is based on the Comparable Group's market value capital structure of 22.7% debt and 77.3% equity, a market cost of debt of 3.08% and a range of market cost of equity of 7.87% to 10.35%.[24] The Comparable Group's net of tax overall cost of capital (weighted average cost of capital) is used as a proxy to conform to the "hypothetical buyer" or "hypothetical seller" of fair market valuation. Use of the buyer's net of tax overall cost of capital (weighted average cost of capital) would produce an investment valuation, not a fair market valuation.[25]

We began the Income Approach for the Wastewater System by first determining the Debt Free Net Cash Flow to be capitalized or discounted. The Debt Free Net Cash Flow is comprised of EBIT, minus income taxes, plus depreciation and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. The development of Wastewater System's Debt Free Net Cash Flow begins on Exhibit 1 and ends on Exhibits 12 through 16.

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24 For example, see http://www.investinganswers.com/financial-dictionary/financial-statement-analysis/weighted-average-cost-capital-wacc-2905. Also see http://www.wallstreetmojo.com/weighted-average-cost-capital-wacc/ , or http://accountingexplained.com/misc/corporate-finance/wacc .

25 We did not use the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation because a "hypothetical buyer" cannot finance an acquisition at such a rate and therefore, its use would provide a meaningless result. Where the 6.15% DSIC related cost was determined based the Comparable Group's book value capital structure of 48.1% debt and 51.9% equity, a cost of debt of 3.08% and a DSIC cost of equity of 9.80%. We note the 6.15% Comparable Group's DSIC related net of tax overall cost of capital falls below the 6.59% to 8.50% range of discount rates used in our Income Approach.

Differences in accounting practices exist between GASB, DCED and FASB because there are differences in their purpose. The GASB's and DCED's impetuses are to make sure government entities are accountable for the money they receive from the public or taxpayers, while the FASB's focus is to help investors and creditors make decisions. These differences in accounting objectives between GASB, DCED and FASB can present a problem when it comes to comparing the financial statements of entities that are either publicly or privately owned, such as the Wastewater System and the Comparable Group.

Exhibit 1 presents the Wastewater System's financial information contained in their financial statements, so it is more consistent with the Comparable Group and more practical for valuation purposes. The information on Exhibit 1 was used to develop Exhibits 12 through 16. As noted previously, the Wastewater System's financial statements and their rates did not include taxes nor a fair rate of return. Accordingly, on Exhibits 13 through 16 we adjusted the Wastewater System's post-2020 financial information for pro forma expenses and returns to be reflective of a MUNI or IOU ownership.

The Capitalization of Earnings Method. The capitalization of earnings method begins with an estimate of the income or cash flow producing capabilities of the business (Exhibit 12) for a recent time period and assumes current ownership and operations. We began the capitalization of earnings method for the Wastewater System by first determining the Debt Free Net Cash Flow to be capitalized. The Debt Free Net Cash Flow is comprised of current EBIT, minus income taxes, plus current depreciation, and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. Specifically, our capitalization of earnings

method capitalizes Wastewater System's current (2021) Debt Free Net Cash Flow.[26] The second element of the capitalization of earnings method is the determination of an appropriate capitalization rate. Our analysis uses the current municipal revenue bond yield on December 31, 2021 of 2.85% (Exhibit 12, line 24) as the capitalization rate. We also did a second capitalization of earnings calculation based on a 2.75% capitalization rate (Exhibit 12, line 27), or 10-basis points below the current level to reflect some population growth projected for the Wastewater System's because we assumed the Wastewater System's Debt Free Net Cash Flow growth will be at least 0.1% (10-basis points).

We computed the Wastewater System's indicated value based on the capitalization of earnings method by dividing the projected Debt Free Net Cash Flow by the capitalization factor. The capitalization factor is equal to the discount rate minus assumed growth in projected Debt Free Net Cash Flow. We considered ranges of growth in the capitalization of earnings method. Essentially, we considered two ranges of growth in the capitalization of earnings method, no growth and 0.1% growth. However, based upon our quantitative and qualitative analysis, recent rate increase, and the Wastewater System service area's projected population growth, we believe the 0.1% growth scenario is reasonable for the Water System based on current ownership and operations.

For pro forma 2021, we adjusted the Wastewater System's Debt Free Net Cash Flow (Exhibit 12, lines 23 and 28) and removed the sewer line rental expenses to get a clearer picture of Debt Free Net Cash Flow. Exhibit 12 shows the results of the capitalization of earnings method. For the Wastewater System, the capitalization of earnings method using a 2.85% capitalization

26 Data from 2020 was assumed for the year 2021 due to lack of actual information.

rate (no growth) indicates a value of $5.8 million and $14.2 million on pro forma 2021 results. The capitalization of earnings method using a 2.75% capitalization rate (growth) indicates a value of $6.0 million and $14.7 million on pro forma 2021 results. Collectively, for Wastewater System, we believe the 0.1% growth scenario is the most probable result based on current ownership and operations and therefore, the capitalization of earnings method suggests a value of $14.7 million based on pro forma 2021 results and current operations and ownership.

The DCF Method. For the Wastewater System, the DCF method considers two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model ("Market Multiple DCF") and the capitalization of terminal value model ("Capitalization DCF"). We show the results of these models on Exhibits 13 through 16.

The DCF method begins with an estimate of the income or cash flow producing capabilities of the business. Specifically, our DCF methods use estimates of the results of the Wastewater System's operations over the next 20 years. We use two different assumptions for the Wastewater System's future operations in the DCF methods: MUNI ownership shown on Exhibits 13 and 15; and IOU ownership shown on Exhibits 14 and 16.

Under the MUNI ownership the discount rate is the current 2.85% municipal revenue bond yield and under the IOU ownership the discount rate is the current net of tax overall cost of capital, reflecting the upper and lower range of the net of tax overall cost of capital for the Comparable Group of 6.59% to 8.50%. For the Capitalization DCF, the capitalization rate reflects a scenario of no additional growth (i.e., discount rate = capitalization rate) and a scenario of minimal growth of 0.1% (i.e., discount rate – 0.1% growth = capitalization rate) under MUNI ownership and 0.1% growth (i.e., discount rate – 0.1% growth = capitalization rate) under IOU ownership based on inflation, changes in Debt Free Net Cash Flows and the projected population growth.

We computed the Market Multiple DCF terminal values by multiplying the Wastewater System's projected EBITDA and EBIT by the Comparable Group's adjusted multiples of 20.3-times and 30.1-times, respectively. We computed the Capitalization DCF terminal value by dividing the projected Debt Free Net Cash Flow by the capitalization factor. The capitalization factor is equal to the discount rate minus assumed growth in projected Debt Free Net Cash Flow.

Exhibit 13 shows the results of the DCF method under the MUNI ownership scenario. The results of the Capitalization DCF shown on Exhibit 13 show a range of value for the Wastewater System of $7.5 million to $7.6 million. The results of the Market Multiple DCF shown on Exhibit 13 show a value of $8.9 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $8.3 million for the Wastewater System based on the 0.1% growth assumption.

Exhibit 14 shows the results of the DCF method under the IOU ownership scenario. The results of the Capitalization DCF shown on Exhibit 14 show a range of value for Wastewater System of $4.6 million to $5.9 million. The results of the Market Multiple DCF shown on Exhibit 14 show a range of value of $7.1 million to $9.0 million. Collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of indicates a value of $6.5 million for the Wastewater System.[27]

27 If we used the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation shown on Exhibit 14, the results of the Capitalization DCF would show a value for Wastewater System of $6.3 million. Further, the results of the Market Multiple DCF would show a value of $9.5 million and collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $7.9 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of $8.3 million and the DCF method based on the IOU ownership scenario indicates a value of $7.9 million. Collectively, the DCF method indicates a value of $8.1 million based on OCNLD.

The DCF method based on the MUNI ownership scenario indicates a value of $16.6 million and the DCF method based on the IOU ownership scenario indicates a value of $11.9 million. Collectively, the DCF method indicates a value of $14.2 million based on OCNLD.

Change in ownership of the Wastewater System to a MUNI or an IOU produces a myriad of problems for the DCF Method. Under a MUNI purchase, future cash flow estimates are uncertain because they would reflect the actual price paid for the acquisition. Under an IOU purchase and the associated regulation by the PUC, future cash flow estimates are uncertain since regulation by the PUC would result in an unknown determination of rate base and the related depreciation and authorized/achieved earning levels. In the current instance, we know the Market Approach and the Cost Approach (RCNLD) indicate values considerably higher than the OCNLD value.

Therefore, Exhibits 13 and 14 are recalculated on Exhibits 15 and 16 to reflect revenues and cash flows derived from an earnings base between the values indicated by the RCNLD and the Market Approach. Exhibit 15 shows the results of the DCF method under the MUNI ownership scenario. The results of the Capitalization DCF shown on Exhibit 15 show a range of value for the Wastewater System of $50.3 million to $51.4 million. The results of the Market Multiple DCF shown on Exhibit 15 show a value of $47.8 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $49.6 million for the Wastewater System based on the 0.1% growth assumption.

Exhibit 16 shows the results of the DCF method under the IOU ownership. The results of the Capitalization DCF shown on Exhibit 16 show a range of value for Wastewater System of $29.6 million to $38.8 million. The results of the Market Multiple DCF shown on Exhibit 16 show a range of value of $43.8 million to $56.1 million. Collectively, the DCF method based on

the IOU ownership scenario and a 0.1% growth assumption indicates a value of $41.3 million for the Wastewater System.[28]

The DCF method based on the MUNI ownership scenario indicates a value of $49.6 million and the DCF method based on the IOU ownership scenario indicates a value of $41.3 million. Collectively, the DCF method indicates a value of $45.5 million ($45,450,675 rounded) based on the Income Approach.

The Market Approach. There are two methods of doing the Market Approach to valuation: the market multiples method; and the selected transaction method. We developed both the market multiples method and the selected transaction method in our valuation analysis.

The Market Multiples Method. The market multiples method valuation begins by reviewing market price data of corporations engaged in the same or a similar line of business as the Wastewater System. We relied upon market data for the Comparable Group for these purposes since they are equally affected by similar economic, industry, and business risks as the Wastewater System. Since no marketplace exists for the common stock of the Wastewater System, an alternative to estimate the value of the Wastewater System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are similar to the Wastewater System. The specific market price data reviewed includes the market value of common equity plus minority interest, preferred stock, and total debt net of cash and cash equivalents (i.e., Enterprise Value). Where the market value of common equity is the product of

28 If we used the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation shown on Exhibit 16, the results of the Capitalization DCF would show a value for Wastewater System of $41.5 million. Further, the results of the Market Multiple DCF would show a value of $59.5 million and collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $50.6 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of $49.6 million and the DCF method based on the IOU ownership scenario using DSIC indicates a value of $50.6 million. Collectively, the DCF method indicates a value of $50.1 million when DSIC is considered.

multiplying the closing stock price by the number of common shares outstanding. The Enterprise Value provides an indication of the value of the entire business. The Enterprise Value multiples ("Market Multiples") are shown on Exhibit 17. For the Comparable Group, the Market Multiples were calculated as of December 31, 2021 based on the latest twelve months of financial data available at the appraisal date.

We used the Comparable Group's Enterprise Value on December 31, 2021 and calculated Market Multiples of: revenue ("Revenue"); EBITDA; EBIT; gross property plant and equipment ("GPPE"); net property plant and equipment ("NPPE"); investor provided capital ("ICAP"); utility customers ("Customers"); and population of the area served ("Population").

The next step in the market multiples method valuation was applying the Comparable Group's Market Multiples to corresponding financial and operating statistics of the Wastewater System. The Comparable Group's Market Multiples reflect their capitalization rate of each financial and operating statistic. For example, a Market Multiple of EBIT of 16.14 times equates to a capitalization of EBIT of 6.20% (1 ÷ 16.14 = 6.20%). Each capitalization rate is unique to the entity and the statistic being evaluated and reflects the growth and investment risk of the entity.

We believe that similar economic, industry and business risks have affected the Comparable Group as those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike. On average, the utilities in the Comparable Group are larger than the Wastewater System. The relative size difference between the Comparable Group and Wastewater System suggests that the risk to investors of the Wastewater System is higher than the Comparable Group. Further, based upon our quantitative and qualitative analysis, we concluded that the Wastewater System has more risk than the Comparable Group.

Accordingly, the Comparable Group's Market Multiples are not directly applicable to the Wastewater System. We assumed the higher risk due to the Wastewater System's size is added to the higher risk found in our quantitative and qualitative analysis. This combined risk was assumed to result in the Wastewater System being 10% more risky than the Comparable Group and produces an 90% (100% - 90%) base risk adjustment to the Comparable Group's Market Multiples. We applied the 90% base risk adjustment to all financial multiples. For example, the Comparable Group's ICAP multiple was multiplied by 90% to produce a lower multiple applicable to the Wastewater System to account for risk differences.

The Comparable Group's Market Multiples of Revenue, EBITDA, and EBIT were adjusted for the base risk adjustment to produce multiples applicable to the Wastewater System (Exhibit 17, page 3). The Comparable Group's Market Multiples of GPPE and NPPE were adjusted for the base risk adjustment and for their percentage of property plant and equipment (Exhibit 17, page 3) financed with "cost free" capital such as contributions because "cost free" capital should not be part of this valuation process. The Comparable Group's Market Multiples of Customers and Population were adjusted for the type of assets of the Wastewater System, earnings rate, and growth.

The net risk adjustments to the Comparable Group's Market Multiples are shown on page 1 of Exhibit 17. The adjustments to the Comparable Group's Market Multiples are: 90% of ICAP (more risk/less growth); 102% of GPPE (more risk/lower growth and contributions); 102% of NPPE (more risk/lower growth and contributions); 90% of Revenue (more risk/lower growth); 90% of EBIT; 90% EBITDA (more risk/lower growth); 104% of Customers (growth, earning rate, and contributions); and 104% Population (growth, earning rate, and contributions).

Page 1 of Exhibit 17 shows the market multiples method indicated values based on: Revenue, EBIT and EBITDA (collectivity called "Income Statement Items"); ICAP, GPPE and NPPE (collectivity called "Capital Items"); and Customers and Population (collectivity called "Demographics Items"). For most municipal utilities, the indicated values based on Income Statement Items are far below the indicated values that are based on Capital Items and those based on Demographics Items. We attribute this to the dollars of Revenue, EBIT and EBITDA do not reflect any provision for taxes while the multiples for the Comparable Group do.[29] Consequently, we do not believe the results of the multiples of Revenue, EBIT and EBITDA are meaningful and should not be used for municipal utilities.

In the market multiples method, the meaningful Market Multiples of the Comparable Group are used to develop an indicated value of the Wastewater System. This is accomplished by multiplying the Wastewater System's financial and operating data by the Comparable Group's median Market Multiples (Exhibit 17, page 1). The results of the market multiples method (Exhibit 17, page 1) show a range of value for the Wastewater System of $18.8 million to $46.2 million. We note the value indicated by the Capital Items are substantially different (lower) than the other indicated values. In the Cost Approach Conclusion section of this report we noted our concerns regarding the values suggested by the OCN and OCNLD. Accordingly, we gave the Capital Items 25% weight, while weighting the Demographics Items 75%, in determining an indicated value of $36.3 million for the Wastewater System's domestic customers using the market multiples method.[30] The additional value attributable to the Wastewater System's ultimate

29 The Revenue, EBIT and EBITDA for the Wastewater System also do not include a fair rate of return.
30 The results of the market multiples method would indicate a value of $32.5 million had we given Capital Items and Demographics Items equal weight.

wholesale customers is determined later in the Market Value of Ultimate Wholesale Customers section of this report.

The Selected Transactions Method. The selected transactions method entails analyzing certain public information relating to selected transactions involving the purchase or sales of businesses involved in the same or similar business line. The number of selected transactions available for review is limited because most acquisitions in the water and wastewater industry involve small acquisitions for which no public information exits. Additionally, not all transactions are comparable since some purchase prices may only involve the acquisition of the common stock, purchase prices may be net of cash and others may only involve assets. In any of these instances, the derived multiples (e.g., purchase price as a multiple of: Revenues; EBITDA; EBIT; etc.) would understate (overstate) the multiples involving a purchase price for an entire business enterprise (common stock) or business assets.

The selected transactions method provides a valuation of a business, or assets, at the time the acquisition of that business was completed, rather than the appraisal date market value (December 31, 2021). The change in the Comparable Group's market multiples of NPPE and ICAP, shown in Figure 1, illustrates the change in market valuation over a recent 72-month period.[31] In Figure 1 the Comparable Group's market multiples of NPPE and ICAP were indexed to December 31, 2021 valuation multiples so that the December 31, 2021 valuation multiples have an index value of 100.

31 Note that Figure 1 only depicts change in market valuations based on NPPE and ICAP. Other metrics (e.g., EBIT, Customers, etc.) may reveal different changes in market valuations.

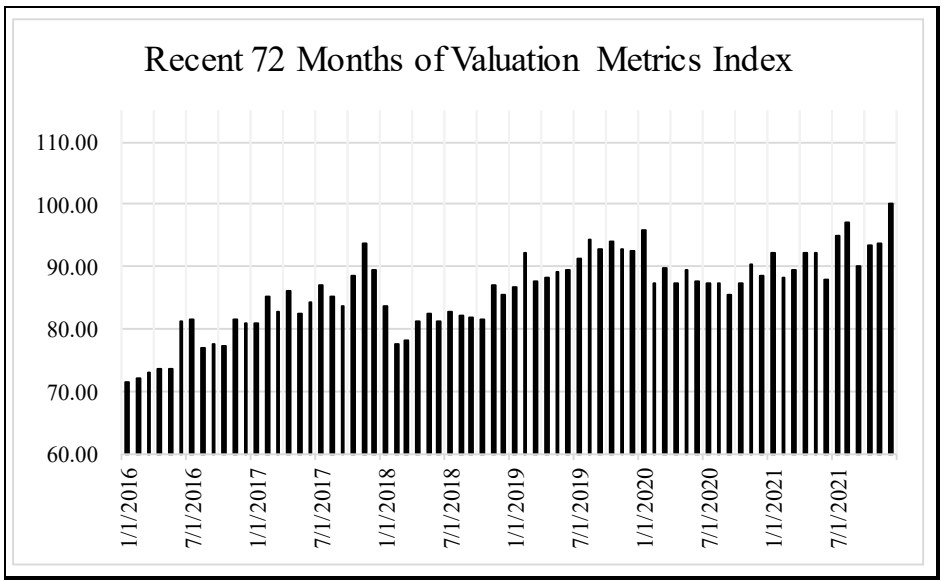


**Figure 1**

The index of the Comparable Group's appraisal date (December 31, 2021) valuation multiples is 12% above the 2021's lowest levels and at the 2021's highest levels and 15% above the 2020's lowest levels and 4% above 2020's highest levels. The index of the Comparable Group's December 31, 2021 valuation multiples is 15% higher than 2019's lowest levels and 6% above 2019's highest levels, are 22% higher than 2018's lowest levels and 13% above 2018's highest levels, are 22% higher than 2017's lowest levels and 6% above 2017's highest level, and are 19% to 29% higher than 2016's multiples' index.

Because of the rapid rise in valuation multiples since early 2016 we limited our search for selected transactions to: (1) those that occurred in 2016 or later; (2) purchases of water or sewer systems; (3) assets being purchased; and (4) those that did not discount "cost free" capital/customer contributions in the valuation. The selected transactions that met the stated selection criteria are shown on pages 2 and 3 of Exhibit 18.

Using certain public information, we calculated sales price multiples of selected transactions involving the purchase or sale of businesses that met the stated selection criteria. The

calculated sales price multiples included transactions multiples of: ICAP; GPPE; NPPE; Revenue; EBITDA; EBIT; Customers; and Population. As shown on pages 2 and 3 of Exhibit 18, the selected transactions method indicated values based on the Income Statement Items are far different than the Wastewater System's selected transactions method indicated values based on Capital Items and those based on Demographics Items. We attribute this to the fact the selling utilities' dollars of Income Statement Items do not reflect any provision for taxes.[32] Consequently, we do not believe the results of the multiples of Income Statement Items are meaningful.

The selected transaction method relies on and reflects information that was known, ex-ante, at the time the winning purchase bid (price) was offered, and the metrics used are time period sensitive. For example, bids made in 2016 only reflects metrics from 2015 since the results of 2016 could not be known at the time of the bids. The selected transaction method ex-ante information (metrics) is shown on page 2 of Exhibit 18. Complete information only exists for a few of the transactions, with only Customers and Population having ample data for all transactions as is evident from the information shown (Exhibit 18, page 2). Therefore, we supplemented the ex-ante data with ex-post information of GPPE and NPPE (collectivity called "Asset Items") as shown on page 3 of Exhibit 18.

In the selected transactions method, the significant selected transactions multiples of the selling utilities are used to develop an indicated value of the Wastewater System. Initially, the value of the Wastewater System's domestic customers is determined before the value attributable to the Wastewater System's ultimate wholesale customers is added. This process is accomplished

32 Further, Revenue, EBIT and EBITDA for the Wastewater System also do not include a fair rate of return.

by multiplying the Wastewater System's financial and operating data by the selling utilities' transactions multiples (Exhibit 18, pages 2 and 3).

Previously we noted our concerns regarding the values suggested by the OCN and OCNLD and therefore, gave less weight (i.e., 25%) to the results indicated by the Asset Items then the Demographics Items (i.e., 75%) in reaching our conclusion shown on Exhibit 18, page 1.[33] The results of the selected transactions method (Exhibit 18, page 1) show a range of value for the Wastewater System's domestic customers of $17.2 million to $32.2 million when all transactions are considered and a range of value of $16.5 million to $44.8 million when fully integrated assets (excluding wholesale) are solely considered. We determined an indicated value of $33.3 million for the Wastewater System's domestic customers using the selected transactions method by considering the results of all transactions, $28.4 million, and the results of the fully integrated assets (excluding wholesale) of $36.5 million.[34] The additional value attributable to the Wastewater System's ultimate wholesale customers is determined later in the Market Value of Ultimate Wholesale Customers section of this report.

Wall Street Transactions. In 2018 two IOUs, Connecticut Water Service, Inc. ("Connecticut Water") and SJW Group, announced a planned merger with Connecticut Water being acquired by SJW through a stock purchase (stock swap). SJW Group's purchase of Connecticut Water was approved in late 2019. Similarly, in 2021 two IOUs, were involved in another transaction which involved Aquarion Company, parent of Aquarion Water Company,

33 If equal weighting was given to both Asset Items and Demographic Items, the indicated value for the Wastewater System's domestic customers would have been $27.5 million.

34 The appraisal gave 25% weight to the collection/distribution assets selected transactions results and 75% weight to the integrated systems (excluding wholesale) transactions results. We did so due to the small sample size of integrated systems (excluding wholesale) transactions and the fact that similar multiples occurred in both the collection/distribution systems and integrated systems selected transactions, therefore, consideration was given to both.

completing its acquisition of the New England Service Company, Inc. ("NESC") through a stock purchase (stock swap).[35] Both Connecticut Water and NESC were publicly traded as was the stock they received in the transactions.

Although these acquisitions are not directly applicable to the Wastewater System, they do provide a range of indicated value for the Wastewater System's domestic customers (Exhibit 19, page 1) which we relied on as checks. In these selected transactions, the significant selected transactions multiples of the selling utilities, Connecticut Water and NESC, are used to develop an indicated value of the Wastewater System. This is accomplished by multiplying the Wastewater System's financial and operating data by the selling utilities' transactions multiples. The results of the Connecticut Water selected transactions (Exhibit 19, page 2) show a range of value for the Wastewater System's domestic customers of $27.9 million when the reported significant selected transactions multiples are considered and a value of $40.1 million when the reported significant selected transactions multiples have been adjusted for "cost free" capital. The results of the NESC selected transactions (Exhibit 19, page 3) show a range of value for the Wastewater System's domestic customers of $20.4 million when the reported significant selected transactions multiples are considered and a value of $33.2 million when the reported significant selected transactions multiples have been adjusted for "cost free" capital.[36]

Collectively, the Wall Street selected transactions indicate values of $33.2 million to $40.1 million, which are similar to the values found by the market multiples method of $39.3

35 NESC is the sole stockholder of four regulated water companies operating in three separate states.
36 For Connecticut Water and NESC, we gave the Capital Items 25% weight and weighted the Demographics Items 75% in determining their indicated values.

million and the selected transaction method of $33.3 million for the Wastewater System's domestic customers.[37]

The results of the market multiples method shown on Exhibit 17 indicate value of $39.3 million. The results of the selected transactions method shown on Exhibit 18 indicate value of $33.3 million. Based on the aforesaid results, the Market Approach to valuation indicates a value of $36.3 million for the Wastewater System's domestic customers based on the results of the market multiples method and the selected transactions method.

Market Value of Ultimate Wholesale Customers . Exhibit 20 shows the calculation of the value of ultimate whole customers and the Market Approach conclusion. As shown, we computed the market value of receiving only treatment services of $12.8 million by subtracting the value of collection/distribution assets from the value of integrated systems (excluding wholesale).[38] We then determined the number of ultimate wholesale customers of 3,760 to be valued by subtracting the number of domestic customers from the number of ultimate customers (7,019 - 3,259).

The market value of receiving only treatment services, $12.8 million, was then divided by the number of domestic customers to produce the treatment value per domestic customer of $3,936 ($12,828,666 ÷ 3,259). We looked at the relative contribution of domestic customers and ultimate customers in terms of flows and revenues (Exhibit 2, page 2) and concluded a relative ultimate wholesale customer equivalency factor of 97%.[39] The relative wholesale customer equivalency

37 We note Connecticut Water and NECS were fully integrated companies, as is Wastewater System. Additionally, both were publicly traded, which the Wastewater System is not, and therefore, may overstate the value for the Wastewater System. However, these transactions were stock transactions, which may understate the value for the Wastewater System's asset purchase.

38 See the Selected Transactions section of this report for the asset value determination of collection/distribution assets and integrated systems (excluding wholesale).

39 The relative ultimate wholesale customer equivalency factor indicates ultimate wholesale customers contribute about 97% as domestic customers, on a per customer basis.

factor was multiplied by the treatment value per domestic customer to determine the treatment value per ultimate wholesale customer of $3,936 ($3,818 × 97%).

The treatment value per ultimate wholesale customer was then multiplied by number of ultimate wholesale customers to produce the market value of the Wastewater System's ultimate wholesale customers of $14.4 million ($3,818 × 3,760). The market value of the Wastewater System's ultimate wholesale customers was then added to the market value of the Wastewater System's domestic customers to produce the total market value for the Wastewater System. Based on the aforesaid results, the Market Approach to valuation indicates a value of $50.7 million ($50,664,671 rounded) for the Wastewater System ($36.3 million + $14.4 million) as shown on Exhibit 20.

Conclusion. We summarize our findings for the Wastewater System on Exhibit 21. Our finding for the Wastewater System is based on the Cost, Market, and Income Approaches to valuation. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

The results from the market multiple discounted cash flow method and the capitalization discounted cash flow method form the basis for our Income Approach. Our Market Approach is supported by the market multiples method and selected transactions method. The results from the original cost method form the basis for our replacement cost method, and both methods form the basis for our Cost Approach.

We considered the results of each approach as an indicator of value individually, or as independent indicators of value. Therefore, all three approaches to valuation were given

consideration in arriving at our estimate of the fair market value conclusion. We gave less weight to the Cost Approach due to our concerns stated in this report. At a minimum, we believe the Cost Approach does not fully account for the intangible value of ultimate wholesale customers. We gave equal weight to the indicated values produced by the two economic approaches, Income and Market, as they best capture the intrinsic value of the ultimate wholesale customers. Based on these facts, our conclusion regarding the fair market value is $44.3 million. Our conclusion regarding the fair market value can be described by the weights and the specific results of the three approaches to valuation that are shown on Exhibit 21. The results of our analyses, shown on Exhibit 21, indicate a range of value for the Wastewater System of $33.0 million to $50.7 million and collectively indicate a fair market value of $44,292,000 for the Wastewater System.

# APPENDIX A - QUALIFICATIONS

**APPENDIX A**

Professional Qualifications
of
Harold Walker, III
Manager, Financial Studies
Gannett Fleming Valuation and Rate Consultants, LLC.

## EDUCATION

Mr. Walker graduated from Pennsylvania State University in 1984 with a Bachelor of Science Degree in Finance. His studies concentrated on securities analysis and portfolio management with an emphasis on economics and quantitative business analysis. He has also completed the regulation and the rate-making process courses presented by the College of Business Administration and Economics Center for Public Utilities at New Mexico State University. Additionally, he has attended programs presented by The Institute of Chartered Financial Analysts (CFA).

Mr. Walker was awarded the professional designation "Certified Rate of Return Analyst" (CRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience, and the successful completion of a comprehensive examination. He is also a member of the Society of Utility and Regulatory Financial Analysts (SURFA) and has attended numerous financial forums sponsored by the Society. The SURFA forums are recognized by the Association for Investment Management and Research (AIMR) and the National Association of State Boards of Accountancy for continuing education credits.

Mr. Walker is also a licensed Municipal Advisor Representative (Series 50) by Municipal Securities Rulemaking Board (MSRB) and Financial Industry Regulatory Authority (FINRA).

## BUSINESS EXPERIENCE

In 1996, Mr. Walker joined Gannett Fleming Valuation and Rate Consultants, LLC. In his capacity as Manager, Financial Studies and for the past 25 years, he has continuously studied rates of return requirements for regulated firms. In this regard, he supervised the preparation of rate of return studies in connection with his testimony and in the past, for other individuals. He also assisted and/or developed dividend policy studies, nuclear prudence studies, calculated fixed charge rates for avoided costs involving cogeneration projects, financial decision studies for capital budgeting purposes and developed financial models for determining future capital requirements and the effect of those requirements on investors and ratepayers, valued utility property and common stock for acquisition and divestiture, and assisted in the private placement of fixed capital securities for public utilities.

Head, Gannett Fleming GASB 34 Task Force responsible for developing Governmental Accounting Standards Board (GASB) 34 services and educating Gannett Fleming personnel and

Gannett Fleming clients on GASB 34 and how it may affect them. The GASB 34 related services include inventory of assets, valuation of assets, salvage estimation, annual depreciation rate determination, estimation of depreciation reserve, asset service life determination, asset condition assessment, condition assessment documentation, maintenance estimate for asset preservation, establishment of condition level index, geographic information system (GIS) and data management services, management discussion and analysis (MD&A) reporting, required supplemental information (RSI) reporting, auditor interface, and GASB 34 compliance review.

In 2004, Mr. Walker was elected to serve on the Board of Directors of SURFA. Previously, he served as an ex-officio directors as an advisor to SURFA's existing President. In 2000, Mr. Walker was elected President of SURFA for the 2001-2002 term. Prior to that, he was elected to serve on the Board of Directors of SURFA during the period 1997-1998 and 1999-2000. Currently, he also serves on the Pennsylvania Municipal Authorities Association, Electric Deregulation Committee.

Prior to joining Gannett Fleming Valuation and Rate Consultants, LLC., Mr. Walker was employed by AUS Consultants - Utility Services. He held various positions during his eleven years with AUS, concluding his employment there as a Vice President. His duties included providing and supervising financial and economic studies on behalf of investor owned and municipally owned water, wastewater, electric, natural gas distribution and transmission, oil pipeline and telephone utilities as well as resource recovery companies.

Mr. Walker was also the Publisher of C.A. Turner Utility Reports from 1988 to 1996 while employed at AUS Consultants - Utility Services. C.A. Turner Utility Reports is a financial publication which provides financial data and related ratios and forecasts covering the utility industry. From 1993 to 1994, he became a contributing author for the Fortnightly, a utility trade journal while employed at AUS Consultants - Utility Services. His column was the Financial News column and focused mainly on the natural gas industry.

**EXPERT TESTIMONY**

Mr. Walker has submitted testimony or been deposed on various topics before regulatory commissions and courts in 26 states including: Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, Nevada, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia. His testimonies covered various subjects including: fair market value, the taking of natural resources, appropriate capital structure and fixed capital cost rates, depreciation, fair rate of return, purchased water adjustments, synchronization of interest charges for income tax purposes, valuation, cash working capital, lead-lag studies, financial analyses of investment alternatives, benchmarking, and fair value.

## PROFESSIONAL AFFILIATIONS

Society of Utility and Regulatory Financial Analysts
- Board of Directors, 1996-2000, 2005-2008
- President, 2000-2002
- Treasurer, 1996-1998

National Association of Water Companies
Pennsylvania Municipal Authorities Association
- Electric Deregulation Committee

## TECHNICAL PUBLICATIONS & PRESENTATIONS

Walker, Harold. Panelist "Now is the Time to Maximize Your Utility's Value." Presented at the Pennsylvania Association of Township Supervisors 97th Annual State Convention, April 2019.

Walker, Harold. Panelist "Fair Market Acquisitions Debate." Presented at National Association of Regulatory Utilities Commissioners Winter Policy Summit, February 2019.

Walker, Harold. Panelist "Fair Market Value Legislation." Presented at the National Association of Water Companies Water Summit, October 2018.

Walker, Harold. Panelist "Leveraging Water & Sewer to Address Roads, Schools, and Pension Obligations." Presented at the Maryland Association of Counties 2018 Summer Conference, August 2018.

Walker, Harold. Panelist "Is the Glass Half Full or Half Empty? Valuing Municipal Water Acquisitions." Presented at the Mid-Atlantic Conference of Regulatory Utilities Commissioners 23rd Annual Education Conference, June 2018.

Walker, Harold. "Valuation and Inventory of Governmental Assets Under GASB 34." Presented at the Society of Depreciation Professionals 21st Annual Conference, September 2007.

Walker, Harold. "The Paradox of State Regulatory Opinions and Investor Behavior." Presented at the National Association of Water Companies New England Chapter conference, November 2006.

Walker, Harold. "Valuation and Inventory Under GASB 34." Presented at the Government Finance Officers Association South Central Pennsylvania Regional Chapter conference, August 2003.

Walker, Harold. "Valuation and Inventory under GASB 34." Presented at the Government Finance Officers Association Southeastern Pennsylvania Regional Chapter conference, April 2002.

Walker, Harold. "GASB 34 & Your Infrastructure." *The Authority,* August 2001, Volume XXXII, No. 4, pages 10-13.

Walker, Harold. "Managing Risk." Conference Chairperson, presented at the Society of Utility & Regulatory Financial Analysts 33rd Financial Forum, April 2001.

Walker, Harold. "Paying for Your MSW System - Waste Generation Fees." Presented at the Federation of New York Solid Waste Association Solid Waste/Recycling Conference and Trade Show, May 2001.

Walker, Harold. "Statement No. 34 of the Government Accounting Standards Board." Presented at the Pennsylvania Association of Township Supervisors 79th Annual State Convention, April 2001.

Walker, Harold. "Cost of Capital Issues." Presented at the National Association of Water Companies New England Chapter conference, October 2000.

Walker, Harold, Timothy Hartman, and Mark Everett. "Waste Generation Study: Life After Flow Control." Presented at Waste Con 2000, October 1999.

Walker, Harold, and Timothy Hartman. "The Enhancement of Revenues Through a Waste Generation Study." Presented at SWANA's Planning and Management Symposium, July 1999.

COMPLIANCE & APPRAISAL CERTIFICATION

# Compliance with Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021*

## Fulfillment of Requirements for a Personal Property Appraisal and Report

- **State the identity of the client and any intended users, by name or type:**

  The client is the City of Beaver Falls. The intended users of the valuation are the City of Beaver Falls, Aqua Pennsylvania Wastewater, Inc., and the Pennsylvania Public Utility Commission ("PUC").

- **State the intended use of the appraisal**

  The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

- **Describe information sufficient to identify the property, real, personal, and intangible, involved in the appraisal, including the physical and economic property characteristics relevant to the assignment.**

  City of Beaver Falls owns and operates the Wastewater System which consists of a wastewater treatment plant ("WWTP"), a pump station, about 36 miles of mains, approximately 674 manholes, 3,252 services, associated infrastructure and appurtenances, and related land and land rights.

  The Wastewater System's WWTP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Each municipality is responsible for their own collection system.

  The Wastewater System WWTP is a 4.7 million gallons per day ("MGD") capacity plant. In 2020, the WWTP's average daily flow was 2.10 MGD. The WWTP has with three primary settling tanks, two biological contact oxidation towers, five secondary settling tanks, two chlorine disinfection tanks, two anaerobic sludge digesters, a belt filter press, a grit separator, a grease separator, with various piping, pumps, blowers, controls, and an onsite emergency power generator. The dewatered sludge and process residuals are disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026883 (effective November 1, 2018 and expires October 31, 2023).

  The Wastewater System owns and maintains the Eastvale Pump Station, located in neighboring Eastvale Borough. The Eastvale Pump Station's force main is 8-inches

*- On February 19, 2021, The Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by one year. The 2020-2021 USPAP will now be effective until December 31, 2022.

in diameter and approximately 1,400 linear feet. The force main consists of ductile iron ("DIP") pipe, which was installed in 2006.

The Wastewater System's 190,442 linear feet of gravity sewer collection and trunk mains consist of 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch and 24-inch diameter pipe which was installed between 1937 to 2011. About 82% of the gravity mains were installed in 1937, 16% between 1990 and 1998, and 1% between 2008 and 2011. The mains consist of vitrified clay ("VCP") pipe and cured in place ("CIP") VCP, and polyvinyl chloride ("PVC") SDR 35 pipe. Only about 6% of the mains installed in 1937 have had to be replaced or lined. There are 674 brick and concrete manholes and 3,252 services laterals in the system. All manholes and services laterals were installed in 1937, and none have been replaced.

The Wastewater System's land and land rights include land used wastewater collection and transmission, about 36 miles of mains, 1 WWTP, 1 pump station and multiple easements and rights-of-way necessary to operate the Wastewater System.

- **State the real property interests appraised**

  The Wastewater System's land and land rights agreements necessary to access its property.

- **State the type and definition of value and cite the source of the definition, including whether the opinion of value is in terms of cash or of financing terms equivalent to cash, or based on non-market financing or financing with unusual conditions or incentives**

  Fair market value is defined as:

  > "The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." The International Glossary of Business Valuation Standards

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# Compliance with Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021*

## Fulfillment of Requirements for a Personal Property Appraisal and Report

- **State the effective date of the appraisal and the date of the report**

  The effective date of the appraisal is as of December 31, 2021, and the appraisal report date is August 10, 2022.

- **Describe sufficient information to disclose to the client and any other intended users of the appraisal the scope of work used to develop the appraisal**

  Gannett Fleming Valuation and Rate Consultants, LLC was retained by City of Beaver Falls ("Beaver Falls") to estimate the fair market value of City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

  The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

  As stated, the standard of value for this engagement is fair market value. The premise of value is the going concern. The going concern premise of business value assumes that the business will continue running normally using all its assets to produce income and will continue operating beyond the valuation date.

  We valued the Wastewater System's assets as a group under the premise that the assets collectively comprise an ongoing operating business enterprise. Additionally, in accordance with 66 Pa. C.S. Section 1329, the original source of funding for any part of the Wastewater System's assets was not relevant to the determination of the value of said assets.

  We accepted all information and data provided by the City of Beaver Falls as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verified any data, engineering assessment, financial record or operating data provided for this assignment. We assumed all title to all assets included in the appraisal is good and marketable, no hidden defects in the property or soil and no hazardous conditions or materials exist which could affect the assets.

  The appraisal considered all three approaches to value: the cost, income, and market. Briefly the scopes of work for each are as follows:

  The cost approach utilized the original cost method and replacement cost method. The reproduction cost method was calculated by trending (trended cost method) the

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asset inventory developed by Gannett Fleming, Inc. from its original cost new inventory. The original cost method determined the original cost new measure of the cost of the assets when first constructed. The original cost new inventory was trended using the Handy Whitman Index of Public Utility Construction Costs for the water industry to produce the reproduction cost new and converted to replacement cost new after obsolescence was factored. The calculated accrued depreciation was determined for the original cost new and for the replacement cost new. The calculated accrued depreciation was based on the assets' attained ages, and the service life of the assets. The cost basis of depreciable assets was reduced annually by the accumulated depreciation to reflect the loss in the service value of the assets since being constructed. All land and land rights were valued at original cost.

Income Approach - The income approach utilized the capitalization of earning (cash flow) method and the discounted cash flow method. The capitalization of earning method converted a single base economic income number to a value by dividing it by a capitalization rate. The discounted cash flow method used estimates of future debt free net cash flow and discounted them to arrive at a present value or price of the cash flows. The capitalization rate and the discount rate were developed based on market debt and equity rates at the appraisal date. The discounted cash flow method reflected two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model and a capitalization of terminal value model.

Market Approach - The market approach was developed based on the market multiples method and the selected transaction method. The market multiples method was based on the market price data of publicly traded corporations engaged in the same or a similar line of business as the Wastewater System. The market price data of these comparable publicly traded corporations was used to calculate the market multiples for the comparable publicly traded corporations at the appraisal date. The selected transactions method used certain public information relating to the purchase or sales of businesses involved in the same or a similar business line as the Wastewater System to calculated market multiples at the time of transaction (sale/purchase). The calculated market multiples determined by the market multiples method and the selected transaction method were then multiplied by the corresponding the Wastewater System financial and operating statistic to produce an indicated value for the Wastewater System.

Reconciliation of the Valuation Approaches - The fair market value conclusion was based on reconciliation of each of the three approaches to value and the intended purpose of the appraisal.

*- On February 19, 2021, The Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by one year. The 2020-2021 USPAP will now be effective until December 31, 2022.

- **Clearly and conspicuously:**
  - **State all extraordinary assumptions and hypothetical conditions;**

    There were no extraordinary assumptions required or hypothetical conditions in this appraisal.

  - **State that their use might have affected the assignment results**

    Not applicable.

- **Clearly and accurately disclose all assumptions, extraordinary assumptions, hypothetical conditions, and limiting conditions used in the assignment**

  Not applicable.

- **Describe the information analyzed, the appraisal procedures followed, and the reasoning that supports the analyses, opinions, and conclusions**

  See scope of work above.

- **State the use of the real estate existing as of the date of value and the use of the real estate reflected in the appraisal**

  The Wastewater System's land and land rights include land used wastewater collection and transmission, about 36 miles of mains, 1 WWTP, 1 pump station and multiple easements and rights-of-way necessary to operate the Wastewater System.

  The Wastewater System's land and land rights were assumed to be used for the operation of the Wastewater for the appraisal.

*- On February 19, 2021, The Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by one year. The 2020-2021 USPAP will now be effective until December 31, 2022.

- **State and describe the support and rationale for the appraiser's opinion of the highest and best use of the real estate**

  All land and land rights were assumed to be used for the operation of the Wastewater System for the appraisal, were valued at original cost, and not at highest and best use of the real estate.

- **State and explain any permitted departures from specific requirements of STANDARD 1 and the reason for excluding any of the usual valuation approaches. The appraisal then becomes a limited appraisal - a limited appraisal report must contain a prominent section that clearly identifies the extent of the appraisal process performed and the departures taken**

  No departures for Standard 1 were made.

- **Include a signed certification in accordance with Standards Rule 2-3**

  See attached for signed certification.

*- On February 19, 2021, The Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by one year. The 2020-2021 USPAP will now be effective until December 31, 2022.

# APPRAISAL CERTIFICATION
## Beaver County, Pennsylvania
## City of Beaver Falls
## Wastewater System Assets
## Fair Market Value Appraisal Report
## As of December 31, 2021

Gannett Fleming Valuation and Rate Consultants, LLC certify that, to the best of its knowledge and belief:

— The statements of fact contained in this report are true and correct.

— The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.

— Gannett Fleming Valuation and Rate Consultants, LLC has not performed an appraisal of the City of Beaver Falls' wastewater system prior to this current appraisal.

— Gannett Fleming Valuation and Rate Consultants, LLC, nor its professional staff has any present or prospective interest in the property that is the subject of this report and has no interest or bias with respect to the parties involved.

— We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

— Our engagement in this assignment is not contingent upon developing or reporting predetermined results.

— Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

— Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (2020-2021)

# APPRAISAL CERTIFICATION
## Beaver County, Pennsylvania
## City of Beaver Falls
## Wastewater System Assets
## Fair Market Value Appraisal Report
## As of December 31, 2021

— The signers of this report relied upon John F. Rae, P.E., Senior Project Manager, at Gannett Fleming, Inc., who viewed or observed the property that is the subject of this report.

— Individuals providing significant appraisal assistance to the person signing this certification include: John J. Spanos, President, Joanna Lappin, Depreciation Analyst and Glen Friel, Analyst at Gannett Fleming Valuation and Rate Consultants, LLC.

Gannett Fleming Valuation and Rate Consultants, LLC

By,



HAROLD WALKER, III

Manager, Financial Studies

EXHIBITS

City of Beaver Falls Wastewater System Assets
Selected Audited Financial Information

| | 12-Months Ended December 31: | | | |
|---|---|---|---|---|
| | 2017 | 2018 | 2019 | 2020 |
| Gross property, plant & equipment | 13,202,222 | 13,208,168 | 13,210,979 | 13,298,336 |
| Accumulated depreciation | 6,543,064 | 6,789,301 | 7,032,761 | 7,272,228 |
| Net property, plant & equipment | 6,659,158 | 6,418,867 | 6,178,218 | 6,026,108 |
| Assets | 8,321,618 | 8,566,364 | 8,166,744 | 8,238,912 |
| Debt Current | 0 | 0 | 0 | 0 |
| Debt | 0 | 0 | 0 | 0 |
| Equity | 8,053,661 | 8,367,190 | 7,978,686 | 8,146,961 |
| Total Capital | 8,053,661 | 8,367,190 | 7,978,686 | 8,146,961 |
| OPERATING REVENUES | | | | |
| Charges for services | 2,800,191 | 3,054,418 | 3,147,364 | 3,023,166 |
| Other operating income | 1,794 | 1,577 | 1,337 | 2,249 |
| TOTAL OPERATING REVENUES | 2,801,985 | 3,055,995 | 3,148,701 | 3,025,415 |
| Expenses | 2,188,424 | 2,224,099 | 2,620,251 | 2,630,694 |
| Depreciation | 249,840 | 246,236 | 243,460 | 239,466 |
| TOTAL OPERATING EXPENSES | 2,438,264 | 2,470,335 | 2,863,711 | 2,870,160 |
| CAPX | 7,749 | 5,945 | 2,811 | 87,357 |
| Interest | 24,629 | 0 | 0 | 0 |
| Principal | 940,000 | 0 | 0 | 0 |

Source of Information: Audited Financial Statements (2017-2020)

City of Beaver Falls Wastewater System Assets
Population, Housing Units, Customer Count, EDUs and Flows

| | City | Ultimate | System |
|---|---|---|---|
| Population in Houses (2021) | 7,488 | 20,743 | |
| Occupied Housing Units (2021) | 3,333 | 9,069 | |
| Average Size | 2.25 | 2.29 | |

| | Domestic | Ultimate |
|---|---|---|
| Population to Customers | 4.8 | 2.2 |
| Customers to Housing Units | 98% | |

| Customers (2021) | Domestic Customers | Ultimate Wholesale Customers | Ultimate Customers |
|---|---|---|---|
| Retail Customers | | | |
| City of Beaver Falls | 3,252 | | 3,252 |
| Wholesale Customers | | | |
| Big Beaver | 1 | 166 | 166 |
| Eastvale | 1 | 104 | 104 |
| North Sewickley | 1 | 1,094 | 1,094 |
| Patterson Heights | 1 | 270 | 270 |
| Patterson Township | 1 | 1,191 | 1,191 |
| West Mayfield | 1 | 521 | 521 |
| White Township | 1 | 421 | 421 |
| Total | 3,259 | 3,767 | 7,019 |

| | Total EDUs |
|---|---|
| | 5,107 |

Projected New EDUs

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| New EDUs | 19 | 0 | 1 | 2 | 3 |

Annual Daily Average Sewage Flow (MGD)

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| WWTP Totals | 1.93 | 2.65 | 3.00 | 2.65 | 2.10 |

City of Beaver Falls Wastewater System Assets
Population, Housing Units, Customer Count, EDUs and Flows

Population and Housing Units (2021)

| | Total Population | Population in Households | Occupied Housing Units | Persons Per Housing Unit | Estimated Population Served |
|---|---|---|---|---|---|
| City of Beaver Falls | 8,578 | 7,488 | 3,333 | 2.25 | 7,488 |
| Big Beaver | 1,912 | 1,906 | 839 | 2.27 | 330 |
| Eastvale | 209 | 200 | 89 | 2.25 | 200 |
| North Sewickley | 5,264 | 5,264 | 2,122 | 2.48 | 2,786 |
| Patterson Heights | 542 | 542 | 227 | 2.39 | 542 |
| Patterson Township | 2,960 | 2,953 | 1,406 | 2.10 | 1,866 |
| West Mayfield | 1,106 | 1,102 | 464 | 2.38 | 1,080 |
| White Township | 1,288 | 1,288 | 589 | 2.19 | 1,288 |
| Total | 21,859 | 20,743 | 9,069 | 2.29 | 15,580 |

| | | | | | Percentage to Totals | |
|---|---|---|---|---|---|---|
| | Billable Gallons | Revenues - Sewage Charges | Gallons Per Ultimate Customers | Revenues Per Ultimate Customers | Billable Gallons | Revenues - Sewage Charges |
| | (2020) | (2020) | | | | |
| Retail Customers | 162,524,000 | $1,506,821 | 49,977 | $463 | 45% | 50% |
| Wholesale Customers | 199,834,000 | 1,516,345 | 53,049 | 403 | 55% | 50% |
| Total | 362,358,000 | $3,023,166 | | | | |

**TABLE 3.1 US Population Census Counts, 2010 & 2020**

| State | Population 2010 | Population 2020 | Percentage Change |
|---|---|---|---|
| Alabama | 4,779,736 | 5,024,279 | 5.1% |
| Alaska | 710,231 | 733,391 | 3.3% |
| Arizona | 6,392,017 | 7,151,502 | 11.9% |
| Arkansas | 2,915,918 | 3,011,524 | 3.3% |
| California | 37,253,956 | 39,538,223 | 6.1% |
| Colorado | 5,029,196 | 5,773,714 | 14.8% |
| Connecticut | 3,574,097 | 3,605,944 | 0.9% |
| Delaware | 897,934 | 989,948 | 10.2% |
| District of Columbia | 601,723 | 689,545 | 14.6% |
| Florida | 18,801,310 | 21,538,187 | 14.6% |
| Georgia | 9,687,653 | 10,711,908 | 10.6% |
| Hawaii | 1,360,301 | 1,455,271 | 7.0% |
| Idaho | 1,567,582 | 1,839,106 | 17.3% |
| Illinois | 12,830,632 | 12,812,508 | -0.1% |
| Indiana | 6,483,802 | 6,785,528 | 4.7% |
| Iowa | 3,046,355 | 3,190,369 | 4.7% |
| Kansas | 2,853,118 | 2,937,880 | 3.0% |
| Kentucky | 4,339,367 | 4,505,836 | 3.8% |
| Louisiana | 4,533,372 | 4,657,757 | 2.7% |
| Maine | 1,328,361 | 1,362,359 | 2.6% |
| Maryland | 5,773,552 | 6,177,224 | 7.0% |
| Massachusetts | 6,547,629 | 7,029,917 | 7.4% |
| Michigan | 9,883,640 | 10,077,331 | 2.0% |
| Minnesota | 5,303,925 | 5,706,494 | 7.6% |
| Mississippi | 2,967,297 | 2,961,279 | -0.2% |
| Missouri | 5,988,927 | 6,154,913 | 2.8% |
| Montana | 989,415 | 1,084,225 | 9.6% |
| Nebraska | 1,826,341 | 1,961,504 | 7.4% |
| Nevada | 2,700,551 | 3,104,614 | 15.0% |
| New Hampshire | 1,316,470 | 1,377,529 | 4.6% |
| New Jersey | 8,791,894 | 9,288,994 | 5.7% |
| New Mexico | 2,059,179 | 2,117,522 | 2.8% |
| New York | 19,378,102 | 20,201,249 | 4.2% |
| North Carolina | 9,535,483 | 10,439,388 | 9.5% |
| North Dakota | 672,591 | 779,094 | 15.8% |
| Ohio | 11,536,504 | 11,799,448 | 2.3% |
| Oklahoma | 3,751,351 | 3,959,353 | 5.5% |
| Oregon | 3,831,074 | 4,237,256 | 10.6% |
| Pennsylvania | 12,702,379 | 13,002,700 | 2.4% |
| Rhode Island | 1,052,567 | 1,097,379 | 4.3% |
| South Carolina | 4,625,364 | 5,118,425 | 10.7% |
| South Dakota | 814,180 | 886,667 | 8.9% |
| Tennessee | 6,346,105 | 6,910,840 | 8.9% |
| Texas | 25,145,561 | 29,145,505 | 15.9% |
| Utah | 2,763,885 | 3,271,616 | 18.4% |
| Vermont | 625,741 | 643,077 | 2.8% |
| Virginia | 8,001,024 | 8,631,393 | 7.9% |
| Washington | 6,724,540 | 7,705,281 | 14.6% |
| West Virginia | 1,852,994 | 1,793,716 | -3.2% |
| Wisconsin | 5,686,986 | 5,893,718 | 3.6% |
| Wyoming | 563,626 | 576,851 | 2.3% |
| Total - States & D.C. | 308,745,538 | 331,449,281 | 7.4% |

Source: STATS Indiana, using U.S. Census Bureau data

**TABLE 3.2 Pennsylvania Population Census by County and Municipality, 2010 & 2020**

| Geographic Area | Population 2010 | Population 2020 | Percentage Change | Municipal Growth Rank |
|---|---|---|---|---|
| Pennsylvania | 12,702,379 | 13,002,700 | 2.4% | - |
| Beaver County | 170,539 | 168,215 | -1.4% | - |
| Beaver Falls City | 8,987 | 9,005 | 0.2% | 963 out of 2,572 |
| Big Beaver Borough | 1,970 | 1,852 | -6.0% | 1,816 out of 2,572 |
| Eastvale Borough | 225 | 184 | -18.2% | 2,477 out of 2,572 |
| North Sewickley Townsh | 5,488 | 5,495 | 0.1% | 971 out of 2,572 |
| Patterson Township | 3,029 | 3,129 | 3.3% | 594 out of 2,572 |
| Patterson Heights Boroug | 636 | 639 | 0.5% | 930 out of 2,572 |
| West Mayfield Borough | 1,239 | 1,195 | -3.6% | 1,473 out of 2,572 |
| White Township | 1,394 | 1,316 | -5.6% | 1,762 out of 2,572 |
| System Total | 22,968 | 22,815 | -0.7% | 1,083 out of 2,572 |

Source: U.S. Census Bureau,Census 2020 Redistricting Data (Public Law 94-171) Summary File.

**TABLE 3.3 Forecasted Population by County and Municipality, 2020-2045**

| | Population | | | | | | Percentage Change | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Estimate 2020 | Forecast 2025 | Forecast 2030 | Forecast 2035 | Forecast 2040 | Forecast 2045 | 2020 to 2025 | 2025 to 2030 | 2030 to 2035 | 2035 to 2040 | 2040 to 2045 | 2020 to 2045 |
| Pittsburgh, City of | 304,900 | 311,659 | 321,969 | 333,067 | 344,473 | 357,154 | 2.2% | 3.3% | 3.4% | 3.4% | 3.4% | 17.1% |
| Allegheny (Excl. Pittsburgh) | 924,120 | 938,526 | 963,797 | 989,969 | 1,015,104 | 1,043,734 | 1.6% | 2.7% | 2.7% | 2.5% | 2.5% | 12.9% |
| Armstrong | 64,822 | 63,052 | 62,573 | 63,017 | 63,683 | 64,156 | -2.7% | -0.8% | 0.7% | 1.1% | 1.1% | -1.0% |
| Beaver | 165,356 | 165,660 | 169,639 | 174,012 | 177,584 | 180,383 | 0.2% | 2.4% | 2.6% | 2.1% | 2.1% | 9.1% |
| Butler | 189,577 | 193,864 | 201,009 | 209,286 | 216,520 | 222,117 | 2.3% | 3.7% | 4.1% | 3.5% | 3.5% | 17.2% |
| Fayette | 129,158 | 126,620 | 126,610 | 127,595 | 128,255 | 128,468 | -2.0% | 0.0% | 0.8% | 0.5% | 0.5% | -0.5% |
| Greene | 37,184 | 36,790 | 36,981 | 37,450 | 37,912 | 38,341 | -1.1% | 0.5% | 1.3% | 1.2% | 1.2% | 3.1% |
| Indiana | 87,307 | 88,299 | 90,698 | 93,276 | 95,010 | 95,804 | 1.1% | 2.7% | 2.8% | 1.9% | 1.9% | 9.7% |
| Lawrence | 85,935 | 84,432 | 85,425 | 87,531 | 89,361 | 90,583 | -1.7% | 1.2% | 2.5% | 2.1% | 2.1% | 5.4% |
| Washington | 209,558 | 213,562 | 220,429 | 228,261 | 235,444 | 241,574 | 1.9% | 3.2% | 3.6% | 3.1% | 3.1% | 15.3% |
| Westmoreland | 355,285 | 357,066 | 366,299 | 377,950 | 387,880 | 394,643 | 0.5% | 2.6% | 3.2% | 2.6% | 2.6% | 11.1% |
| Total - SPC Region | 2,553,202 | 2,579,530 | 2,645,429 | 2,721,414 | 2,791,226 | 2,856,957 | 1.0% | 2.6% | 2.9% | 2.6% | 2.6% | 11.9% |
| Beaver Falls City | 8,404 | 8,367 | 8,520 | 8,687 | 8,839 | 9,019 | -0.4% | 1.8% | 2.0% | 1.7% | 1.7% | 7.3% |
| Big Beaver Borough | 1,837 | 1,879 | 1,965 | 1,992 | 2,025 | 2,050 | 2.3% | 4.6% | 1.4% | 1.7% | 1.7% | 11.6% |
| Eastvale Borough | 217 | 211 | 211 | 213 | 214 | 215 | -2.8% | 0.0% | 0.9% | 0.5% | 0.5% | -0.9% |
| North Sewickley Township | 5,363 | 5,321 | 5,400 | 5,531 | 5,632 | 5,700 | -0.8% | 1.5% | 2.4% | 1.8% | 1.8% | 6.3% |
| Patterson Heights Borough | 609 | 606 | 620 | 635 | 645 | 651 | -0.5% | 2.3% | 2.4% | 1.6% | 1.6% | 6.9% |
| Patterson Township | 2,940 | 2,945 | 3,007 | 3,065 | 3,100 | 3,114 | 0.2% | 2.1% | 1.9% | 1.1% | 1.1% | 5.9% |
| West Mayfield Borough | 1,283 | 1,304 | 1,349 | 1,389 | 1,418 | 1,440 | 1.6% | 3.5% | 3.0% | 2.1% | 2.1% | 12.2% |
| White Township | 1,304 | 1,291 | 1,309 | 1,327 | 1,338 | 1,349 | -1.0% | 1.4% | 1.4% | 0.8% | 0.8% | 3.5% |
| System Total | 21,957 | 21,924 | 22,381 | 22,839 | 23,211 | 23,538 | -0.2% | 2.1% | 2.0% | 1.6% | 1.6% | 7.2% |

Source: Southwestern Pennsylvanaia Commission, June 2019.

**TABLE 3.4 Forecasted Employment by County and Municipality, 2020-2045**

| | Employment | | | | | | Percentage Change | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Estimate 2020 | Forecast 2025 | Forecast 2030 | Forecast 2035 | Forecast 2040 | Forecast 2045 | 2020 to 2025 | 2025 to 2030 | 2030 to 2035 | 2035 to 2040 | 2035 to 2040 | 2020 to 2045 |
| Pittsburgh, City of | 32,014 | 31,555 | 31,463 | 32,272 | 33,601 | 35,092 | -1.4% | -0.3% | 2.6% | 4.1% | 4.1% | 9.6% |
| Allegheny (Excl. Pittsburgh) | 110,038 | 107,804 | 106,063 | 107,535 | 110,874 | 114,757 | -2.0% | -1.6% | 1.4% | 3.1% | 3.1% | 4.3% |
| Armstrong | 4,160 | 4,016 | 3,916 | 3,920 | 3,963 | 3,993 | -3.5% | -2.5% | 0.1% | 1.1% | 1.1% | -4.0% |
| Beaver | 13,247 | 12,932 | 12,750 | 12,821 | 12,989 | 13,147 | -2.4% | -1.4% | 0.6% | 1.3% | 1.3% | -0.8% |
| Butler | 21,551 | 21,255 | 21,043 | 21,405 | 21,957 | 22,436 | -1.4% | -1.0% | 1.7% | 2.6% | 2.6% | 4.1% |
| Fayette | 10,604 | 10,262 | 10,026 | 10,042 | 10,138 | 10,177 | -3.2% | -2.3% | 0.2% | 1.0% | 1.0% | -4.0% |
| Greene | 2,568 | 2,475 | 2,411 | 2,420 | 2,460 | 2,491 | -3.6% | -2.6% | 0.4% | 1.7% | 1.7% | -3.0% |
| Indiana | 7,947 | 7,810 | 7,726 | 7,848 | 8,009 | 8,125 | -1.7% | -1.1% | 1.6% | 2.1% | 2.1% | 2.2% |
| Lawrence | 6,751 | 6,556 | 6,446 | 6,496 | 6,599 | 6,669 | -2.9% | -1.7% | 0.8% | 1.6% | 1.6% | -1.2% |
| Washington | 19,660 | 19,321 | 19,089 | 19,440 | 20,066 | 20,650 | -1.7% | -1.2% | 1.8% | 3.2% | 3.2% | 5.0% |
| Westmoreland | 37,420 | 36,547 | 36,028 | 36,450 | 37,175 | 37,705 | -2.3% | -1.4% | 1.2% | 2.0% | 2.0% | 0.8% |
| Total - SPC Region | 265,960 | 260,533 | 256,961 | 260,649 | 267,831 | 275,242 | -2.0% | -1.4% | 1.4% | 2.8% | 2.8% | 3.5% |
| Beaver Falls City | 1,029 | 993 | 975 | 976 | 987 | 1,006 | -3.5% | -1.8% | 0.1% | 1.1% | 1.1% | -2.2% |
| Big Beaver Borough | 25 | 25 | 23 | 23 | 24 | 24 | 0.0% | -8.0% | 0.0% | 4.3% | 4.3% | -4.0% |
| Eastvale Borough | 39 | 36 | 36 | 36 | 35 | 36 | -7.7% | 0.0% | 0.0% | -2.8% | -2.8% | -7.7% |
| North Sewickley Township | 184 | 177 | 172 | 173 | 175 | 176 | -3.8% | -2.8% | 0.6% | 1.2% | 1.2% | -4.3% |
| Patterson Heights Borough | 32 | 31 | 31 | 31 | 31 | 31 | -3.1% | 0.0% | 0.0% | 0.0% | 0.0% | -3.1% |
| Patterson Township | 14 | 13 | 13 | 13 | 13 | 13 | -7.1% | 0.0% | 0.0% | 0.0% | 0.0% | -7.1% |
| West Mayfield Borough | 5 | 5 | 5 | 5 | 5 | 6 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 20.0% |
| White Township | 4 | 4 | 4 | 4 | 4 | 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| System Total | 1,332 | 1,284 | 1,259 | 1,261 | 1,274 | 1,296 | -3.6% | -1.9% | 0.2% | 1.0% | 1.0% | -2.7% |

Source: Southwestern Pennsylvanaia Commission, June 2019.

Comparison of Credit Market Financial Risk Metrics
For City of Beaver Falls Wastewater System Assets
And the Comparable Group
2018 - 2020 (1)

| | City of Beaver Falls Wastewater System Assets | | | Comparable Group | | |
|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| Debt Service Coverage | NA | NA | NA | 2.4 | 2.0 | 3.7 |
| Pre-Tax Interest Coverage - Including AFC(2)(x) | NA | NA | NA | 3.7 | 3.6 | 3.6 |
| Post-Tax Interest Coverage - Including AFC(2)(x) | NA | NA | NA | 3.2 | 2.9 | 3.0 |
| GCF / Interest Coverage(3)(x) | NA | NA | NA | 5.2 | 4.7 | 4.9 |
| GCF / Tot. Debt(4)(%) | NA | NA | NA | 15.9 | 15.8 | 18.7 |
| GCF / Construction(5)(%) | 451.8 | 18,799.4 | 13,993.2 | 72.2 | 63.0 | 63.2 |

Notes: (1) Average of the achieved results for each individual company based upon the financials as originally reported.
(2) Represents the number of times available earnings, including AFC, cover all interest charges.
(3) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
(4) GCF (see note 3) as a percentage of total debt.
(5) The percent of GCF (see note 3) which cover gross construction expenditures.

Source: 2018-20 Annual Reports and Budgets
S&P Capital IQ
EXHIBIT 1

City of Beaver Falls Wastewater System Assets
Illustrating the Impact of Size on Risk and Retun
Through Common Stock Returns

**TABLE 5.1 Change in Return and Risk for Size-Quartiles Portfolio of the NYSE/AMEX/NASDAQ Common Stocks (1)**

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Beta Adjusted | |
| Market Quartile | Market Quartile Name | Average Quartile Premium 1926-20 (%) | Standard Deviation of Return 1926-18 (%) | Change in Quartile Premium (%) | Largest Market Value in the Quartile (Mill $) | Quartile Beta | Comparison Group Beta | Beta Ratio | Quartile Size Premium (%) | Change in Quartile Premium (%) |
| (Largest Stocks) | | | | | | | | | | |
| 1 | Large-Cap | 0.00 | 19.9 | -- | 1,966,079 | 1.00 | 0.80 | 80% | 0.00 | |
| 2 | Mid-Cap | 2.48 | 24.3 | 2.48 | 13,179 | 1.13 | 0.80 | 71% | 1.76 | 1.76 |
| 3 | Low-Cap | 3.95 | 28.5 | 1.47 | 2,446 | 1.23 | 0.80 | 65% | 2.57 | 0.81 |
| 4 | Mico-Cap | 6.21 | 38.5 | 2.26 | 453 | 1.35 | 0.80 | 59% | 3.68 | 1.11 |
| (Smallest Stocks) | | | | | | | | | | |

Notes: (1) 2020 Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook

**TABLE 5.2 Recent Market Values and Ibbotson Associates Market Quartiles for the Comparable Group**

| | 12/31/2021 Market Value (Mill $) | Market Quartile Name | Market Quartile |
|---|---|---|---|
| Comparable Group | | | |
| American States Water Co | 3,821 | Mid-Cap | 2 |
| American Water Works Co Inc | 34,285 | Large-Cap | 1 |
| Artesian Resources -Cl A | 435 | Mico-Cap | 4 |
| California Water Service Gp | 3,780 | Mid-Cap | 2 |
| Essential Utilities, Inc. | 13,570 | Large-Cap | 1 |
| Middlesex Water Co | 2,105 | Low-Cap | 3 |
| SJW Corp | 2,183 | Low-Cap | 3 |
| York Water Co | 652 | Low-Cap | 3 |
| Median | 2,982 | Mid-Cap | 2 |

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

**TABLE 6.1 Property Plant & Equipment Analysis**

(Current Know Statistics)

| | Gross Property, Plant & Equipment | Net Property, Plant & Equipment | Percentage of Property, Plant & Equipment Not Depreciated |
|---|---|---|---|
| | (Millions of $) | | |
| City of Beaver Falls Wastewater System Assets * | $12.898 | $7.851 | 61% |
| Comparable Group | | | |
| American States Water Company | $2,202.419 | $1,614.705 | 73% |
| American Water Works Company | 26,972.000 | 20,680.000 | 77% |
| Artesian Resources Corporation | 743.292 | 585.751 | 79% |
| California Water Service Group | 4,124.024 | 2,796.369 | 68% |
| Essential Utilities, Inc. | 12,348.442 | 10,012.155 | 81% |
| Middlesex Water Company | 1,063.753 | 865.947 | 81% |
| SJW Group | 3,616.710 | 2,486.932 | 69% |
| The York Water Company | 464.886 | 368.286 | 79% |
| Median | | | 78% |

* - Developed on Exhibit 7.

**TABLE 6.2 Property Plant & Equipment Analysis for Contributions**

(As of 9/30/2021)

| | Net Property, Plant & Equipment | Investor's Capital | Percentage of Property, Plant & Equipment Net of Contributions | 2020 Percentage of Known "Cost Free" Capital |
|---|---|---|---|---|
| | (Millions of $) | | | |
| Comparable Group | | | | |
| American States Water Co | $1,614.705 | $1,292.917 | 80% | 22% |
| American Water Works Co Inc | 20,680.000 | 18,040.000 | 87% | 19% |
| Artesian Resources -CL A | 585.751 | 347.983 | 59% | 39% |
| California Water Service Gp | 2,796.369 | 2,305.564 | 82% | 28% |
| Essential Utilities, Inc. | 10,012.155 | 10,907.411 | 109% | 20% |
| Middlesex Water Co | 865.947 | 693.048 | 80% | 25% |
| SJW Corp | 2,486.932 | 2,569.103 | 103% | 26% |
| York Water Co | 368.286 | 285.060 | 77% | 28% |
| Median | | | 81% | 25% |

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

**TABLE 6.3 Capital Expenditures Analysis**

| | PP&E-Total Net (Millions of $) | | | | Capital Expenditures (Millions of $) | | | |
|---|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2017 | 2020 | 2019 | 2018 | 2017 |
| City of Beaver Falls Wastewater System Assets | $6.026 | $6.178 | $6.419 | $6.659 | $0.087 | $0.003 | $0.006 | $0.008 |
| Comparable Group | | | | | | | | |
| American States Water Co | $1,557.936 | $1,458.595 | $1,304.683 | $1,213.264 | $130.423 | $151.940 | $126.561 | $113.126 |
| American Water Works Co Inc | 19,805.000 | 18,335.000 | 17,409.000 | 16,246.000 | 1,822.000 | 1,654.000 | 1,586.000 | 1,434.000 |
| Artesian Resources -CL A | 563.817 | 535.013 | 502.527 | 464.384 | 34.277 | 40.677 | 49.053 | 41.094 |
| California Water Service Gp | 2,654.027 | 2,409.873 | 2,220.873 | 2,036.971 | 298.651 | 273.770 | 271.707 | 259.194 |
| Essential Utilities, Inc. | 9,573.211 | 6,358.657 | 5,930.326 | 5,399.860 | 835.642 | 550.273 | 495.737 | 478.089 |
| Middlesex Water Co | 813.014 | 722.044 | 628.476 | 566.718 | 105.619 | 89.125 | 72.094 | 50.301 |
| SJW Corp | 2,356.988 | 2,230.343 | 1,365.771 | 1,278.025 | 195.323 | 164.325 | 135.973 | 141.213 |
| York Water Co | 344.365 | 313.993 | 299.871 | 289.524 | 33.299 | 20.537 | 16.882 | 25.074 |

| | Capital Expenditures / PP&E-Total Net | | | |
|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2017 |
| City of Beaver Falls Wastewater System Assets | 1% | 0% | 0% | 0% |
| Comparable Group | | | | |
| American States Water Co | 8% | 10% | 10% | 9% |
| American Water Works Co Inc | 9% | 9% | 9% | 9% |
| Artesian Resources -CL A | 6% | 8% | 10% | 9% |
| California Water Service Gp | 11% | 11% | 12% | 13% |
| Essential Utilities, Inc. | 9% | 9% | 8% | 9% |
| Middlesex Water Co | 13% | 12% | 11% | 9% |
| SJW Corp | 8% | 7% | 10% | 11% |
| York Water Co | 10% | 7% | 6% | 9% |
| Median | 9% | 9% | 10% | 9% |

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

| | Revenues | | | | EBITDA | | | |
|---|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2017 | 2020 | 2019 | 2018 | 2017 |
| | (Millions of $) | | | | (Millions of $) | | | |
| City of Beaver Falls Wastewater System Assets | $3.025 | $3.149 | $3.056 | $2.802 | $0.395 | $0.528 | $0.832 | $0.614 |
| Comparable Group | | | | | | | | |
| American States Water Co | $488.243 | $473.869 | $436.816 | $440.603 | $171.044 | $164.085 | $144.803 | $159.380 |
| American Water Works Co Inc | 3,777.000 | 3,610.000 | 3,440.000 | 3,357.000 | 1,901.000 | 1,812.000 | 1,704.000 | 1,720.000 |
| Artesian Resources -CL A | 88.141 | 83.595 | 80.411 | 82.235 | 39.122 | 35.909 | 34.234 | 36.450 |
| California Water Service Gp | 794.307 | 714.557 | 698.196 | 676.113 | 244.000 | 201.212 | 205.393 | 211.184 |
| Essential Utilities, Inc. | 1,462.698 | 889.692 | 838.091 | 809.525 | 713.483 | 513.717 | 476.204 | 465.691 |
| Middlesex Water Co | 141.592 | 134.598 | 138.077 | 130.775 | 58.537 | 51.550 | 53.546 | 52.813 |
| SJW Corp | 564.526 | 420.482 | 397.699 | 389.225 | 208.918 | 138.578 | 146.601 | 148.580 |
| York Water Co | 53.852 | 51.578 | 48.437 | 48.589 | 31.246 | 30.023 | 28.242 | 29.242 |

| | EBIT | | | |
|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2017 |
| | (Millions of $) | | | |
| City of Beaver Falls Wastewater System Assets | $0.155 | $0.285 | $0.586 | $0.364 |
| Comparable Group | | | | |
| American States Water Co | $133.840 | $128.372 | $104.140 | $120.107 |
| American Water Works Co Inc | 1,297.000 | 1,230.000 | 1,159.000 | 1,228.000 |
| Artesian Resources -CL A | 27.979 | 25.106 | 23.946 | 26.895 |
| California Water Service Gp | 143.065 | 109.924 | 119.686 | 132.592 |
| Essential Utilities, Inc. | 456.424 | 357.241 | 329.531 | 328.967 |
| Middlesex Water Co | 37.699 | 34.318 | 37.766 | 37.967 |
| SJW Corp | 117.296 | 70.089 | 89.694 | 98.079 |
| York Water Co | 23.069 | 22.335 | 21.232 | 22.473 |

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

**TABLE 6.4 Growth Rate Analyses**

| | Revenue Growth | | | EBITDA Growth | | |
|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| City of Beaver Falls Wastewater System Assets | -3.9% | 3.0% | 9.1% | -25.2% | -36.5% | 35.5% |
| Comparable Group | | | | | | |
| American States Water Co | 3.0% | 8.5% | -0.9% | 4.2% | 13.3% | -9.1% |
| American Water Works Co Inc | 4.6% | 4.9% | 2.5% | 4.9% | 6.3% | -0.9% |
| Artesian Resources -CL A | 5.4% | 4.0% | -2.2% | 8.9% | 4.9% | -6.1% |
| California Water Service Gp | 11.2% | 2.3% | 3.3% | 21.3% | -2.0% | -2.7% |
| Essential Utilities, Inc. | 64.4% | 6.2% | 3.5% | 38.9% | 7.9% | 2.3% |
| Middlesex Water Co | 5.2% | -2.5% | 5.6% | 13.6% | -3.7% | 1.4% |
| SJW Corp | 34.3% | 5.7% | 2.2% | 50.8% | -5.5% | -1.3% |
| York Water Co | 4.4% | 6.5% | -0.3% | 4.1% | 6.3% | -3.4% |
| Median | 5.3% | 5.3% | 2.4% | 11.3% | 5.6% | -2.0% |

| | EBIT Growth | | |
|---|---|---|---|
| | 2020 | 2019 | 2018 |
| City of Beaver Falls Wastewater System Assets | -45.6% | -51.4% | 61.0% |
| Comparable Group | | | |
| American States Water Co | 4.3% | 23.3% | -13.3% |
| American Water Works Co Inc | 5.4% | 6.1% | -5.6% |
| Artesian Resources -CL A | 11.4% | 4.8% | -11.0% |
| California Water Service Gp | 30.1% | -8.2% | -9.7% |
| Essential Utilities, Inc. | 27.8% | 8.4% | 0.2% |
| Middlesex Water Co | 9.9% | -9.1% | -0.5% |
| SJW Corp | 67.4% | -21.9% | -8.5% |
| York Water Co | 3.3% | 5.2% | -5.5% |
| Median | 10.7% | 5.0% | -7.1% |

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

**TABLE 6.5 Profit Margin Analyses**

| | EBITDA / Revenue - Margin | | |
|---|---|---|---|
| | 2020 | 2019 | 2018 |
| City of Beaver Falls Wastewater System Assets | 13.1% | 16.8% | 27.2% |
| Comparable Group | | | |
| American States Water Co | 35.0% | 34.6% | 33.1% |
| American Water Works Co Inc | 50.3% | 50.2% | 49.5% |
| Artesian Resources -CL A | 44.4% | 43.0% | 42.6% |
| California Water Service Gp | 30.7% | 28.2% | 29.4% |
| Essential Utilities, Inc. | 48.8% | 57.7% | 56.8% |
| Middlesex Water Co | 41.3% | 38.3% | 38.8% |
| SJW Corp | 37.0% | 33.0% | 36.9% |
| York Water Co | 58.0% | 58.2% | 58.3% |
| Median | 42.9% | 40.6% | 40.7% |

| | EBIT / Revenue - Margin | | |
|---|---|---|---|
| | 2020 | 2019 | 2018 |
| City of Beaver Falls Wastewater System Assets | 5.1% | 9.1% | 19.2% |
| Comparable Group | | | |
| American States Water Co | 27.4% | 27.1% | 23.8% |
| American Water Works Co Inc | 34.3% | 34.1% | 33.7% |
| Artesian Resources -CL A | 31.7% | 30.0% | 29.8% |
| California Water Service Gp | 18.0% | 15.4% | 17.1% |
| Essential Utilities, Inc. | 31.2% | 40.2% | 39.3% |
| Middlesex Water Co | 26.6% | 25.5% | 27.4% |
| SJW Corp | 20.8% | 16.7% | 22.6% |
| York Water Co | 42.8% | 43.3% | 43.8% |
| Median | 29.3% | 28.6% | 28.6% |

Source: S&P Capital IQ
EXHIBIT 1

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF ORIGINAL COST AND ACCRUED DEPRECIATION**
**OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | ORIGINAL COST | ACCRUED DEPRECIATION |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | 109.00 | |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | 1.00 | |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 47,637.50 | |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 133,168.00 | 30,629 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 4,536,214.51 | 1,674,975 |
| 355.00 | POWER GENERATION EQUIPMENT | 92,474.78 | 59,838 |
| 360.10 | FORCE MAINS | 234,542.22 | 47,915 |
| 361.10 | GRAVITY MAINS | 3,740,050.47 | 1,224,191 |
| 361.12 | MANHOLES | 64,697.57 | 51,579 |
| 363.20 | SERVICES TO CUSTOMERS | 170,292.73 | 141,569 |
| 364.30 | METERS | 57,104.19 | 28,362 |
| 371.30 | PUMPING EQUIPMENT | 731,614.08 | 288,255 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 1,950,795.49 | 933,736 |
| 381.40 | PLANT SEWERS | 698,718.01 | 323,953 |
| 382.00 | OUTFALL SEWERS | 70,212.80 | 58,859 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 2,390.76 | 179 |
| 390.70 | COMPUTERS | 8,215.98 | 2,065 |
| 391.70 | TRANSPORTATION EQUIPMENT | 105,532.31 | 56,352 |
| 392.70 | STORES EQUIPMENT | 7,968.37 | 7,968 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 104,839.60 | 7,863 |
| 394.70 | LABORATORY EQUIPMENT | 60,719.01 | 54,357 |
| 395.70 | POWER OPERATED EQUIPMENT | 69,588.51 | 53,982 |
| 396.00 | COMMUNICATION EQUIPMENT | 9,600.00 | 893 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2,000.00 | 280 |
| | **TOTAL COMPANY** | **12,898,486.89** | **5,047,800** |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF ANALYSIS OF ORIGINAL COST**
**OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | ORIGINAL COST |
|---|---|---|
| (1) | (2) | (3) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | 109.00 |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | 1.00 |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 47,637.50 |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 133,168.00 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 4,536,214.51 |
| 355.00 | POWER GENERATION EQUIPMENT | 92,474.78 |
| 360.10 | FORCE MAINS | 234,542.22 |
| 361.10 | GRAVITY MAINS | 3,740,050.47 |
| 361.12 | MANHOLES | 64,697.57 |
| 363.20 | SERVICES TO CUSTOMERS | 170,292.73 |
| 364.30 | METERS | 57,104.19 |
| 371.30 | PUMPING EQUIPMENT | 731,614.08 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 1,950,795.49 |
| 381.40 | PLANT SEWERS | 698,718.01 |
| 382.00 | OUTFALL SEWERS | 70,212.80 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 2,390.76 |
| 390.70 | COMPUTERS | 8,215.98 |
| 391.70 | TRANSPORTATION EQUIPMENT | 105,532.31 |
| 392.70 | STORES EQUIPMENT | 7,968.37 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 104,839.60 |
| 394.70 | LABORATORY EQUIPMENT | 60,719.01 |
| 395.70 | POWER OPERATED EQUIPMENT | 69,588.51 |
| 396.00 | COMMUNICATION EQUIPMENT | 9,600.00 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2,000.00 |
| | **TOTAL COMPANY** | **12,898,486.89** |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | SURVIVOR CURVE | ORIGINAL COST | ACCRUED DEPRECIATION |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | NONDEPRECIABLE | 109.00 | |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | NONDEPRECIABLE | 1.00 | |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | NONDEPRECIABLE | 47,637.50 | |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 65-R3 | 133,168.00 | 30,629 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 70-R2.5 | 4,536,214.51 | 1,674,975 |
| 355.00 | POWER GENERATION EQUIPMENT | 30-S2 | 92,474.78 | 59,838 |
| 360.10 | FORCE MAINS | 70-R2.5 | 234,542.22 | 47,915 |
| 361.10 | GRAVITY MAINS | 75-R1.5 | 3,740,050.47 | 1,224,191 |
| 361.12 | MANHOLES | 65-R1.5 | 64,697.57 | 51,579 |
| 363.20 | SERVICES TO CUSTOMERS | 60-R1.5 | 170,292.73 | 141,569 |
| 364.30 | METERS | 30-L3 | 57,104.19 | 28,362 |
| 371.30 | PUMPING EQUIPMENT | 40-R1.5 | 731,614.08 | 288,255 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 45-S0.5 | 1,950,795.49 | 933,736 |
| 381.40 | PLANT SEWERS | 60-R3 | 698,718.01 | 323,953 |
| 382.00 | OUTFALL SEWERS | 70-R2.5 | 70,212.80 | 58,859 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 20-SQ | 2,390.76 | 179 |
| 390.70 | COMPUTERS | 5-SQ | 8,215.98 | 2,065 |
| 391.70 | TRANSPORTATION EQUIPMENT | 11-S1.5 | 105,532.31 | 56,352 |
| 392.70 | STORES EQUIPMENT | 20-SQ | 7,968.37 | 7,968 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 20-SQ | 104,839.60 | 7,863 |
| 394.70 | LABORATORY EQUIPMENT | 15-SQ | 60,719.01 | 54,357 |
| 395.70 | POWER OPERATED EQUIPMENT | 15-L2.5 | 69,588.51 | 53,982 |
| 396.00 | COMMUNICATION EQUIPMENT | 15-SQ | 9,600.00 | 893 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 15-SQ | 2,000.00 | 280 |
| | **TOTAL COMPANY** | | **12,898,486.89** | **5,047,800** |

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.20 LAND AND LAND RIGHTS - COLLECTION

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1937 | 109.00 | | | | | | |
| | 109.00 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.30 LAND AND LAND RIGHTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1982 | 1.00 | | | | | | |
| | 1.00 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.40 LAND AND LAND RIGHTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1964 | 10,800.00 | | | | | | |
| 1973 | 26,100.00 | | | | | | |
| 1996 | 10,737.50 | | | | | | |
| | 47,637.50 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR (1) | ORIGINAL COST (2) | AVG. LIFE (3) | --ANNUAL ACCRUAL-- RATE (4) | AMOUNT (5) | EXP. (6) | --ACCRUED DEPREC.-- FACTOR (7) | AMOUNT (8) |
|---|---|---|---|---|---|---|---|
| SURVIVOR CURVE.. IOWA 65-R3<br>NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2006 | 133,168.00 | 65.00 | 1.54 | 2,050.79 | 50.05 | 0.2300 | 30,629 |
| | 133,168.00 | | | 2,050.79 | | | 30,629 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 11,464.36 | 70.00 | 1.43 | 163.94 | 11.32 | 0.8383 | 9,610 |
| 1964 | 106,465.92 | 70.00 | 1.43 | 1,522.46 | 23.41 | 0.6656 | 70,861 |
| 1974 | 1,071,672.11 | 70.00 | 1.43 | 15,324.91 | 29.94 | 0.5723 | 613,307 |
| 1996 | 2,738,371.24 | 70.00 | 1.43 | 39,158.71 | 47.00 | 0.3286 | 899,747 |
| 2010 | 523,430.68 | 70.00 | 1.43 | 7,485.06 | 59.31 | 0.1527 | 79,933 |
| 2020 | 69,810.20 | 70.00 | 1.43 | 998.29 | 68.58 | 0.0203 | 1,416 |
| 2021 | 15,000.00 | 70.00 | 1.43 | 214.50 | 69.53 | 0.0067 | 101 |
| | 4,536,214.51 | | | 64,867.87 | | | 1,674,975 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| | ORIGINAL | AVG. | --ANNUAL ACCRUAL-- | | | --ACCRUED DEPREC.-- | |
|---|---|---|---|---|---|---|---|
| YEAR | COST | LIFE | RATE | AMOUNT | EXP. | FACTOR | AMOUNT |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 30-S2 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 87,502.00 | 30.00 | 3.33 | 2,913.82 | 9.57 | 0.6810 | 59,589 |
| 2020 | 4,972.78 | 30.00 | 3.33 | 165.59 | 28.50 | 0.0500 | 249 |
| | 92,474.78 | | | 3,079.41 | | | 59,838 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2006 | 234,542.22 | 70.00 | 1.43 | 3,353.95 | 55.70 | 0.2043 | 47,915 |
| | 234,542.22 | | | 3,353.95 | | | 47,915 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 75-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 489,859.08 | 75.00 | 1.33 | 6,515.13 | 19.96 | 0.7339 | 359,493 |
| 1990 | 268,174.99 | 75.00 | 1.33 | 3,566.73 | 50.56 | 0.3259 | 87,390 |
| 1991 | 377,447.37 | 75.00 | 1.33 | 5,020.05 | 51.29 | 0.3161 | 119,322 |
| 1993 | 107,872.58 | 75.00 | 1.33 | 1,434.71 | 52.75 | 0.2967 | 32,003 |
| 1996 | 1,932,736.25 | 75.00 | 1.33 | 25,705.39 | 54.97 | 0.2671 | 516,176 |
| 1998 | 286,361.78 | 75.00 | 1.33 | 3,808.61 | 56.46 | 0.2472 | 70,789 |
| 2008 | 240,153.18 | 75.00 | 1.33 | 3,194.04 | 64.14 | 0.1448 | 34,774 |
| 2011 | 37,445.24 | 75.00 | 1.33 | 498.02 | 66.50 | 0.1133 | 4,244 |
| | 3,740,050.47 | | | 49,742.68 | | | 1,224,191 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR (1) | ORIGINAL COST (2) | AVG. LIFE (3) | --ANNUAL ACCRUAL-- RATE (4) | AMOUNT (5) | EXP. (6) | --ACCRUED DEPREC.-- FACTOR (7) | AMOUNT (8) |
|---|---|---|---|---|---|---|---|
| SURVIVOR CURVE.. IOWA 65-R1.5<br>NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 64,697.57 | 65.00 | 1.54 | 996.34 | 13.18 | 0.7972 | 51,579 |
| | 64,697.57 | | | 996.34 | | | 51,579 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 60-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 170,292.73 | 60.00 | 1.67 | 2,843.89 | 10.12 | 0.8313 | 141,569 |
| | 170,292.73 | | | 2,843.89 | | | 141,569 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 30-L3 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 26,010.00 | 30.00 | 3.33 | 866.13 | 9.94 | 0.6687 | 17,392 |
| 1998 | 4,315.00 | 30.00 | 3.33 | 143.69 | 10.58 | 0.6473 | 2,793 |
| 2006 | 14,000.00 | 30.00 | 3.33 | 466.20 | 15.38 | 0.4873 | 6,823 |
| 2012 | 2,738.00 | 30.00 | 3.33 | 91.18 | 20.66 | 0.3113 | 852 |
| 2020 | 10,041.19 | 30.00 | 3.33 | 334.37 | 28.50 | 0.0500 | 502 |
| | 57,104.19 | | | 1,901.57 | | | 28,362 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 40-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1974 | 1,052.13 | 40.00 | 2.50 | 26.30 | 9.70 | 0.7575 | 797 |
| 1996 | 451,422.00 | 40.00 | 2.50 | 11,285.55 | 20.99 | 0.4753 | 214,538 |
| 2006 | 236,966.95 | 40.00 | 2.50 | 5,924.17 | 27.91 | 0.3023 | 71,623 |
| 2020 | 42,173.00 | 40.00 | 2.50 | 1,054.32 | 38.77 | 0.0308 | 1,297 |
| | 731,614.08 | | | 18,290.34 | | | 288,255 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 45-S0.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1964 | 84,623.16 | 45.00 | 2.22 | 1,878.63 | 11.24 | 0.7502 | 63,486 |
| 1974 | 327,096.94 | 45.00 | 2.22 | 7,261.55 | 15.13 | 0.6638 | 217,120 |
| 1996 | 1,525,782.76 | 45.00 | 2.22 | 33,872.38 | 25.75 | 0.4278 | 652,699 |
| 2020 | 13,292.63 | 45.00 | 2.22 | 295.10 | 43.54 | 0.0324 | 431 |
| | 1,950,795.49 | | | 43,307.66 | | | 933,736 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 381.40 PLANT SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 60-R3 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 465.84 | 60.00 | 1.67 | 7.78 | 4.16 | 0.9307 | 434 |
| 1974 | 160,611.05 | 60.00 | 1.67 | 2,682.20 | 19.18 | 0.6803 | 109,269 |
| 1996 | 537,641.12 | 60.00 | 1.67 | 8,978.61 | 36.09 | 0.3985 | 214,250 |
| | 698,718.01 | | | 11,668.59 | | | 323,953 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 70,212.80 | 70.00 | 1.43 | 1,004.04 | 11.32 | 0.8383 | 58,859 |
| | 70,212.80 | | | 1,004.04 | | | 58,859 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 2,390.76 | 20.00 | 5.00 | 119.54 | 18.50 | 0.0750 | 179 |
| | 2,390.76 | | | 119.54 | | | 179 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 5-SQUARE<br>NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 6,215.98 | 5.00 | 20.00 | 1,243.20 | 3.50 | 0.3000 | 1,865 |
| 2021 | 2,000.00 | 5.00 | 20.00 | 400.00 | 4.50 | 0.1000 | 200 |
| | 8,215.98 | | | 1,643.20 | | | 2,065 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 20.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 11-S1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1992 | 29,103.64 | 11.00 | | | | 1.0000 | 29,104 |
| 2002 | 3,217.22 | 11.00 | 9.09 | 292.45 | 0.65 | 0.9409 | 3,027 |
| 2006 | 4,848.45 | 11.00 | 9.09 | 440.72 | 1.68 | 0.8473 | 4,108 |
| 2014 | 25,656.00 | 11.00 | 9.09 | 2,332.13 | 4.84 | 0.5600 | 14,367 |
| 2020 | 42,707.00 | 11.00 | 9.09 | 3,882.07 | 9.52 | 0.1346 | 5,746 |
| | 105,532.31 | | | 6,947.37 | | | 56,352 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.58

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 392.70 STORES EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 7,968.37 | 20.00 | | | | 1.0000 | 7,968 |
| | 7,968.37 | | | | | | 7,968 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 393.70 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE<br>NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 104,839.60 | 20.00 | 5.00 | 5,241.98 | 18.50 | 0.0750 | 7,863 |
| | 104,839.60 | | | 5,241.98 | | | 7,863 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 394.70 LABORATORY EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 54,138.01 | 15.00 | | | | 1.0000 | 54,138 |
| 2021 | 6,581.00 | 15.00 | 6.67 | 438.95 | 14.50 | 0.0333 | 219 |
| | 60,719.01 | | | 438.95 | | | 54,357 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.72

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 15-L2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1998 | 49,374.85 | 15.00 | 6.67 | 3,293.30 | 3.30 | 0.7800 | 38,512 |
| 1999 | 20,213.66 | 15.00 | 6.67 | 1,348.25 | 3.52 | 0.7653 | 15,470 |
| | 69,588.51 | | | 4,641.55 | | | 53,982 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 8,600.00 | 15.00 | 6.67 | 573.62 | 13.50 | 0.1000 | 860 |
| 2021 | 1,000.00 | 15.00 | 6.67 | 66.70 | 14.50 | 0.0333 | 33 |
| | 9,600.00 | | | 640.32 | | | 893 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2018 | 600.00 | 15.00 | 6.67 | 40.02 | 11.50 | 0.2333 | 140 |
| 2020 | 1,400.00 | 15.00 | 6.67 | 93.38 | 13.50 | 0.1000 | 140 |
| | 2,000.00 | | | 133.40 | | | 280 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF REPLACEMENT COST AND ACCRUED DEPRECIATION**
**OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | REPLACEMENT COST | ACCRUED DEPRECIATION |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | 109.00 | |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | 1.00 | |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 47,637.50 | |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 251,761.82 | 57,905 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 18,744,546.41 | 8,800,274 |
| 355.00 | POWER GENERATION EQUIPMENT | 315,296.69 | 211,222 |
| 360.10 | FORCE MAINS | 462,504.10 | 94,485 |
| 361.10 | GRAVITY MAINS | 32,233,125.13 | 19,370,184 |
| 361.12 | MANHOLES | 3,031,543.28 | 2,416,837 |
| 363.20 | SERVICES TO CUSTOMERS | 9,512,065.35 | 7,907,665 |
| 364.30 | METERS | 186,921.73 | 103,616 |
| 371.30 | PUMPING EQUIPMENT | 2,263,701.35 | 954,164 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 8,454,982.25 | 4,733,183 |
| 381.40 | PLANT SEWERS | 3,019,153.39 | 1,619,666 |
| 382.00 | OUTFALL SEWERS | 3,289,971.20 | 2,757,950 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 2,686.27 | 201 |
| 390.70 | COMPUTERS | 8,400.42 | 2,113 |
| 391.70 | TRANSPORTATION EQUIPMENT | 118,574.34 | 66,441 |
| 392.70 | STORES EQUIPMENT | 15,972.20 | 15,972 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 111,247.88 | 8,344 |
| 394.70 | LABORATORY EQUIPMENT | 84,022.28 | 77,615 |
| 395.70 | POWER OPERATED EQUIPMENT | 120,716.15 | 93,651 |
| 396.00 | COMMUNICATION EQUIPMENT | 9,702.28 | 903 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2,214.57 | 312 |
| | **TOTAL COMPANY** | **82,286,856.59** | **49,292,703** |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF ANALYSIS OF REPLACEMENT COST**
**OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | REPLACEMENT COST |
|---|---|---|
| (1) | (2) | (3) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | 109.00 |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | 1.00 |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 47,637.50 |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 251,761.82 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 18,744,546.41 |
| 355.00 | POWER GENERATION EQUIPMENT | 315,296.69 |
| 360.10 | FORCE MAINS | 462,504.10 |
| 361.10 | GRAVITY MAINS | 32,233,125.13 |
| 361.12 | MANHOLES | 3,031,543.28 |
| 363.20 | SERVICES TO CUSTOMERS | 9,512,065.35 |
| 364.30 | METERS | 186,921.73 |
| 371.30 | PUMPING EQUIPMENT | 2,263,701.35 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 8,454,982.25 |
| 381.40 | PLANT SEWERS | 3,019,153.39 |
| 382.00 | OUTFALL SEWERS | 3,289,971.20 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 2,686.27 |
| 390.70 | COMPUTERS | 8,400.42 |
| 391.70 | TRANSPORTATION EQUIPMENT | 118,574.34 |
| 392.70 | STORES EQUIPMENT | 15,972.20 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 111,247.88 |
| 394.70 | LABORATORY EQUIPMENT | 84,022.28 |
| 395.70 | POWER OPERATED EQUIPMENT | 120,716.15 |
| 396.00 | COMMUNICATION EQUIPMENT | 9,702.28 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2,214.57 |
| | **TOTAL COMPANY** | **82,286,856.59** |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO REPLACEMENT COST AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | SURVIVOR CURVE | REPLACEMENT COST | ACCRUED DEPRECIATION |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | NONDEPRECIABLE | 109.00 | |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | NONDEPRECIABLE | 1.00 | |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | NONDEPRECIABLE | 47,637.50 | |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 65-R3 | 251,761.82 | 57,905 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 70-R2.5 | 18,744,546.41 | 8,800,274 |
| 355.00 | POWER GENERATION EQUIPMENT | 30-S2 | 315,296.69 | 211,222 |
| 360.10 | FORCE MAINS | 70-R2.5 | 462,504.10 | 94,485 |
| 361.10 | GRAVITY MAINS | 75-R1.5 | 32,233,125.13 | 19,370,184 |
| 361.12 | MANHOLES | 65-R1.5 | 3,031,543.28 | 2,416,837 |
| 363.20 | SERVICES TO CUSTOMERS | 60-R1.5 | 9,512,065.35 | 7,907,665 |
| 364.30 | METERS | 30-L3 | 186,921.73 | 103,616 |
| 371.30 | PUMPING EQUIPMENT | 40-R1.5 | 2,263,701.35 | 954,164 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 45-S0.5 | 8,454,982.25 | 4,733,183 |
| 381.40 | PLANT SEWERS | 60-R3 | 3,019,153.39 | 1,619,666 |
| 382.00 | OUTFALL SEWERS | 70-R2.5 | 3,289,971.20 | 2,757,950 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 20-SQ | 2,686.27 | 201 |
| 390.70 | COMPUTERS | 5-SQ | 8,400.42 | 2,113 |
| 391.70 | TRANSPORTATION EQUIPMENT | 11-S1.5 | 118,574.34 | 66,441 |
| 392.70 | STORES EQUIPMENT | 20-SQ | 15,972.20 | 15,972 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 20-SQ | 111,247.88 | 8,344 |
| 394.70 | LABORATORY EQUIPMENT | 15-SQ | 84,022.28 | 77,615 |
| 395.70 | POWER OPERATED EQUIPMENT | 15-L2.5 | 120,716.15 | 93,651 |
| 396.00 | COMMUNICATION EQUIPMENT | 15-SQ | 9,702.28 | 903 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 15-SQ | 2,214.57 | 312 |
| | **TOTAL COMPANY** | | **82,286,856.59** | **49,292,703** |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF REPLACEMENT COST NEW AND REPLACEMENT COST NEW LESS DEPRECIATION OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| DESCRIPTION | | REPLACEMENT COST |
|---|---|---|
| (1) | | (2) |
| REPLACEMENT COST NEW | $ | 82,286,857 |
| LESS: ACCRUED DEPRECIATION | | 49,292,703 |
| REPLACEMENT COST NEW LESS DEPRECIATION | $ | 32,994,154 |
| **CONCLUSION: RCNLD** | **$** | **32,994,154** |

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

| ACCOUNT | DESCRIPTION | VINTAGE YEAR | BASE COST | TRANSITION FACTOR | FACTOR REFERENCE | REPLACEMENT COST |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 353.20 | LAND AND LAND RIGHTS - COLLECTION | 1937 | 109.00 | 1.00000 | (1) | 109.00 |
| 353.30 | LAND AND LAND RIGHTS - PUMPING | 1982 | 1.00 | 1.00000 | (1) | 1.00 |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 1964 | 10,800.00 | 1.00000 | (1) | 10,800.00 |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 1973 | 26,100.00 | 1.00000 | (1) | 26,100.00 |
| 353.40 | LAND AND LAND RIGHTS - TREATMENT | 1996 | 10,737.50 | 1.00000 | (1) | 10,737.50 |
| 354.30 | STRUCTURES AND IMPROVEMENTS - PUMPING | 2006 | 133,168.00 | 1.89056 | (2) | 251,761.82 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 1937 | 11,464.36 | 48.94444 | (2) | 561,116.73 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 1964 | 106,465.92 | 15.73214 | (2) | 1,674,937.06 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 1974 | 1,071,672.11 | 7.52991 | (2) | 8,069,599.39 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 1996 | 2,738,371.24 | 2.74455 | (2) | 7,515,592.09 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 2010 | 523,430.68 | 1.57321 | (2) | 823,468.62 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 2020 | 69,810.20 | 1.19864 | (2) | 83,677.26 |
| 354.40 | STRUCTURES AND IMPROVEMENTS - TREATMENT | 2021 | 15,000.00 | 1.07702 | (2) | 16,155.26 |
| 355.00 | POWER GENERATION EQUIPMENT | 1996 | 87,502.00 | 3.54000 | (3) | 309,757.08 |
| 355.00 | POWER GENERATION EQUIPMENT | 2020 | 4,972.78 | 1.11399 | (3) | 5,539.61 |
| 360.10 | FORCE MAINS | 2006 | 234,542.22 | 1.97194 | (4) | 462,504.10 |
| 361.10 | GRAVITY MAINS | 1937 | 489,859.08 | 46.85714 | (4) | 22,953,396.89 |
| 361.10 | GRAVITY MAINS | 1990 | 268,174.99 | 3.26910 | (4) | 876,691.66 |
| 361.10 | GRAVITY MAINS | 1991 | 377,447.37 | 3.20521 | (4) | 1,209,798.74 |
| 361.10 | GRAVITY MAINS | 1993 | 107,872.58 | 3.06542 | (4) | 330,674.82 |
| 361.10 | GRAVITY MAINS | 1996 | 1,932,736.25 | 2.90265 | (4) | 5,610,066.28 |
| 361.10 | GRAVITY MAINS | 1998 | 286,361.78 | 2.77183 | (4) | 793,746.45 |
| 361.10 | GRAVITY MAINS | 2008 | 240,153.18 | 1.67347 | (4) | 401,889.00 |
| 361.10 | GRAVITY MAINS | 2011 | 37,445.24 | 1.51852 | (4) | 56,861.29 |
| 361.12 | MANHOLES | 1937 | 64,697.57 | 46.85714 | (4) | 3,031,543.28 |
| 363.20 | SERVICES TO CUSTOMERS | 1937 | 170,292.73 | 55.85714 | (5) | 9,512,065.35 |
| 364.30 | METERS | 1996 | 26,010.00 | 3.87923 | (6) | 100,898.70 |
| 364.30 | METERS | 1998 | 4,315.00 | 4.07614 | (6) | 17,588.55 |
| 364.30 | METERS | 2006 | 14,000.00 | 3.23790 | (6) | 45,330.65 |
| 364.30 | METERS | 2012 | 2,738.00 | 2.11873 | (6) | 5,801.09 |
| 364.30 | METERS | 2020 | 10,041.19 | 1.72318 | (6) | 17,302.74 |
| 371.30 | PUMPING EQUIPMENT | 1974 | 1,052.13 | 13.05738 | (3) | 13,738.06 |
| 371.30 | PUMPING EQUIPMENT | 1996 | 451,422.00 | 3.54000 | (3) | 1,598,033.88 |
| 371.30 | PUMPING EQUIPMENT | 2006 | 236,966.95 | 2.55288 | (3) | 604,949.28 |
| 371.30 | PUMPING EQUIPMENT | 2020 | 42,173.00 | 1.11399 | (3) | 46,980.13 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 1964 | 84,623.16 | 16.86667 | (7) | 1,427,310.63 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 1974 | 327,096.94 | 8.57627 | (7) | 2,805,272.06 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 1996 | 1,525,782.76 | 2.75749 | (7) | 4,207,335.57 |
| 380.00 | TREATMENT AND DISPOSAL EQUIPMENT | 2020 | 13,292.63 | 1.13326 | (7) | 15,063.99 |
| 381.40 | PLANT SEWERS | 1937 | 465.84 | 46.85714 | (4) | 21,827.93 |
| 381.40 | PLANT SEWERS | 1974 | 160,611.05 | 8.94545 | (4) | 1,436,738.85 |
| 381.40 | PLANT SEWERS | 1996 | 537,641.12 | 2.90265 | (4) | 1,560,586.61 |
| 382.00 | OUTFALL SEWERS | 1937 | 70,212.80 | 46.85714 | (4) | 3,289,971.20 |
| 390.00 | OFFICE FURNITURE AND EQUIPMENT | 2020 | 2,390.76 | 1.12360 | (8) | 2,686.27 |
| 390.70 | COMPUTERS | 2020 | 6,215.98 | 1.02409 | (9) | 6,365.75 |
| 390.70 | COMPUTERS | 2021 | 2,000.00 | 1.01734 | (9) | 2,034.67 |
| 391.70 | TRANSPORTATION EQUIPMENT | 1992 | 29,103.64 | 1.23808 | (10) | 36,032.76 |
| 391.70 | TRANSPORTATION EQUIPMENT | 2002 | 3,217.22 | 1.18500 | (10) | 3,812.41 |
| 391.70 | TRANSPORTATION EQUIPMENT | 2006 | 4,848.45 | 1.22192 | (10) | 5,924.40 |
| 391.70 | TRANSPORTATION EQUIPMENT | 2014 | 25,656.00 | 1.09986 | (10) | 28,218.13 |
| 391.70 | TRANSPORTATION EQUIPMENT | 2020 | 42,707.00 | 1.04401 | (10) | 44,586.64 |
| 392.70 | STORES EQUIPMENT | 1996 | 7,968.37 | 2.00445 | (11) | 15,972.20 |
| 393.70 | TOOLS, SHOP AND GARAGE EQUIPMENT | 2020 | 104,839.60 | 1.06112 | (12) | 111,247.88 |
| 394.70 | LABORATORY EQUIPMENT | 1996 | 54,138.01 | 1.42957 | (13) | 77,394.30 |
| 394.70 | LABORATORY EQUIPMENT | 2021 | 6,581.00 | 1.00714 | (13) | 6,627.98 |

**CITY OF BEAVER FALLS**
**CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS**

**SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR**
**OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021**

| ACCOUNT | DESCRIPTION | VINTAGE YEAR | BASE COST | TRANSITION FACTOR | FACTOR REFERENCE | REPLACEMENT COST |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 395.70 | POWER OPERATED EQUIPMENT | 1998 | 49,374.85 | 1.74378 | (14) | 86,098.97 |
| 395.70 | POWER OPERATED EQUIPMENT | 1999 | 20,213.66 | 1.71256 | (14) | 34,617.18 |
| 396.00 | COMMUNICATION EQUIPMENT | 2020 | 8,600.00 | 1.01097 | (15) | 8,694.30 |
| 396.00 | COMMUNICATION EQUIPMENT | 2021 | 1,000.00 | 1.00798 | (15) | 1,007.98 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2018 | 600.00 | 1.13646 | (16) | 681.88 |
| 397.70 | MISCELLANEOUS EQUIPMENT | 2020 | 1,400.00 | 1.09478 | (16) | 1,532.69 |
| | **TOTAL COMPANY** | | **12,898,486.89** | | | **82,286,856.59** |

NOTES : (1) Not trended
(2) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 8
(3) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 9
(4) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 34
(5) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 39
(6) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 40
(7) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 16
(8) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted
(9) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted
(10) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted
(11) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted
(12) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted
(13) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted
(14) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted
(15) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted
(16) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.20 LAND AND LAND RIGHTS - COLLECTION

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1937 | 109.00 | | | | | | |
| | 109.00 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.30 LAND AND LAND RIGHTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1982 | 1.00 | | | | | | |
| | 1.00 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.40 LAND AND LAND RIGHTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NONDEPRECIABLE | | | | | | | |
| 1964 | 10,800.00 | | | | | | |
| 1973 | 26,100.00 | | | | | | |
| 1996 | 10,737.50 | | | | | | |
| | 47,637.50 | | | | | | |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 65-R3 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2006 | 251,761.82 | 65.00 | 1.54 | 3,877.13 | 50.05 | 0.2300 | 57,905 |
| | 251,761.82 | | | 3,877.13 | | | 57,905 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 561,116.73 | 70.00 | 1.43 | 8,023.97 | 11.32 | 0.8383 | 470,379 |
| 1964 | 1,674,937.06 | 70.00 | 1.43 | 23,951.60 | 23.41 | 0.6656 | 1,114,788 |
| 1974 | 8,069,599.39 | 70.00 | 1.43 | 115,395.27 | 29.94 | 0.5723 | 4,618,151 |
| 1996 | 7,515,592.09 | 70.00 | 1.43 | 107,472.97 | 47.00 | 0.3286 | 2,469,398 |
| 2010 | 823,468.62 | 70.00 | 1.43 | 11,775.60 | 59.31 | 0.1527 | 125,752 |
| 2020 | 83,677.26 | 70.00 | 1.43 | 1,196.58 | 68.58 | 0.0203 | 1,698 |
| 2021 | 16,155.26 | 70.00 | 1.43 | 231.02 | 69.53 | 0.0067 | 108 |
| | 18,744,546.41 | | | 268,047.01 | | | 8,800,274 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 30-S2 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 309,757.08 | 30.00 | 3.33 | 10,314.91 | 9.57 | 0.6810 | 210,945 |
| 2020 | 5,539.61 | 30.00 | 3.33 | 184.47 | 28.50 | 0.0500 | 277 |
| | 315,296.69 | | | 10,499.38 | | | 211,222 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2006 | 462,504.10 | 70.00 | 1.43 | 6,613.81 | 55.70 | 0.2043 | 94,485 |
| | 462,504.10 | | | 6,613.81 | | | 94,485 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 75-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 22,953,396.89 | 75.00 | 1.33 | 305,280.18 | 19.96 | 0.7339 | 16,844,809 |
| 1990 | 876,691.66 | 75.00 | 1.33 | 11,660.00 | 50.56 | 0.3259 | 285,688 |
| 1991 | 1,209,798.74 | 75.00 | 1.33 | 16,090.32 | 51.29 | 0.3161 | 382,454 |
| 1993 | 330,674.82 | 75.00 | 1.33 | 4,397.98 | 52.75 | 0.2967 | 98,101 |
| 1996 | 5,610,066.28 | 75.00 | 1.33 | 74,613.88 | 54.97 | 0.2671 | 1,498,280 |
| 1998 | 793,746.45 | 75.00 | 1.33 | 10,556.83 | 56.46 | 0.2472 | 196,214 |
| 2008 | 401,889.00 | 75.00 | 1.33 | 5,345.12 | 64.14 | 0.1448 | 58,194 |
| 2011 | 56,861.29 | 75.00 | 1.33 | 756.26 | 66.50 | 0.1133 | 6,444 |
| | 32,233,125.13 | | | 428,700.57 | | | 19,370,184 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR (1) | ORIGINAL COST (2) | AVG. LIFE (3) | --ANNUAL ACCRUAL-- RATE (4) | AMOUNT (5) | EXP. (6) | --ACCRUED DEPREC.-- FACTOR (7) | AMOUNT (8) |
|---|---|---|---|---|---|---|---|
| SURVIVOR CURVE.. IOWA 65-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 3,031,543.28 | 65.00 | 1.54 | 46,685.77 | 13.18 | 0.7972 | 2,416,837 |
| | 3,031,543.28 | | | 46,685.77 | | | 2,416,837 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR (1) | ORIGINAL COST (2) | AVG. LIFE (3) | --ANNUAL ACCRUAL-- RATE (4) | AMOUNT (5) | EXP. (6) | --ACCRUED DEPREC.-- FACTOR (7) | AMOUNT (8) |
|---|---|---|---|---|---|---|---|
| SURVIVOR CURVE.. IOWA 60-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 9,512,065.35 | 60.00 | 1.67 | 158,851.49 | 10.12 | 0.8313 | 7,907,665 |
| | 9,512,065.35 | | | 158,851.49 | | | 7,907,665 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 30-L3 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 100,898.70 | 30.00 | 3.33 | 3,359.93 | 9.94 | 0.6687 | 67,468 |
| 1998 | 17,588.55 | 30.00 | 3.33 | 585.70 | 10.58 | 0.6473 | 11,386 |
| 2006 | 45,330.65 | 30.00 | 3.33 | 1,509.51 | 15.38 | 0.4873 | 22,091 |
| 2012 | 5,801.09 | 30.00 | 3.33 | 193.18 | 20.66 | 0.3113 | 1,806 |
| 2020 | 17,302.74 | 30.00 | 3.33 | 576.18 | 28.50 | 0.0500 | 865 |
| | 186,921.73 | | | 6,224.50 | | | 103,616 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 40-R1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1974 | 13,738.06 | 40.00 | 2.50 | 343.45 | 9.70 | 0.7575 | 10,407 |
| 1996 | 1,598,033.88 | 40.00 | 2.50 | 39,950.85 | 20.99 | 0.4753 | 759,466 |
| 2006 | 604,949.28 | 40.00 | 2.50 | 15,123.73 | 27.91 | 0.3023 | 182,846 |
| 2020 | 46,980.13 | 40.00 | 2.50 | 1,174.50 | 38.77 | 0.0308 | 1,445 |
| | 2,263,701.35 | | | 56,592.53 | | | 954,164 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 45-S0.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1964 | 1,427,310.63 | 45.00 | 2.22 | 31,686.30 | 11.24 | 0.7502 | 1,070,797 |
| 1974 | 2,805,272.06 | 45.00 | 2.22 | 62,277.04 | 15.13 | 0.6638 | 1,862,083 |
| 1996 | 4,207,335.57 | 45.00 | 2.22 | 93,402.85 | 25.75 | 0.4278 | 1,799,814 |
| 2020 | 15,063.99 | 45.00 | 2.22 | 334.42 | 43.54 | 0.0324 | 489 |
| | 8,454,982.25 | | | 187,700.61 | | | 4,733,183 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 381.40 PLANT SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 60-R3 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 21,827.93 | 60.00 | 1.67 | 364.53 | 4.16 | 0.9307 | 20,315 |
| 1974 | 1,436,738.85 | 60.00 | 1.67 | 23,993.54 | 19.18 | 0.6803 | 977,457 |
| 1996 | 1,560,586.61 | 60.00 | 1.67 | 26,061.80 | 36.09 | 0.3985 | 621,894 |
| | 3,019,153.39 | | | 50,419.87 | | | 1,619,666 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR (1) | ORIGINAL COST (2) | AVG. LIFE (3) | --ANNUAL ACCRUAL-- RATE (4) | AMOUNT (5) | EXP. (6) | --ACCRUED DEPREC.-- FACTOR (7) | AMOUNT (8) |
|---|---|---|---|---|---|---|---|
| SURVIVOR CURVE.. IOWA 70-R2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1937 | 3,289,971.20 | 70.00 | 1.43 | 47,046.59 | 11.32 | 0.8383 | 2,757,950 |
| | 3,289,971.20 | | | 47,046.59 | | | 2,757,950 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 2,686.27 | 20.00 | 5.00 | 134.31 | 18.50 | 0.0750 | 201 |
| | 2,686.27 | | | 134.31 | | | 201 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 5-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 6,365.75 | 5.00 | 20.00 | 1,273.15 | 3.50 | 0.3000 | 1,910 |
| 2021 | 2,034.67 | 5.00 | 20.00 | 406.93 | 4.50 | 0.1000 | 203 |
| | 8,400.42 | | | 1,680.08 | | | 2,113 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 20.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 11-S1.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1992 | 36,032.76 | 11.00 | | | | 1.0000 | 36,033 |
| 2002 | 3,812.41 | 11.00 | 9.09 | 346.55 | 0.65 | 0.9409 | 3,587 |
| 2006 | 5,924.40 | 11.00 | 9.09 | 538.53 | 1.68 | 0.8473 | 5,020 |
| 2014 | 28,218.13 | 11.00 | 9.09 | 2,565.03 | 4.84 | 0.5600 | 15,802 |
| 2020 | 44,586.64 | 11.00 | 9.09 | 4,052.93 | 9.52 | 0.1346 | 5,999 |
| | 118,574.34 | | | 7,503.04 | | | 66,441 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 392.70 STORES EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 15,972.20 | 20.00 | | | | 1.0000 | 15,972 |
| | 15,972.20 | | | | | | 15,972 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 393.70 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 20-SQUARE<br>NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 111,247.88 | 20.00 | 5.00 | 5,562.39 | 18.50 | 0.0750 | 8,344 |
| | 111,247.88 | | | 5,562.39 | | | 8,344 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 394.70 LABORATORY EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1996 | 77,394.30 | 15.00 | | | | 1.0000 | 77,394 |
| 2021 | 6,627.98 | 15.00 | 6.67 | 442.09 | 14.50 | 0.0333 | 221 |
| | 84,022.28 | | | 442.09 | | | 77,615 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.53

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. IOWA 15-L2.5 | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 1998 | 86,098.97 | 15.00 | 6.67 | 5,742.80 | 3.30 | 0.7800 | 67,157 |
| 1999 | 34,617.18 | 15.00 | 6.67 | 2,308.97 | 3.52 | 0.7653 | 26,494 |
| | 120,716.15 | | | 8,051.77 | | | 93,651 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2020 | 8,694.30 | 15.00 | 6.67 | 579.91 | 13.50 | 0.1000 | 869 |
| 2021 | 1,007.98 | 15.00 | 6.67 | 67.23 | 14.50 | 0.0333 | 34 |
| | 9,702.28 | | | 647.14 | | | 903 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

| YEAR | ORIGINAL COST | AVG. LIFE | --ANNUAL ACCRUAL-- RATE | AMOUNT | EXP. | --ACCRUED DEPREC.-- FACTOR | AMOUNT |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| SURVIVOR CURVE.. 15-SQUARE | | | | | | | |
| NET SALVAGE PERCENT.. 0 | | | | | | | |
| 2018 | 681.88 | 15.00 | 6.67 | 45.48 | 11.50 | 0.2333 | 159 |
| 2020 | 1,532.69 | 15.00 | 6.67 | 102.23 | 13.50 | 0.1000 | 153 |
| | 2,214.57 | | | 147.71 | | | 312 |

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

| | | Actual | | | Estimated |
|---|---|---|---|---|---|
| | | | | | Year 0 |
| | | 2018 | 2019 | 2020 | 2021 |
| 1. | **OPERATING REVENUES (1)** | | | | |
| 2. | Charges for services | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 |
| 3. | Other operating revenue | 1,577 | 1,337 | 2,249 | 2,249 |
| 4. | Tap Fees | 0 | 0 | 0 | 0 |
| 5. | **Total Operating Revenues** | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 |
| 6. | **Rate Increase** | | | | |
| 7. | **OPERATING EXPENSES (1)** | | | | |
| 8. | Operating & Maintenance Expenses | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 |
| 9. | **Operating Expenses Before Depreciation** | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 |
| 10. | Depreciation (2) | 246,236 | 243,460 | 243,460 | 240,816 |
| 11. | **Total Operating Expenses** | 2,470,335 | 2,863,711 | 2,874,154 | 2,871,510 |
| 12. | **Operating Income** | 585,660 | 284,990 | 151,261 | 153,905 |
| 13. | Revenues (3) | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 |
| 14. | EBITDA (4) | 831,896 | 528,450 | 394,721 | 394,721 |
| 15. | EBIT (5) | 585,660 | 284,990 | 151,261 | 153,905 |
| 16. | EBIT | 585,660 | 284,990 | 151,261 | 153,905 |
| 17. | (-) Income Taxes | 0 | 0 | 0 | 0 |
| 18. | Debt Free Net Income | 585,660 | 284,990 | 151,261 | 153,905 |
| 19. | (+) Depreciation & Amortization | 246,236 | 243,460 | 243,460 | 240,816 |
| 20. | (-) Capital Expenditures (6) | 5,945 | 2,811 | 87,357 | 222,858 |
| 21. | (-) Changes in Working Capital (7) | 6,418 | 6,612 | 6,353 | 6,353 |
| 22. | Debt Free Net Cash Flow | $819,533 | $519,027 | $301,011 | $165,510 |

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

| | | 2021 | Pro Forma 2021 (11) |
|---|---|---|---|
| | | 2.85% Capitalization Rate Model (No Growth) | 2.85% Capitalization Rate Model (No Growth) |
| 23. | Debt Free Net Cash Flow (10) | $165,510 | $405,510 |
| 24. | Capitalization Factor: (8) | 2.85% | 2.85% |
| 25. | Indicated Value (line 23 ÷ line 24) | $5,807,355 | $14,228,408 |
| | | 2.75% Capitalization Rate Model (0.10% Growth) | 2.75% Capitalization Rate Model (0.10% Growth) |
| 26. | Debt Free Net Cash Flow (10) | $165,510 | $405,510 |
| 27. | Capitalization Factor: (9) | 2.75% | 2.75% |
| 28. | Indicated Value (line 26 ÷ line 27) | $6,018,532 | $14,745,805 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 5.

(4) Line 12 + line 10.

(5) Line 12.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.

(9) Discount rate is the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.

(10) Final year shown, line 22.

(11) Debt Free Net Cash Flow adjusted for the removal of line rentals if system is not sold.

**Terms:**

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Actual | | | Estimated Year 0 | Estimated Year 1 | Estimated Year 2 |
|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 |
| 3. Other operating revenue | 1,577 | 1,337 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. **Total Operating Revenues** | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 3,025,879 |
| 7. **Rate Increase** | | | | | | |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 | 2,709,615 | 2,790,903 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | 0 | 0 | 0 | (139,031) | (143,201) | (147,497) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | (240,000) | (247,200) | (254,616) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,224,099 | 2,620,251 | 2,630,694 | 2,251,664 | 2,319,213 | 2,388,790 |
| 16. Depreciation (2) | 246,236 | 243,460 | 243,460 | 240,816 | 227,764 | 231,047 |
| 17. **Total Operating Expenses** | 2,470,335 | 2,863,711 | 2,874,154 | 2,492,479 | 2,546,978 | 2,619,837 |
| 18. **Operating Income** | 585,660 | 284,990 | 151,261 | 532,936 | 478,437 | 406,042 |
| 19. Revenues (3) | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 3,025,879 |
| 20. EBITDA (4) | 831,896 | 528,450 | 394,721 | 773,752 | 706,202 | 637,089 |
| 21. EBIT (5) | 585,660 | 284,990 | 151,261 | 532,936 | 478,437 | 406,042 |
| 22. EBIT | 585,660 | 284,990 | 151,261 | 532,936 | 478,437 | 406,042 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 585,660 | 284,990 | 151,261 | 532,936 | 478,437 | 406,042 |
| 25. (+) Depreciation & Amortization | 246,236 | 243,460 | 243,460 | 240,816 | 227,764 | 231,047 |
| 26. (-) Capital Expenditures (6) | 5,945 | 2,811 | 87,357 | 222,858 | 221,893 | 225,090 |
| 27. (-) Changes in Working Capital (7) | 6,418 | 6,612 | 6,353 | 6,353 | 6,353 | 6,354 |
| 28. Debt Free Net Cash Flow | $819,533 | $519,027 | $301,011 | $544,540 | $477,955 | $405,645 |
| 29. PV Time Period (mid-year) | | | | (0.5) | 0.5 | 1.5 |
| | | | | | 1 | 2 |
| 30. Present Value Factor: 2.85% (8) | | | | | 0.9860 | 0.9587 |
| 31. Present Value Debt Free Net Cash Flow | | | | | $471,264 | $388,892 |
| | | | | | 1 | 2 |
| 32. Present Value Factor: 2.75% (9) | | | | | 0.9865 | 0.9601 |
| 33. Present Value Debt Free Net Cash Flow | | | | | $471,503 | $389,460 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated | Estimated | Estimated | Estimated | Estimated | Estimated |
|---|---|---|---|---|---|---|
| | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 |
| | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,024,557 | 3,101,598 | 3,107,047 | 3,116,058 | 3,343,851 | 3,353,548 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 75,614 | 0 | 0 | 218,124 | 0 | 0 |
| 6. **Total Operating Revenues** | 3,102,420 | 3,103,847 | 3,109,296 | 3,336,431 | 3,346,100 | 3,355,797 |
| 7. **Rate Increase** | **3%** | | | **7%** | | |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,874,630 | 2,960,869 | 3,049,695 | 3,141,186 | 3,235,422 | 3,332,484 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (151,922) | (156,480) | (161,174) | (166,010) | (170,990) | (176,120) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (262,254) | (270,122) | (278,226) | (286,573) | (295,170) | (304,025) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,460,454 | 2,534,267 | 2,610,295 | 2,688,604 | 2,769,262 | 2,852,340 |
| 16. Depreciation (2) | 234,376 | 237,754 | 241,180 | 244,656 | 248,181 | 251,758 |
| 17. **Total Operating Expenses** | 2,694,830 | 2,772,022 | 2,851,475 | 2,933,260 | 3,017,443 | 3,104,098 |
| 18. **Operating Income** | 407,590 | 331,825 | 257,821 | 403,171 | 328,657 | 251,699 |
| 19. Revenues (3) | 3,102,420 | 3,103,847 | 3,109,296 | 3,336,431 | 3,346,100 | 3,355,797 |
| 20. EBITDA (4) | 641,966 | 569,580 | 499,001 | 647,827 | 576,838 | 503,457 |
| 21. EBIT (5) | 407,590 | 331,825 | 257,821 | 403,171 | 328,657 | 251,699 |
| 22. EBIT | 407,590 | 331,825 | 257,821 | 403,171 | 328,657 | 251,699 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 407,590 | 331,825 | 257,821 | 403,171 | 328,657 | 251,699 |
| 25. (+) Depreciation & Amortization | 234,376 | 237,754 | 241,180 | 244,656 | 248,181 | 251,758 |
| 26. (-) Capital Expenditures (6) | 228,334 | 231,624 | 234,962 | 238,348 | 241,783 | 245,267 |
| 27. (-) Changes in Working Capital (7) | 6,515 | 6,518 | 6,530 | 7,007 | 7,027 | 7,047 |
| 28. Debt Free Net Cash Flow | $407,117 | $331,438 | $257,509 | $402,473 | $328,028 | $251,143 |
| 29. PV Time Period (mid-year) | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 30. Present Value Factor: 2.85% (8) | 0.9322 | 0.9063 | 0.8812 | 0.8568 | 0.8331 | 0.8100 |
| 31. Present Value Debt Free Net Cash Flow | $379,515 | $300,382 | $226,917 | $344,838 | $273,280 | $203,426 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 32. Present Value Factor: 2.75% (9) | 0.9344 | 0.9094 | 0.8851 | 0.8614 | 0.8383 | 0.8159 |
| 33. Present Value Debt Free Net Cash Flow | $380,411 | $301,410 | $227,922 | $346,690 | $274,986 | $204,907 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 9 | Estimated Year 10 | Estimated Year 11 | Estimated Year 12 | Estimated Year 13 | Estimated Year 14 |
|---|---|---|---|---|---|---|
| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,363,273 | 3,592,273 | 3,602,691 | 3,613,139 | 3,804,798 | 3,815,832 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 218,613 | 0 | 0 | 180,657 | 0 | 164,081 |
| 6. **Total Operating Revenues** | 3,584,135 | 3,594,522 | 3,604,940 | 3,796,045 | 3,807,047 | 3,982,162 |
| 7. **Rate Increase** | **7%** | | | **5%** | | **4%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 3,432,459 | 3,535,433 | 3,641,496 | 3,750,741 | 3,863,263 | 3,979,161 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (181,403) | (186,845) | (192,451) | (198,224) | (204,171) | (210,296) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (313,146) | (322,540) | (332,216) | (342,183) | (352,448) | (363,022) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,937,910 | 3,026,047 | 3,116,829 | 3,210,334 | 3,306,644 | 3,405,843 |
| 16. Depreciation (2) | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 |
| 17. **Total Operating Expenses** | 3,193,296 | 3,285,114 | 3,379,629 | 3,476,921 | 3,577,073 | 3,680,169 |
| 18. **Operating Income** | 390,839 | 309,408 | 225,311 | 319,124 | 229,974 | 301,993 |
| 19. Revenues (3) | 3,584,135 | 3,594,522 | 3,604,940 | 3,796,045 | 3,807,047 | 3,982,162 |
| 20. EBITDA (4) | 646,225 | 568,475 | 488,111 | 585,711 | 500,403 | 576,319 |
| 21. EBIT (5) | 390,839 | 309,408 | 225,311 | 319,124 | 229,974 | 301,993 |
| 22. EBIT | 390,839 | 309,408 | 225,311 | 319,124 | 229,974 | 301,993 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 390,839 | 309,408 | 225,311 | 319,124 | 229,974 | 301,993 |
| 25. (+) Depreciation & Amortization | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 |
| 26. (-) Capital Expenditures (6) | 248,802 | 252,387 | 256,025 | 259,714 | 263,457 | 267,254 |
| 27. (-) Changes in Working Capital (7) | 7,527 | 7,548 | 7,570 | 7,972 | 7,995 | 8,363 |
| 28. Debt Free Net Cash Flow | $389,896 | $308,539 | $224,516 | $318,026 | $228,951 | $300,702 |
| 29. PV Time Period (mid-year) | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 30. Present Value Factor: 2.85% (8) | 0.7875 | 0.7657 | 0.7445 | 0.7239 | 0.7038 | 0.6843 |
| 31. Present Value Debt Free Net Cash Flow | $307,043 | $236,248 | $167,152 | $230,219 | $161,136 | $205,771 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 32. Present Value Factor: 2.75% (9) | 0.7941 | 0.7728 | 0.7521 | 0.7320 | 0.7124 | 0.6933 |
| 33. Present Value Debt Free Net Cash Flow | $309,617 | $238,439 | $168,858 | $232,795 | $163,105 | $208,477 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 15 | Estimated Year 16 | Estimated Year 17 | Estimated Year 18 | Estimated Year 19 | Estimated Year 20 |
|---|---|---|---|---|---|---|
| | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,991,454 | 4,003,029 | 4,151,136 | 4,163,174 | 4,338,082 | 4,350,662 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 136,103 | 0 | 162,364 | 0 | 160,975 |
| 6. **Total Operating Revenues** | 3,993,703 | 4,141,381 | 4,153,385 | 4,327,787 | 4,340,331 | 4,513,886 |
| 7. **Rate Increase** | | **3%** | | **4%** | | **4%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 4,098,536 | 4,221,492 | 4,348,136 | 4,478,580 | 4,612,938 | 4,751,326 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (216,605) | (223,103) | (229,796) | (236,690) | (243,791) | (251,105) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (373,912) | (385,130) | (396,683) | (408,584) | (420,841) | (433,467) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 3,508,018 | 3,613,259 | 3,721,657 | 3,833,306 | 3,948,306 | 4,066,755 |
| 16. Depreciation (2) | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |
| 17. **Total Operating Expenses** | 3,786,297 | 3,895,548 | 4,008,014 | 4,123,791 | 4,242,976 | 4,365,672 |
| 18. **Operating Income** | 207,406 | 245,833 | 145,371 | 203,996 | 97,355 | 148,214 |
| 19. Revenues (3) | 3,993,703 | 4,141,381 | 4,153,385 | 4,327,787 | 4,340,331 | 4,513,886 |
| 20. EBITDA (4) | 485,685 | 528,122 | 431,728 | 494,481 | 392,025 | 447,131 |
| 21. EBIT (5) | 207,406 | 245,833 | 145,371 | 203,996 | 97,355 | 148,214 |
| 22. EBIT | 207,406 | 245,833 | 145,371 | 203,996 | 97,355 | 148,214 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 207,406 | 245,833 | 145,371 | 203,996 | 97,355 | 148,214 |
| 25. (+) Depreciation & Amortization | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |
| 26. (-) Capital Expenditures (6) | 271,105 | 275,012 | 278,975 | 282,995 | 287,073 | 291,210 |
| 27. (-) Changes in Working Capital (7) | 8,387 | 8,697 | 8,722 | 9,088 | 9,115 | 9,479 |
| 28. Debt Free Net Cash Flow | $206,193 | $244,413 | $144,031 | $202,397 | $95,838 | $146,442 |
| 29. PV Time Period (mid-year) | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 30. Present Value Factor: 2.85% (8) | 0.6653 | 0.6469 | 0.6290 | 0.6115 | 0.5946 | 0.5781 |
| 31. Present Value Debt Free Net Cash Flow | $137,180 | $158,111 | $90,596 | $123,766 | $56,985 | $84,658 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 32. Present Value Factor: 2.75% (9) | 0.6748 | 0.6567 | 0.6391 | 0.6220 | 0.6054 | 0.5892 |
| 33. Present Value Debt Free Net Cash Flow | $139,139 | $160,506 | $92,050 | $125,891 | $58,020 | $86,284 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| DCF With Capitalization of Terminal Value Model @ 2.85% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $146,442 |
| Divided by Capitalization Factor (8) | 2.85% |
| 20th Year Terminal Value | 5,138,319 |
| 20th Year Present Value Factor (11) | 0.5781 |
| Present Value of Terminal Value | 2,970,462 |
| Present Value Debt Free Net Cash Flow for 20 Years | 4,547,379 |
| Indicated Value | $7,517,841 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $148,214 | 30.1 | $4,461,256 |
| Projected EBITDA | 447,131 | 20.3 | 9,076,764 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 7,553,647 |
| 20th Year Present Value Factor (11) | | | 0.5781 |
| Present Value of Terminal Value | | | 4,366,763 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 4,547,379 |
| Indicated Value | | | $8,914,142 |

| DCF With Capitalization of Terminal Value Model @ 2.75% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $146,442 |
| Divided by Capitalization Factor (9) | 2.75% |
| 20th Year Terminal Value | 5,325,167 |
| 20th Year Present Value Factor (12) | 0.5781 |
| Present Value of Terminal Value | 3,078,479 |
| Present Value Debt Free Net Cash Flow for 20 Years | 4,547,379 |
| Indicated Value | $7,625,858 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $148,214 | 30.1 | $4,461,256 |
| Projected EBITDA | 447,131 | 20.3 | 9,076,764 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 7,553,647 |
| 20th Year Present Value Factor (12) | | | 0.5781 |
| Present Value of Terminal Value | | | 4,366,763 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 4,547,379 |
| Indicated Value | | | $8,914,142 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.
(3) Line 6.
(4) Line 18 + line 16.
(5) Line 18.
(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.
(7) Changes in Working Capital - based on water industry 0.21% of revenues.
(8) Discount rate is the the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.
(9) Discount rate is the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.
(10) Final year shown, line 28.
(11) Final year shown, line 30.
(12) Final year shown, line 30.
(13) Developed on Market Multiples EXHIBIT 17.

**Terms:**

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Actual | | | Estimated | Estimated | Estimated |
|---|---|---|---|---|---|---|
| | | | | Year 0 | Year 1 | Year 2 |
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 |
| 3. Other operating revenue | 1,577 | 1,337 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 0 | 0 | 0 | 250,961 |
| 6. **Total Operating Revenues** | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 3,276,840 |
| 7. **Rate Increase** | | | | | | **8%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 | 2,709,615 | 2,790,903 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | 0 | 0 | 0 | (139,031) | (143,201) | (147,497) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | (240,000) | (247,200) | (254,616) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 0 | 0 | 0 | 0 | 28,431 | 28,423 |
| 16. **Operating Expenses Before Depreciation** | 2,224,099 | 2,620,251 | 2,630,694 | 2,251,664 | 2,347,644 | 2,417,213 |
| 17. Depreciation (2) | 246,236 | 243,460 | 243,460 | 240,816 | 227,764 | 231,047 |
| 18. **Total Operating Expenses** | 2,470,335 | 2,863,711 | 2,874,154 | 2,492,479 | 2,575,409 | 2,648,260 |
| 19. **Operating Income** | 585,660 | 284,990 | 151,261 | 532,936 | 450,006 | 628,580 |
| 20. Revenues (3) | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 3,276,840 |
| 21. EBITDA (4) | 831,896 | 528,450 | 394,721 | 773,752 | 677,771 | 859,627 |
| 22. EBIT (5) | 585,660 | 284,990 | 151,261 | 532,936 | 450,006 | 628,580 |
| 23. EBIT | 585,660 | 284,990 | 151,261 | 532,936 | 450,006 | 628,580 |
| 24. (-) Income Taxes | 0 | 0 | 0 | 153,965 | 130,007 | 181,597 |
| 25. Debt Free Net Income | 585,660 | 284,990 | 151,261 | 378,971 | 319,999 | 446,983 |
| 26. (+) Depreciation & Amortization | 246,236 | 243,460 | 243,460 | 240,816 | 227,764 | 231,047 |
| 27. (-) Capital Expenditures (6) | 5,945 | 2,811 | 87,357 | 222,858 | 221,893 | 225,090 |
| 28. (-) Changes in Working Capital (7) | 6,418 | 6,612 | 6,353 | 6,353 | 6,353 | 6,881 |
| 29. Debt Free Net Cash Flow | $819,533 | $519,027 | $301,011 | $390,575 | $319,517 | $446,059 |
| 30. PV Time Period (mid-year) | | | | (0.5) | 0.5 | 1.5 |
| 31. Present Value Factor: 6.59% (8) | | | | | 0.9686 | 0.9087 |
| 32. Present Value Debt Free Net Cash Flow | | | | | $309,484 | $405,334 |
| | | | | | 1 | 2 |
| 33. Present Value Factor: 8.50% (9) | | | | | 0.9600 | 0.8848 |
| 34. Present Value Debt Free Net Cash Flow | | | | | $306,737 | $394,673 |
| | | | | | 1 | 2 |
| 35. Present Value Factor: 6.49% (8) | | | | | 0.9690 | 0.9100 |
| 36. Present Value Debt Free Net Cash Flow | | | | | $309,612 | $405,914 |
| | | | | | 1 | 2 |
| 37. Present Value Factor: 8.40% (9) | | | | | 0.9605 | 0.8860 |
| 38. Present Value Debt Free Net Cash Flow | | | | | $306,896 | $395,208 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 3 | Estimated Year 4 | Estimated Year 5 | Estimated Year 6 | Estimated Year 7 | Estimated Year 8 |
|---|---|---|---|---|---|---|
| | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,275,596 | 3,277,103 | 3,282,861 | 3,522,848 | 3,533,064 | 3,543,310 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 229,800 | 0 | 0 | 212,599 |
| 6. **Total Operating Revenues** | 3,277,845 | 3,279,352 | 3,514,910 | 3,525,097 | 3,535,313 | 3,758,158 |
| 7. **Rate Increase** | | | **7%** | | | **6%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,874,630 | 2,960,869 | 3,049,695 | 3,141,186 | 3,235,422 | 3,332,484 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (151,922) | (156,480) | (161,174) | (166,010) | (170,990) | (176,120) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (262,254) | (270,122) | (278,226) | (286,573) | (295,170) | (304,025) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 29,845 | 29,842 | 29,842 | 31,173 | 31,222 | 31,271 |
| 16. **Operating Expenses Before Depreciation** | 2,490,299 | 2,564,109 | 2,640,137 | 2,719,777 | 2,800,484 | 2,883,611 |
| 17. Depreciation (2) | 234,376 | 237,754 | 241,180 | 244,656 | 248,181 | 251,758 |
| 18. **Total Operating Expenses** | 2,724,675 | 2,801,864 | 2,881,317 | 2,964,433 | 3,048,665 | 3,135,369 |
| 19. **Operating Income** | 553,170 | 477,488 | 633,593 | 560,664 | 486,648 | 622,789 |
| 20. Revenues (3) | 3,277,845 | 3,279,352 | 3,514,910 | 3,525,097 | 3,535,313 | 3,758,158 |
| 21. EBITDA (4) | 787,546 | 715,243 | 874,773 | 805,320 | 734,829 | 874,547 |
| 22. EBIT (5) | 553,170 | 477,488 | 633,593 | 560,664 | 486,648 | 622,789 |
| 23. EBIT | 553,170 | 477,488 | 633,593 | 560,664 | 486,648 | 622,789 |
| 24. (-) Income Taxes | 159,811 | 137,946 | 183,045 | 161,976 | 140,593 | 179,924 |
| 25. Debt Free Net Income | 393,359 | 339,542 | 450,548 | 398,688 | 346,055 | 442,865 |
| 26. (+) Depreciation & Amortization | 234,376 | 237,754 | 241,180 | 244,656 | 248,181 | 251,758 |
| 27. (-) Capital Expenditures (6) | 228,334 | 231,624 | 234,962 | 238,348 | 241,783 | 245,267 |
| 28. (-) Changes in Working Capital (7) | 6,883 | 6,887 | 7,381 | 7,403 | 7,424 | 7,892 |
| 29. Debt Free Net Cash Flow | $392,518 | $338,786 | $449,385 | $397,593 | $345,029 | $441,464 |
| 30. PV Time Period (mid-year) | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 |
| 31. Present Value Factor: 6.59% (8) | 0.8525 | 0.7998 | 0.7504 | 0.7040 | 0.6605 | 0.6196 |
| 32. Present Value Debt Free Net Cash Flow | $334,622 | $270,961 | $337,218 | $279,906 | $227,891 | $273,531 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 33. Present Value Factor: 8.50% (9) | 0.8155 | 0.7516 | 0.6927 | 0.6385 | 0.5884 | 0.5423 |
| 34. Present Value Debt Free Net Cash Flow | $320,098 | $254,632 | $311,289 | $253,863 | $203,015 | $239,406 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 35. Present Value Factor: 6.49% (8) | 0.8545 | 0.8025 | 0.7535 | 0.7076 | 0.6645 | 0.6240 |
| 36. Present Value Debt Free Net Cash Flow | $335,407 | $271,876 | $338,611 | $281,337 | $229,272 | $275,473 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 37. Present Value Factor: 8.40% (9) | 0.8174 | 0.7540 | 0.6956 | 0.6417 | 0.5920 | 0.5461 |
| 38. Present Value Debt Free Net Cash Flow | $320,844 | $255,445 | $312,592 | $255,136 | $204,257 | $241,083 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 9 | Estimated Year 10 | Estimated Year 11 | Estimated Year 12 | Estimated Year 13 | Estimated Year 14 |
|---|---|---|---|---|---|---|
| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,766,800 | 3,777,724 | 3,788,679 | 4,042,845 | 4,054,570 | 4,066,328 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 242,475 | 0 | 0 | 243,980 |
| 6. **Total Operating Revenues** | 3,769,049 | 3,779,973 | 4,033,403 | 4,045,094 | 4,056,819 | 4,312,557 |
| 7. **Rate Increase** | | | **6%** | | | **6%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 3,432,459 | 3,535,433 | 3,641,496 | 3,750,741 | 3,863,263 | 3,979,161 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (181,403) | (186,845) | (192,451) | (198,224) | (204,171) | (210,296) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (313,146) | (322,540) | (332,216) | (342,183) | (352,448) | (363,022) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 32,530 | 32,582 | 32,635 | 34,067 | 34,124 | 34,180 |
| 16. **Operating Expenses Before Depreciation** | 2,970,440 | 3,058,629 | 3,149,464 | 3,244,401 | 3,340,768 | 3,440,023 |
| 17. Depreciation (2) | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 |
| 18. **Total Operating Expenses** | 3,225,826 | 3,317,696 | 3,412,264 | 3,510,988 | 3,611,197 | 3,714,349 |
| 19. **Operating Income** | 543,223 | 462,277 | 621,139 | 534,106 | 445,622 | 598,208 |
| 20. Revenues (3) | 3,769,049 | 3,779,973 | 4,033,403 | 4,045,094 | 4,056,819 | 4,312,557 |
| 21. EBITDA (4) | 798,609 | 721,344 | 883,939 | 800,693 | 716,051 | 872,534 |
| 22. EBIT (5) | 543,223 | 462,277 | 621,139 | 534,106 | 445,622 | 598,208 |
| 23. EBIT | 543,223 | 462,277 | 621,139 | 534,106 | 445,622 | 598,208 |
| 24. (-) Income Taxes | 156,937 | 133,552 | 179,447 | 154,303 | 128,740 | 172,822 |
| 25. Debt Free Net Income | 386,286 | 328,725 | 441,692 | 379,803 | 316,882 | 425,386 |
| 26. (+) Depreciation & Amortization | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 |
| 27. (-) Capital Expenditures (6) | 248,802 | 252,387 | 256,025 | 259,714 | 263,457 | 267,254 |
| 28. (-) Changes in Working Capital (7) | 7,915 | 7,938 | 8,470 | 8,495 | 8,519 | 9,056 |
| 29. Debt Free Net Cash Flow | $384,955 | $327,467 | $439,997 | $378,182 | $315,335 | $423,402 |
| 30. PV Time Period (mid-year) | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 |
| 31. Present Value Factor: 6.59% (8) | 0.5813 | 0.5454 | 0.5117 | 0.4800 | 0.4503 | 0.4225 |
| 32. Present Value Debt Free Net Cash Flow | $223,774 | $178,600 | $225,146 | $181,527 | $141,995 | $178,887 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 33. Present Value Factor: 8.50% (9) | 0.4999 | 0.4607 | 0.4246 | 0.3913 | 0.3607 | 0.3324 |
| 34. Present Value Debt Free Net Cash Flow | $192,439 | $150,864 | $186,823 | $147,982 | $113,741 | $140,739 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 35. Present Value Factor: 6.49% (8) | 0.5860 | 0.5503 | 0.5167 | 0.4852 | 0.4557 | 0.4279 |
| 36. Present Value Debt Free Net Cash Flow | $225,584 | $180,205 | $227,346 | $183,494 | $143,698 | $181,174 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 37. Present Value Factor: 8.40% (9) | 0.5038 | 0.4648 | 0.4287 | 0.3955 | 0.3649 | 0.3366 |
| 38. Present Value Debt Free Net Cash Flow | $193,940 | $152,206 | $188,627 | $149,571 | $115,066 | $142,517 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 15 | Estimated Year 16 | Estimated Year 17 | Estimated Year 18 | Estimated Year 19 | Estimated Year 20 |
|---|---|---|---|---|---|---|
| | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 4,322,807 | 4,335,344 | 4,500,093 | 4,513,143 | 4,707,281 | 4,720,932 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 151,737 | 0 | 180,526 | 0 | 195,919 |
| 6. **Total Operating Revenues** | 4,325,056 | 4,489,330 | 4,502,342 | 4,695,918 | 4,709,530 | 4,919,100 |
| 7. **Rate Increase** | | **3%** | | **4%** | | **4%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 4,098,536 | 4,221,492 | 4,348,136 | 4,478,580 | 4,612,938 | 4,751,326 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (216,605) | (223,103) | (229,796) | (236,690) | (243,791) | (251,105) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (373,912) | (385,130) | (396,683) | (408,584) | (420,841) | (433,467) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 35,625 | 35,687 | 36,610 | 36,674 | 37,765 | 37,831 |
| 16. **Operating Expenses Before Depreciation** | 3,543,643 | 3,648,946 | 3,758,267 | 3,869,980 | 3,986,071 | 4,104,586 |
| 17. Depreciation (2) | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |
| 18. **Total Operating Expenses** | 3,821,922 | 3,931,235 | 4,044,624 | 4,160,465 | 4,280,741 | 4,403,503 |
| 19. **Operating Income** | 503,134 | 558,095 | 457,718 | 535,453 | 428,789 | 515,597 |
| 20. Revenues (3) | 4,325,056 | 4,489,330 | 4,502,342 | 4,695,918 | 4,709,530 | 4,919,100 |
| 21. EBITDA (4) | 781,413 | 840,384 | 744,075 | 825,938 | 723,459 | 814,514 |
| 22. EBIT (5) | 503,134 | 558,095 | 457,718 | 535,453 | 428,789 | 515,597 |
| 23. EBIT | 503,134 | 558,095 | 457,718 | 535,453 | 428,789 | 515,597 |
| 24. (-) Income Taxes | 145,355 | 161,234 | 132,235 | 154,692 | 123,877 | 148,956 |
| 25. Debt Free Net Income | 357,779 | 396,861 | 325,483 | 380,761 | 304,912 | 366,641 |
| 26. (+) Depreciation & Amortization | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |
| 27. (-) Capital Expenditures (6) | 271,105 | 275,012 | 278,975 | 282,995 | 287,073 | 291,210 |
| 28. (-) Changes in Working Capital (7) | 9,083 | 9,428 | 9,455 | 9,861 | 9,890 | 10,330 |
| 29. Debt Free Net Cash Flow | $355,870 | $394,710 | $323,410 | $378,389 | $302,619 | $364,018 |
| 30. PV Time Period (mid-year) | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 |
| 31. Present Value Factor: 6.59% (8) | 0.3964 | 0.3719 | 0.3489 | 0.3273 | 0.3071 | 0.2881 |
| 32. Present Value Debt Free Net Cash Flow | $141,067 | $146,793 | $112,838 | $123,847 | $92,934 | $104,874 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 33. Present Value Factor: 8.50% (9) | 0.3064 | 0.2824 | 0.2603 | 0.2399 | 0.2211 | 0.2038 |
| 34. Present Value Debt Free Net Cash Flow | $109,039 | $111,466 | $84,184 | $90,776 | $66,909 | $74,187 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 35. Present Value Factor: 6.49% (8) | 0.4018 | 0.3773 | 0.3543 | 0.3327 | 0.3125 | 0.2934 |
| 36. Present Value Debt Free Net Cash Flow | $142,989 | $148,924 | $114,584 | $125,890 | $94,569 | $106,803 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 37. Present Value Factor: 8.40% (9) | 0.3105 | 0.2864 | 0.2643 | 0.2438 | 0.2249 | 0.2075 |
| 38. Present Value Debt Free Net Cash Flow | $110,498 | $113,045 | $85,477 | $92,251 | $68,059 | $75,534 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| DCF With Capitalization of Terminal Value Model @ 6.59% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $364,018 |
| Divided by Capitalization Factor (8) | 6.59% |
| 20th Year Terminal Value | 5,523,796 |
| 20th Year Present Value Factor (11) | 0.2881 |
| Present Value of Terminal Value | 1,591,406 |
| Present Value Debt Free Net Cash Flow for 20 Years | 4,291,230 |
| Indicated Value | $5,882,636 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.59% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $515,597 | 30.1 | $15,519,484 |
| Projected EBITDA | 814,514 | 20.3 | 16,534,639 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 16,199,638 |
| 20th Year Present Value Factor (11) | | | 0.2881 |
| Present Value of Terminal Value | | | 4,667,116 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 4,291,230 |
| Indicated Value | | | $8,958,346 |

| DCF With Capitalization of Terminal Value Model @ 8.50% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $364,018 |
| Divided by Capitalization Factor (9) | 8.50% |
| 20th Year Terminal Value | 4,282,566 |
| 20th Year Present Value Factor (12) | 0.2038 |
| Present Value of Terminal Value | 872,787 |
| Present Value Debt Free Net Cash Flow for 20 Years | 3,752,860 |
| Indicated Value | $4,625,648 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 8.50% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $515,597 | 30.1 | $15,519,484 |
| Projected EBITDA | 814,514 | 20.3 | 16,534,639 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 16,199,638 |
| 20th Year Present Value Factor (12) | | | 0.2038 |
| Present Value of Terminal Value | | | 3,301,486 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 3,752,860 |
| Indicated Value | | | $7,054,347 |

| DCF With Capitalization of Terminal Value Model @ 6.49% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $364,018 |
| Divided by Capitalization Factor (8) | 6.49% |
| 20th Year Terminal Value | 5,608,908 |
| 20th Year Present Value Factor (11) | 0.2881 |
| Present Value of Terminal Value | 1,615,926 |
| Present Value Debt Free Net Cash Flow for 20 Years | 4,291,230 |
| Indicated Value | $5,907,157 |

| DCF With Capitalization of Terminal Value Model @ 8.40% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $364,018 |
| Divided by Capitalization Factor (9) | 8.40% |
| 20th Year Terminal Value | 4,333,549 |
| 20th Year Present Value Factor (12) | 0.2038 |
| Present Value of Terminal Value | 883,177 |
| Present Value Debt Free Net Cash Flow for 20 Years | 3,752,860 |
| Indicated Value | $4,636,038 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by IOU at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2022 assumed due to IOU purchase at the end of 2022

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 6.

(4) Line 19 + line 17.

(5) Line 19.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.

(9) Discount rate is the current upper end of the IOU discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

**Terms:**

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Actual | | | Estimated Year 0 | Estimated Year 1 | Estimated Year 2 |
|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 |
| 3. Other operating revenue | 1,577 | 1,337 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 0 | 0 | 0 | 1,511,815 |
| 6. **Total Operating Revenues** | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 4,537,694 |
| 7. **Rate Increase** | | | | | | **50%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 | 2,709,615 | 2,790,903 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | 0 | 0 | 0 | (139,031) | (143,201) | (147,497) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | (240,000) | (247,200) | (254,616) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,224,099 | 2,620,251 | 2,630,694 | 2,251,664 | 2,319,213 | 2,388,790 |
| 16. Depreciation (2) | 246,236 | 243,460 | 243,460 | 240,690 | 744,864 | 754,605 |
| 17. **Total Operating Expenses** | 2,470,335 | 2,863,711 | 2,874,154 | 2,492,354 | 3,064,078 | 3,143,395 |
| 18. **Operating Income** | 585,660 | 284,990 | 151,261 | 533,061 | (38,663) | 1,394,299 |
| 19. Revenues (3) | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 4,537,694 |
| 20. EBITDA (4) | 831,896 | 528,450 | 394,721 | 773,752 | 706,202 | 2,148,904 |
| 21. EBIT (5) | 585,660 | 284,990 | 151,261 | 533,061 | (38,663) | 1,394,299 |
| 22. EBIT | 585,660 | 284,990 | 151,261 | 533,061 | (38,663) | 1,394,299 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 585,660 | 284,990 | 151,261 | 533,061 | (38,663) | 1,394,299 |
| 25. (+) Depreciation & Amortization | 246,236 | 243,460 | 243,460 | 240,690 | 744,864 | 754,605 |
| 26. (-) Capital Expenditures (6) | 5,945 | 2,811 | 87,357 | 222,858 | 726,057 | 735,552 |
| 27. (-) Changes in Working Capital (7) | 6,418 | 6,612 | 6,353 | 6,353 | 6,353 | 9,529 |
| 28. Debt Free Net Cash Flow | $819,533 | $519,027 | $301,011 | $544,540 | ($26,209) | $1,403,823 |
| 29. PV Time Period (mid-year) | | | | (0.5) | 0.5 | 1.5 |
| | | | | | 1 | 2 |
| 30. Present Value Factor: 2.85% (8) | | | | | 0.9860 | 0.9587 |
| 31. Present Value Debt Free Net Cash Flow | | | | | ($25,842) | $1,345,845 |
| | | | | | 1 | 2 |
| 32. Present Value Factor: 2.75% (9) | | | | | 0.9865 | 0.9601 |
| 33. Present Value Debt Free Net Cash Flow | | | | | ($25,855) | $1,347,810 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated | Estimated | Estimated | Estimated | Estimated | Estimated |
|---|---|---|---|---|---|---|
| | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 |
| | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 4,536,836 | 4,538,923 | 4,546,898 | 4,924,891 | 4,939,173 | 4,953,497 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 363,752 | 0 | 0 | 222,907 |
| 6. **Total Operating Revenues** | 4,539,085 | 4,541,172 | 4,912,899 | 4,927,140 | 4,941,422 | 5,178,653 |
| 7. **Rate Increase** | | | **8%** | | | **4%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,874,630 | 2,960,869 | 3,049,695 | 3,141,186 | 3,235,422 | 3,332,484 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (151,922) | (156,480) | (161,174) | (166,010) | (170,990) | (176,120) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (262,254) | (270,122) | (278,226) | (286,573) | (295,170) | (304,025) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,460,454 | 2,534,267 | 2,610,295 | 2,688,604 | 2,769,262 | 2,852,340 |
| 16. Depreciation (2) | 764,474 | 774,472 | 784,601 | 794,861 | 805,257 | 815,788 |
| 17. **Total Operating Expenses** | 3,224,928 | 3,308,739 | 3,394,896 | 3,483,465 | 3,574,519 | 3,668,128 |
| 18. **Operating Income** | 1,314,157 | 1,232,433 | 1,518,003 | 1,443,675 | 1,366,903 | 1,510,525 |
| 19. Revenues (3) | 4,539,085 | 4,541,172 | 4,912,899 | 4,927,140 | 4,941,422 | 5,178,653 |
| 20. EBITDA (4) | 2,078,631 | 2,006,905 | 2,302,604 | 2,238,536 | 2,172,160 | 2,326,313 |
| 21. EBIT (5) | 1,314,157 | 1,232,433 | 1,518,003 | 1,443,675 | 1,366,903 | 1,510,525 |
| 22. EBIT | 1,314,157 | 1,232,433 | 1,518,003 | 1,443,675 | 1,366,903 | 1,510,525 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 1,314,157 | 1,232,433 | 1,518,003 | 1,443,675 | 1,366,903 | 1,510,525 |
| 25. (+) Depreciation & Amortization | 764,474 | 774,472 | 784,601 | 794,861 | 805,257 | 815,788 |
| 26. (-) Capital Expenditures (6) | 745,172 | 754,917 | 764,790 | 774,792 | 784,925 | 795,190 |
| 27. (-) Changes in Working Capital (7) | 9,532 | 9,536 | 10,317 | 10,347 | 10,377 | 10,875 |
| 28. Debt Free Net Cash Flow | $1,323,927 | $1,242,451 | $1,527,497 | $1,453,397 | $1,376,858 | $1,520,248 |
| 29. PV Time Period (mid-year) | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 30. Present Value Factor: 2.85% (8) | 0.9322 | 0.9063 | 0.8812 | 0.8568 | 0.8331 | 0.8100 |
| 31. Present Value Debt Free Net Cash Flow | $1,234,165 | $1,126,034 | $1,346,030 | $1,245,271 | $1,147,060 | $1,231,401 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 32. Present Value Factor: 2.75% (9) | 0.9344 | 0.9094 | 0.8851 | 0.8614 | 0.8383 | 0.8159 |
| 33. Present Value Debt Free Net Cash Flow | $1,237,078 | $1,129,885 | $1,351,987 | $1,251,956 | $1,154,220 | $1,240,370 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 9 | Estimated Year 10 | Estimated Year 11 | Estimated Year 12 | Estimated Year 13 | Estimated Year 14 |
|---|---|---|---|---|---|---|
| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 5,191,416 | 5,206,471 | 5,221,570 | 5,472,364 | 5,488,234 | 5,504,150 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 234,971 | 0 | 0 | 236,678 |
| 6. **Total Operating Revenues** | 5,193,665 | 5,208,720 | 5,458,790 | 5,474,613 | 5,490,483 | 5,743,077 |
| 7. **Rate Increase** | | | **5%** | | | **4%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 3,432,459 | 3,535,433 | 3,641,496 | 3,750,741 | 3,863,263 | 3,979,161 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (181,403) | (186,845) | (192,451) | (198,224) | (204,171) | (210,296) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (313,146) | (322,540) | (332,216) | (342,183) | (352,448) | (363,022) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 2,937,910 | 3,026,047 | 3,116,829 | 3,210,334 | 3,306,644 | 3,405,843 |
| 16. Depreciation (2) | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 |
| 17. **Total Operating Expenses** | 3,764,367 | 3,863,313 | 3,965,044 | 4,069,642 | 4,177,190 | 4,287,774 |
| 18. **Operating Income** | 1,429,298 | 1,345,407 | 1,493,746 | 1,404,971 | 1,313,293 | 1,455,303 |
| 19. Revenues (3) | 5,193,665 | 5,208,720 | 5,458,790 | 5,474,613 | 5,490,483 | 5,743,077 |
| 20. EBITDA (4) | 2,255,755 | 2,182,673 | 2,341,961 | 2,264,279 | 2,183,839 | 2,337,234 |
| 21. EBIT (5) | 1,429,298 | 1,345,407 | 1,493,746 | 1,404,971 | 1,313,293 | 1,455,303 |
| 22. EBIT | 1,429,298 | 1,345,407 | 1,493,746 | 1,404,971 | 1,313,293 | 1,455,303 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 1,429,298 | 1,345,407 | 1,493,746 | 1,404,971 | 1,313,293 | 1,455,303 |
| 25. (+) Depreciation & Amortization | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 |
| 26. (-) Capital Expenditures (6) | 805,590 | 816,125 | 826,799 | 837,612 | 848,566 | 859,664 |
| 27. (-) Changes in Working Capital (7) | 10,907 | 10,938 | 11,463 | 11,497 | 11,530 | 12,060 |
| 28. Debt Free Net Cash Flow | $1,439,258 | $1,355,609 | $1,503,699 | $1,415,171 | $1,323,743 | $1,465,509 |
| 29. PV Time Period (mid-year) | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 30. Present Value Factor: 2.85% (8) | 0.7875 | 0.7657 | 0.7445 | 0.7239 | 0.7038 | 0.6843 |
| 31. Present Value Debt Free Net Cash Flow | $1,133,416 | $1,037,990 | $1,119,504 | $1,024,442 | $931,650 | $1,002,848 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 32. Present Value Factor: 2.75% (9) | 0.7941 | 0.7728 | 0.7521 | 0.7320 | 0.7124 | 0.6933 |
| 33. Present Value Debt Free Net Cash Flow | $1,142,915 | $1,047,615 | $1,130,932 | $1,035,905 | $943,035 | $1,016,038 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 15 | Estimated Year 16 | Estimated Year 17 | Estimated Year 18 | Estimated Year 19 | Estimated Year 20 |
|---|---|---|---|---|---|---|
| | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 5,757,477 | 5,774,173 | 5,999,392 | 6,016,790 | 6,257,505 | 6,275,652 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 207,870 | 0 | 222,621 | 0 | 216,510 |
| 6. **Total Operating Revenues** | 5,759,726 | 5,984,292 | 6,001,641 | 6,241,660 | 6,259,754 | 6,494,411 |
| 7. **Rate Increase** | | **4%** | | **4%** | | **3%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 4,098,536 | 4,221,492 | 4,348,136 | 4,478,580 | 4,612,938 | 4,751,326 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (216,605) | (223,103) | (229,796) | (236,690) | (243,791) | (251,105) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (373,912) | (385,130) | (396,683) | (408,584) | (420,841) | (433,467) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. **Operating Expenses Before Depreciation** | 3,508,018 | 3,613,259 | 3,721,657 | 3,833,306 | 3,948,306 | 4,066,755 |
| 16. Depreciation (2) | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |
| 17. **Total Operating Expenses** | 4,401,484 | 4,518,409 | 4,638,645 | 4,762,286 | 4,889,435 | 5,020,193 |
| 18. **Operating Income** | 1,358,242 | 1,465,883 | 1,362,996 | 1,479,374 | 1,370,319 | 1,474,218 |
| 19. Revenues (3) | 5,759,726 | 5,984,292 | 6,001,641 | 6,241,660 | 6,259,754 | 6,494,411 |
| 20. EBITDA (4) | 2,251,708 | 2,371,033 | 2,279,984 | 2,408,354 | 2,311,448 | 2,427,656 |
| 21. EBIT (5) | 1,358,242 | 1,465,883 | 1,362,996 | 1,479,374 | 1,370,319 | 1,474,218 |
| 22. EBIT | 1,358,242 | 1,465,883 | 1,362,996 | 1,479,374 | 1,370,319 | 1,474,218 |
| 23. (-) Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| 24. Debt Free Net Income | 1,358,242 | 1,465,883 | 1,362,996 | 1,479,374 | 1,370,319 | 1,474,218 |
| 25. (+) Depreciation & Amortization | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |
| 26. (-) Capital Expenditures (6) | 870,906 | 882,296 | 893,835 | 905,524 | 917,367 | 929,364 |
| 27. (-) Changes in Working Capital (7) | 12,095 | 12,567 | 12,603 | 13,107 | 13,145 | 13,638 |
| 28. Debt Free Net Cash Flow | $1,368,706 | $1,476,170 | $1,373,546 | $1,489,722 | $1,380,936 | $1,484,654 |
| 29. PV Time Period (mid-year) | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 30. Present Value Factor: 2.85% (8) | 0.6653 | 0.6469 | 0.6290 | 0.6115 | 0.5946 | 0.5781 |
| 31. Present Value Debt Free Net Cash Flow | $910,600 | $954,934 | $863,960 | $910,965 | $821,105 | $858,278 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 32. Present Value Factor: 2.75% (9) | 0.6748 | 0.6567 | 0.6391 | 0.6220 | 0.6054 | 0.5892 |
| 33. Present Value Debt Free Net Cash Flow | $923,603 | $969,401 | $877,833 | $926,607 | $836,019 | $874,758 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| DCF With Capitalization of Terminal Value Model @ 2.85% | |
|---|---|
| | Terminal Value |
| Projected Debt Free Net Cash Flow (10) | $1,484,654 |
| Divided by Capitalization Factor (8) | 2.85% |
| 20th Year Terminal Value | 52,093,123 |
| 20th Year Present Value Factor (11) | 0.5781 |
| Present Value of Terminal Value | 30,115,034 |
| Present Value Debt Free Net Cash Flow for 20 Years | 20,219,657 |
| Indicated Value | $50,334,691 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85% | | | |
|---|---|---|---|
| | | Multiples (13) | Terminal Value |
| Projected EBIT | $1,474,218 | 30.1 | $44,373,958 |
| Projected EBITDA | 2,427,656 | 20.3 | 49,281,422 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 47,661,959 |
| 20th Year Present Value Factor (11) | | | 0.5781 |
| Present Value of Terminal Value | | | 27,553,378 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 20,219,657 |
| Indicated Value | | | $47,773,036 |

| DCF With Capitalization of Terminal Value Model @ 2.75% | |
|---|---|
| | Terminal Value |
| Projected Debt Free Net Cash Flow (10) | $1,484,654 |
| Divided by Capitalization Factor (9) | 2.75% |
| 20th Year Terminal Value | 53,987,418 |
| 20th Year Present Value Factor (12) | 0.5781 |
| Present Value of Terminal Value | 31,210,126 |
| Present Value Debt Free Net Cash Flow for 20 Years | 20,219,657 |
| Indicated Value | $51,429,783 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75% | | | |
|---|---|---|---|
| | | Multiples (13) | Terminal Value |
| Projected EBIT | $1,474,218 | 30.1 | $44,373,958 |
| Projected EBITDA | 2,427,656 | 20.3 | 49,281,422 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 47,661,959 |
| 20th Year Present Value Factor (12) | | | 0.5781 |
| Present Value of Terminal Value | | | 27,553,378 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 20,219,657 |
| Indicated Value | | | $47,773,036 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.
(3) Line 6.
(4) Line 18 + line 16.
(5) Line 18.
(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.54% of prior year-end GROSS Property, plant and equipment.
(7) Changes in Working Capital - based on water industry 0.21% of revenues.
(8) Discount rate is the the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.
(9) Discount rate is the current MUNI discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.
(10) Final year shown, line 28.
(11) Final year shown, line 30.
(12) Final year shown, line 30.
(13) Developed on Market Multiples EXHIBIT 17.

**Terms:**

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Actual | | | Estimated Year 0 | Estimated Year 1 | Estimated Year 2 |
|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 |
| 3. Other operating revenue | 1,577 | 1,337 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 0 | 0 | 0 | 3,930,719 |
| 6. **Total Operating Revenues** | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 6,956,598 |
| 7. **Rate Increase** | | | | | | **130%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,224,099 | 2,620,251 | 2,630,694 | 2,630,694 | 2,709,615 | 2,790,903 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | 0 | 0 | 0 | (139,031) | (143,201) | (147,497) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | (240,000) | (247,200) | (254,616) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 0 | 0 | 0 | 0 | 84,493 | 84,467 |
| 16. **Operating Expenses Before Depreciation** | 2,224,099 | 2,620,251 | 2,630,694 | 2,251,664 | 2,403,706 | 2,473,257 |
| 17. Depreciation (2) | 246,236 | 243,460 | 243,460 | 240,690 | 744,864 | 754,605 |
| 18. **Total Operating Expenses** | 2,470,335 | 2,863,711 | 2,874,154 | 2,492,354 | 3,148,571 | 3,227,862 |
| 19. **Operating Income** | 585,660 | 284,990 | 151,261 | 533,061 | (123,156) | 3,728,736 |
| 20. Revenues (3) | 3,055,995 | 3,148,701 | 3,025,415 | 3,025,415 | 3,025,415 | 6,956,598 |
| 21. EBITDA (4) | 831,896 | 528,450 | 394,721 | 773,752 | 621,709 | 4,483,341 |
| 22. EBIT (5) | 585,660 | 284,990 | 151,261 | 533,061 | (123,156) | 3,728,736 |
| 23. EBIT | 585,660 | 284,990 | 151,261 | 533,061 | (123,156) | 3,728,736 |
| 24. (-) Income Taxes | 0 | 0 | 0 | 154,001 | (35,580) | 1,077,232 |
| 25. Debt Free Net Income | 585,660 | 284,990 | 151,261 | 379,060 | (87,576) | 2,651,504 |
| 26. (+) Depreciation & Amortization | 246,236 | 243,460 | 243,460 | 240,690 | 744,864 | 754,605 |
| 27. (-) Capital Expenditures (6) | 5,945 | 2,811 | 87,357 | 222,858 | 726,057 | 735,552 |
| 28. (-) Changes in Working Capital (7) | 6,418 | 6,612 | 6,353 | 6,353 | 6,353 | 14,609 |
| 29. Debt Free Net Cash Flow | $819,533 | $519,027 | $301,011 | $390,539 | ($75,122) | $2,655,948 |
| 30. PV Time Period (mid-year) | | | | (0.5) | 0.5 | 1.5 |
| 31. Present Value Factor: 6.59% (8) | | | | | 0.9686 | 0.9087 |
| 32. Present Value Debt Free Net Cash Flow | | | | | ($72,763) | $2,413,460 |
| | | | | | 1 | 2 |
| 33. Present Value Factor: 8.50% (9) | | | | | 0.9600 | 0.8848 |
| 34. Present Value Debt Free Net Cash Flow | | | | | ($72,117) | $2,349,983 |
| | | | | | 1 | 2 |
| 35. Present Value Factor: 6.49% (8) | | | | | 0.9690 | 0.9100 |
| 36. Present Value Debt Free Net Cash Flow | | | | | ($72,793) | $2,416,913 |
| | | | | | 1 | 2 |
| 37. Present Value Factor: 8.40% (9) | | | | | 0.9605 | 0.8860 |
| 38. Present Value Debt Free Net Cash Flow | | | | | ($72,154) | $2,353,170 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 3 | Estimated Year 4 | Estimated Year 5 | Estimated Year 6 | Estimated Year 7 | Estimated Year 8 |
|---|---|---|---|---|---|---|
| | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 6,956,482 | 6,959,682 | 6,971,911 | 7,271,814 | 7,292,903 | 7,314,052 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 278,876 | 0 | 0 | 219,422 |
| 6. **Total Operating Revenues** | 6,958,731 | 6,961,931 | 7,253,036 | 7,274,063 | 7,295,152 | 7,535,723 |
| 7. **Rate Increase** | | | **4%** | | | **3%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 2,874,630 | 2,960,869 | 3,049,695 | 3,141,186 | 3,235,422 | 3,332,484 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (151,922) | (156,480) | (161,174) | (166,010) | (170,990) | (176,120) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (262,254) | (270,122) | (278,226) | (286,573) | (295,170) | (304,025) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 106,807 | 106,792 | 106,782 | 108,410 | 108,500 | 108,591 |
| 16. **Operating Expenses Before Depreciation** | 2,567,261 | 2,641,059 | 2,717,077 | 2,797,014 | 2,877,762 | 2,960,931 |
| 17. Depreciation (2) | 764,474 | 774,472 | 784,601 | 794,861 | 805,257 | 815,788 |
| 18. **Total Operating Expenses** | 3,331,735 | 3,415,531 | 3,501,678 | 3,591,875 | 3,683,019 | 3,776,719 |
| 19. **Operating Income** | 3,626,996 | 3,546,400 | 3,751,358 | 3,682,188 | 3,612,133 | 3,759,004 |
| 20. Revenues (3) | 6,958,731 | 6,961,931 | 7,253,036 | 7,274,063 | 7,295,152 | 7,535,723 |
| 21. EBITDA (4) | 4,391,470 | 4,320,872 | 4,535,959 | 4,477,049 | 4,417,390 | 4,574,792 |
| 22. EBIT (5) | 3,626,996 | 3,546,400 | 3,751,358 | 3,682,188 | 3,612,133 | 3,759,004 |
| 23. EBIT | 3,626,996 | 3,546,400 | 3,751,358 | 3,682,188 | 3,612,133 | 3,759,004 |
| 24. (-) Income Taxes | 1,047,839 | 1,024,555 | 1,083,767 | 1,063,784 | 1,043,545 | 1,085,976 |
| 25. Debt Free Net Income | 2,579,157 | 2,521,845 | 2,667,591 | 2,618,404 | 2,568,588 | 2,673,028 |
| 26. (+) Depreciation & Amortization | 764,474 | 774,472 | 784,601 | 794,861 | 805,257 | 815,788 |
| 27. (-) Capital Expenditures (6) | 745,172 | 754,917 | 764,790 | 774,792 | 784,925 | 795,190 |
| 28. (-) Changes in Working Capital (7) | 14,613 | 14,620 | 15,231 | 15,276 | 15,320 | 15,825 |
| 29. Debt Free Net Cash Flow | $2,583,846 | $2,526,780 | $2,672,171 | $2,623,197 | $2,573,600 | $2,677,801 |
| 30. PV Time Period (mid-year) | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 |
| 31. Present Value Factor: 6.59% (8) | 0.8525 | 0.7998 | 0.7504 | 0.7040 | 0.6605 | 0.6196 |
| 32. Present Value Debt Free Net Cash Flow | $2,202,729 | $2,020,919 | $2,005,197 | $1,846,731 | $1,699,863 | $1,659,166 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 33. Present Value Factor: 8.50% (9) | 0.8155 | 0.7516 | 0.6927 | 0.6385 | 0.5884 | 0.5423 |
| 34. Present Value Debt Free Net Cash Flow | $2,107,127 | $1,899,128 | $1,851,013 | $1,674,912 | $1,514,306 | $1,452,171 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 35. Present Value Factor: 6.49% (8) | 0.8545 | 0.8025 | 0.7535 | 0.7076 | 0.6645 | 0.6240 |
| 36. Present Value Debt Free Net Cash Flow | $2,207,897 | $2,027,741 | $2,013,480 | $1,856,175 | $1,710,157 | $1,670,948 |
| | 3 | 4 | 5 | 6 | 7 | 8 |
| 37. Present Value Factor: 8.40% (9) | 0.8174 | 0.7540 | 0.6956 | 0.6417 | 0.5920 | 0.5461 |
| 38. Present Value Debt Free Net Cash Flow | $2,112,036 | $1,905,192 | $1,858,762 | $1,683,306 | $1,523,571 | $1,462,347 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 9 | Estimated Year 10 | Estimated Year 11 | Estimated Year 12 | Estimated Year 13 | Estimated Year 14 |
|---|---|---|---|---|---|---|
| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 7,555,321 | 7,577,231 | 7,599,205 | 7,849,880 | 7,872,645 | 7,895,475 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 0 | 227,976 | 0 | 0 | 236,864 |
| 6. **Total Operating Revenues** | 7,557,570 | 7,579,480 | 7,829,430 | 7,852,129 | 7,874,894 | 8,134,588 |
| 7. **Rate Increase** | | | **3%** | | | **3%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 3,432,459 | 3,535,433 | 3,641,496 | 3,750,741 | 3,863,263 | 3,979,161 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (181,403) | (186,845) | (192,451) | (198,224) | (204,171) | (210,296) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (313,146) | (322,540) | (332,216) | (342,183) | (352,448) | (363,022) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 109,931 | 110,026 | 110,120 | 111,511 | 111,610 | 111,708 |
| 16. **Operating Expenses Before Depreciation** | 3,047,841 | 3,136,073 | 3,226,949 | 3,321,845 | 3,418,254 | 3,517,551 |
| 17. Depreciation (2) | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 |
| 18. **Total Operating Expenses** | 3,874,298 | 3,973,339 | 4,075,164 | 4,181,153 | 4,288,800 | 4,399,482 |
| 19. **Operating Income** | 3,683,272 | 3,606,141 | 3,754,266 | 3,670,976 | 3,586,094 | 3,735,106 |
| 20. Revenues (3) | 7,557,570 | 7,579,480 | 7,829,430 | 7,852,129 | 7,874,894 | 8,134,588 |
| 21. EBITDA (4) | 4,509,729 | 4,443,407 | 4,602,481 | 4,530,284 | 4,456,640 | 4,617,037 |
| 22. EBIT (5) | 3,683,272 | 3,606,141 | 3,754,266 | 3,670,976 | 3,586,094 | 3,735,106 |
| 23. EBIT | 3,683,272 | 3,606,141 | 3,754,266 | 3,670,976 | 3,586,094 | 3,735,106 |
| 24. (-) Income Taxes | 1,064,097 | 1,041,814 | 1,084,608 | 1,060,545 | 1,036,023 | 1,079,072 |
| 25. Debt Free Net Income | 2,619,175 | 2,564,327 | 2,669,658 | 2,610,431 | 2,550,071 | 2,656,034 |
| 26. (+) Depreciation & Amortization | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 |
| 27. (-) Capital Expenditures (6) | 805,590 | 816,125 | 826,799 | 837,612 | 848,566 | 859,664 |
| 28. (-) Changes in Working Capital (7) | 15,871 | 15,917 | 16,442 | 16,489 | 16,537 | 17,083 |
| 29. Debt Free Net Cash Flow | $2,624,171 | $2,569,551 | $2,674,632 | $2,615,638 | $2,555,514 | $2,661,218 |
| 30. PV Time Period (mid-year) | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 |
| 31. Present Value Factor: 6.59% (8) | 0.5813 | 0.5454 | 0.5117 | 0.4800 | 0.4503 | 0.4225 |
| 32. Present Value Debt Free Net Cash Flow | $1,525,431 | $1,401,433 | $1,368,609 | $1,255,506 | $1,150,748 | $1,124,365 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 33. Present Value Factor: 8.50% (9) | 0.4999 | 0.4607 | 0.4246 | 0.3913 | 0.3607 | 0.3324 |
| 34. Present Value Debt Free Net Cash Flow | $1,311,823 | $1,183,792 | $1,135,649 | $1,023,499 | $921,774 | $884,589 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 35. Present Value Factor: 6.49% (8) | 0.5860 | 0.5503 | 0.5167 | 0.4852 | 0.4557 | 0.4279 |
| 36. Present Value Debt Free Net Cash Flow | $1,537,764 | $1,414,024 | $1,381,983 | $1,269,107 | $1,164,548 | $1,138,735 |
| | 9 | 10 | 11 | 12 | 13 | 14 |
| 37. Present Value Factor: 8.40% (9) | 0.5038 | 0.4648 | 0.4287 | 0.3955 | 0.3649 | 0.3366 |
| 38. Present Value Debt Free Net Cash Flow | $1,322,057 | $1,194,327 | $1,146,615 | $1,034,485 | $932,507 | $895,766 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| | Estimated Year 15 | Estimated Year 16 | Estimated Year 17 | Estimated Year 18 | Estimated Year 19 | Estimated Year 20 |
|---|---|---|---|---|---|---|
| | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| 1. **OPERATING REVENUES (1)** | | | | | | |
| 2. Charges for services | 8,155,923 | 8,179,576 | 8,383,769 | 8,408,082 | 8,634,844 | 8,659,886 |
| 3. Other operating revenue | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 | 2,249 |
| 4. Tap Fees | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Other (Rate Increase) | 0 | 179,951 | 0 | 201,794 | 0 | 216,497 |
| 6. **Total Operating Revenues** | 8,158,172 | 8,361,776 | 8,386,018 | 8,612,125 | 8,637,093 | 8,878,632 |
| 7. **Rate Increase** | | **2%** | | **2%** | | **2%** |
| 8. **OPERATING EXPENSES (1)** | | | | | | |
| 9. Operating & Maintenance Expenses | 4,098,536 | 4,221,492 | 4,348,136 | 4,478,580 | 4,612,938 | 4,751,326 |
| 10. Remove Economies of Scale | | | | | | |
| 11. LESS: EOS - Wages & Benefits | (216,605) | (223,103) | (229,796) | (236,690) | (243,791) | (251,105) |
| 12. LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | 0 | 0 |
| 13. LESS: EOS - Eliminated Expenses | (373,912) | (385,130) | (396,683) | (408,584) | (420,841) | (433,467) |
| 14. ADD: Additional O&M | 0 | 0 | 0 | 0 | 0 | 0 |
| 15. ADD: PURTA & Reg Assessment | 113,154 | 113,255 | 114,382 | 114,485 | 115,739 | 115,847 |
| 16. **Operating Expenses Before Depreciation** | 3,621,172 | 3,726,514 | 3,836,039 | 3,947,791 | 4,064,045 | 4,182,602 |
| 17. Depreciation (2) | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |
| 18. **Total Operating Expenses** | 4,514,638 | 4,631,664 | 4,753,027 | 4,876,771 | 5,005,174 | 5,136,040 |
| 19. **Operating Income** | 3,643,534 | 3,730,112 | 3,632,991 | 3,735,354 | 3,631,919 | 3,742,592 |
| 20. Revenues (3) | 8,158,172 | 8,361,776 | 8,386,018 | 8,612,125 | 8,637,093 | 8,878,632 |
| 21. EBITDA (4) | 4,537,000 | 4,635,262 | 4,549,979 | 4,664,334 | 4,573,048 | 4,696,030 |
| 22. EBIT (5) | 3,643,534 | 3,730,112 | 3,632,991 | 3,735,354 | 3,631,919 | 3,742,592 |
| 23. EBIT | 3,643,534 | 3,730,112 | 3,632,991 | 3,735,354 | 3,631,919 | 3,742,592 |
| 24. (-) Income Taxes | 1,052,617 | 1,077,629 | 1,049,571 | 1,079,144 | 1,049,261 | 1,081,235 |
| 25. Debt Free Net Income | 2,590,917 | 2,652,483 | 2,583,420 | 2,656,210 | 2,582,658 | 2,661,357 |
| 26. (+) Depreciation & Amortization | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |
| 27. (-) Capital Expenditures (6) | 870,906 | 882,296 | 893,835 | 905,524 | 917,367 | 929,364 |
| 28. (-) Changes in Working Capital (7) | 17,132 | 17,560 | 17,611 | 18,085 | 18,138 | 18,645 |
| 29. Debt Free Net Cash Flow | $2,596,344 | $2,657,777 | $2,588,963 | $2,661,580 | $2,588,283 | $2,666,786 |
| 30. PV Time Period (mid-year) | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 |
| 31. Present Value Factor: 6.59% (8) | 0.3964 | 0.3719 | 0.3489 | 0.3273 | 0.3071 | 0.2881 |
| 32. Present Value Debt Free Net Cash Flow | $1,029,191 | $988,427 | $903,289 | $871,135 | $794,862 | $768,301 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 33. Present Value Factor: 8.50% (9) | 0.3064 | 0.2824 | 0.2603 | 0.2399 | 0.2211 | 0.2038 |
| 34. Present Value Debt Free Net Cash Flow | $795,520 | $750,556 | $673,907 | $638,513 | $572,269 | $543,491 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 35. Present Value Factor: 6.49% (8) | 0.4018 | 0.3773 | 0.3543 | 0.3327 | 0.3125 | 0.2934 |
| 36. Present Value Debt Free Net Cash Flow | $1,043,211 | $1,002,779 | $917,269 | $885,508 | $808,838 | $782,435 |
| | 15 | 16 | 17 | 18 | 19 | 20 |
| 37. Present Value Factor: 8.40% (9) | 0.3105 | 0.2864 | 0.2643 | 0.2438 | 0.2249 | 0.2075 |
| 38. Present Value Debt Free Net Cash Flow | $806,165 | $761,187 | $684,263 | $648,893 | $582,105 | $553,358 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

| DCF With Capitalization of Terminal Value Model @ 6.15% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $2,666,786 |
| Divided by Capitalization Factor (8) | 6.15% |
| 20th Year Terminal Value | 43,362,376 |
| 20th Year Present Value Factor (11) | 0.3123 |
| Present Value of Terminal Value | 13,542,070 |
| Present Value Debt Free Net Cash Flow for 20 Years | 27,946,970 |
| Indicated Value | $41,489,040 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.15% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $3,742,592 | 30.1 | $112,652,015 |
| Projected EBITDA | 4,696,030 | 20.3 | 95,329,414 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 101,045,872 |
| 20th Year Present Value Factor (11) | | | 0.3123 |
| Present Value of Terminal Value | | | 31,556,626 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 27,946,970 |
| Indicated Value | | | $59,503,596 |

| DCF With Capitalization of Terminal Value Model @ 6.15% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $2,666,786 |
| Divided by Capitalization Factor (9) | 6.15% |
| 20th Year Terminal Value | 43,362,376 |
| 20th Year Present Value Factor (12) | 0.3123 |
| Present Value of Terminal Value | 13,542,070 |
| Present Value Debt Free Net Cash Flow for 20 Years | 27,946,970 |
| Indicated Value | $41,489,040 |

| DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.15% | | Multiples (13) | Terminal Value |
|---|---|---|---|
| Projected EBIT | $3,742,592 | 30.1 | $112,652,015 |
| Projected EBITDA | 4,696,030 | 20.3 | 95,329,414 |
| Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value | | | 101,045,872 |
| 20th Year Present Value Factor (12) | | | 0.3123 |
| Present Value of Terminal Value | | | 31,556,626 |
| Present Value Debt Free Net Cash Flow for 20 Years | | | 27,946,970 |
| Indicated Value | | | $59,503,596 |

| DCF With Capitalization of Terminal Value Model @ 6.05% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $2,666,786 |
| Divided by Capitalization Factor (8) | 6.05% |
| 20th Year Terminal Value | 44,079,110 |
| 20th Year Present Value Factor (11) | 0.3123 |
| Present Value of Terminal Value | 13,765,906 |
| Present Value Debt Free Net Cash Flow for 20 Years | 27,946,970 |
| Indicated Value | $41,712,876 |

| DCF With Capitalization of Terminal Value Model @ 6.05% | Terminal Value |
|---|---|
| Projected Debt Free Net Cash Flow (10) | $2,666,786 |
| Divided by Capitalization Factor (9) | 6.05% |
| 20th Year Terminal Value | 44,079,110 |
| 20th Year Present Value Factor (12) | 0.3123 |
| Present Value of Terminal Value | 13,765,906 |
| Present Value Debt Free Net Cash Flow for 20 Years | 27,946,970 |
| Indicated Value | $41,712,876 |

**See last page of this EXHIBIT for notes and assumptions.**

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by IOU at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2022 assumed due to IOU purchase at the end of 2022.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 6.

(4) Line 19 + line 17.

(5) Line 19.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.54% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.

(9) Discount rate is the current upper end of the IOU discount rate. Capitalization rate ( K ) at 12/31/2021 adjusted for stated growth ( g ) where capitalization rate = K - g.

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

**Terms:**

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Market Multiples Method
City of Beaver Falls Wastewater System Assets
2021 Operations
Market Multiple Method

| | A | B | C | D (Col B × Col C) | E (Col A × Col D) |
|---|---|---|---|---|---|
| | Subject Company Statistic (1) | Comparison Group's Valuation Multiples 12/31/2021 | Beaver Falls' Wastewater Growth & Risk Adjustment | Beaver Falls' Wastewater Risk Adjusted Valuation Multiples 12/31/2021 | Beaver Falls' Wastewater Market Multiples Valuation |
| **Risk Adjusted Multiple** | | | | | |
| 1. City of Beaver Falls Wastewater System Assets | | | | | |
| 2. Investor Provided Capital | $8,146,961 | 2.31 | 90.00% | 2.08 | $16,945,679 |
| 3. Gross PP&E | $12,898,487 | 1.62 | 102.00% | 1.65 | 21,282,504 |
| 4. Net PP&E | $7,850,687 | 2.03 | 102.00% | 2.07 | 16,250,922 |
| 5. Revenues | $3,025,415 | 9.69 | 90.00% | 8.72 | 26,381,619 |
| 6. EBITDA | $773,752 | 22.55 | 90.00% | 20.30 | 15,707,155 |
| 7. EBIT | $532,936 | 33.47 | 90.00% | 30.12 | 16,052,027 |
| 8. Customers | 3,259 | $10,788 | 104.00% | $11,220 | 36,565,980 |
| 9. Population | 15,580 | $3,446 | 104.00% | $3,584 | 55,838,720 |
| 10. | | | | | |
| 11. Average | | | | | $25,628,076 |

**Conclusion of Market Multiple Method Valuation For Domestic Customers**

| | | Low | High | | Conclusion |
|---|---|---|---|---|---|
| 12. | Capital Items | $16,250,922 | $21,282,504 | | $18,766,713 |
| 13. | (Items 2-4) | | | | |
| 14. | Income Statement Items | 15,707,155 | 26,381,619 | | - |
| 15. | (Items 5 -7) | | | | |
| 16. | Demographics Items | 36,565,980 | 55,838,720 | | 46,202,350 |
| 17. | (Items 8-9) | | | | |
| | | | | Conclusion * | $39,343,441 |

* - Conclusion based on weighting of 25% Capital Items and 75% Demographics Items

Market Multiples Method
City of Beaver Falls Wastewater System Assets
Development of Market Multiples Method for the Market Multiples Method

| | Latest Quarter End | | | Latest 12 Months | | | 2020 | | 12/31/2021 |
|---|---|---|---|---|---|---|---|---|---|
| | Gross PP&E | Net PP&E | Invest. Total Capital | 12 Mos. Rev. | 12 Mos. EBITDA | 12 Mos. EBIT | Customers | Population | Enterprise Value |
| | ($ Mill) | ($ Mill) | ($ Mill) | ($ Mill) | ($ Mill) | ($ Mill) | | | ($ Mill) |
| American States Water Co | $2,202.419 | $1,614.705 | $1,292.917 | $506.429 | $183.194 | $143.991 | 286,341 | 1,000,000 | $4,427.527 |
| American Water Works Company Inc | $26,972.000 | $20,680.000 | $18,040.000 | $3,902.000 | $1,939.000 | $1,310.000 | 3,496,000 | 15,000,000 | $45,375.219 |
| Artesian Resources Corp | $743.292 | $585.751 | $347.983 | $89.945 | $39.770 | $27.949 | 95,640 | 300,000 | $607.616 |
| California Water Service Group | $4,124.024 | $2,796.369 | $2,305.564 | $806.735 | $261.185 | $152.127 | 543,000 | 2,000,000 | $4,829.636 |
| Essential Utilities, Inc. | $12,348.442 | $10,012.155 | $10,907.411 | $1,816.455 | $891.370 | $598.766 | 1,798,803 | 5,000,000 | $19,339.578 |
| Middlesex Water Co | $1,063.753 | $865.947 | $693.048 | $143.744 | $59.269 | $36.773 | 122,200 | 500,000 | $2,430.317 |
| SJW Corp. | $3,616.710 | $2,486.932 | $2,569.103 | $569.649 | $199.528 | $104.677 | 389,293 | 1,614,866 | $3,737.653 |
| York Water Company (The) | $464.886 | $368.286 | $285.060 | $54.783 | $30.849 | $22.190 | 72,681 | 202,000 | $786.746 |
| Average | $6,441.941 | $4,926.268 | $4,555.136 | $986.218 | $450.521 | $299.559 | 850,495 | 3,202,108 | $10,191.787 |
| Max | $26,972.000 | $20,680.000 | $18,040.000 | $3,902.000 | $1,939.000 | $1,310.000 | 3,496,000 | 15,000,000 | $45,375.219 |
| Min | $464.886 | $368.286 | $285.060 | $54.783 | $30.849 | $22.190 | 72,681 | 202,000 | $607.616 |
| Median | $2,909.565 | $2,050.819 | $1,799.241 | $538.039 | $191.361 | $124.334 | 337,817 | 1,307,433 | $4,082.590 |

| | Enterprise Value as a Multiple of | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Invest. Capital | Gross PP&E | Net PP&E | Rev. | EBITDA | EBIT | Customers | Population | Population Per Customer |
| | (x) | (x) | (x) | (x) | (x) | (x) | ($) | ($) | |
| American States Water Co | 3.42 | 2.01 | 2.74 | 8.74 | 24.17 | 30.75 | $15,462 | $4,428 | 3.49 |
| American Water Works Company Inc | 2.52 | 1.68 | 2.19 | 11.63 | 23.40 | 34.64 | $12,979 | $3,025 | 4.29 |
| Artesian Resources Corp | 1.75 | 0.82 | 1.04 | 6.76 | 15.28 | 21.74 | $6,353 | $2,025 | 3.14 |
| California Water Service Group | 2.09 | 1.17 | 1.73 | 5.99 | 18.49 | 31.75 | $8,894 | $2,415 | 3.68 |
| Essential Utilities, Inc. | 1.77 | 1.57 | 1.93 | 10.65 | 21.70 | 32.30 | $10,751 | $3,868 | 2.78 |
| Middlesex Water Co | 3.51 | 2.28 | 2.81 | 16.91 | 41.00 | 66.09 | $19,888 | $4,861 | 4.09 |
| SJW Corp. | 1.45 | 1.03 | 1.50 | 6.56 | 18.73 | 35.71 | $9,601 | $2,315 | 4.15 |
| York Water Company (The) | 2.76 | 1.69 | 2.14 | 14.36 | 25.50 | 35.45 | $10,825 | $3,895 | 2.78 |
| Average | 2.41 | 1.53 | 2.01 | 10.20 | 23.53 | 36.05 | $11,844 | $3,354 | 3.55 |
| Max | 3.51 | 2.28 | 2.81 | 16.91 | 41.00 | 66.09 | $19,888 | $4,861 | 4.29 |
| Min | 1.45 | 0.82 | 1.04 | 5.99 | 15.28 | 21.74 | $6,353 | $2,025 | 2.78 |
| Median | 2.31 | 1.62 | 2.03 | 9.69 | 22.55 | 33.47 | $10,788 | $3,446 | 3.59 |

Market Multiples Method
City of Beaver Falls Wastewater System Assets
Quantification of the Effective Risk/Growth Adjustments

| | | Net PP&E | Gross PP&E | Invest. Capital |
|---|---|---|---|---|
| Comparable Group Multiple | | 2.03 | 1.62 | 2.31 |
| Ratio to Net PPE | | | 79.80% | |
| Not Contributed Multiple (NPPE = ICAP mult.) | | 2.31 | 1.84 | |
| Base Risk Factor | x | 90% | 90% | |
| Subject Company Adjusted Multiple | | 2.08 | 1.66 | |
| | | | | |
| Subject Company Adjusted Multiple | | 2.08 | 1.66 | |
| Comparable Group Multiple | ÷ | 2.03 | 1.62 | |
| Effective Risk/Growth Adjustment | | 102% | 102% | |

| | | Net PP&E | Gross PP&E |
|---|---|---|---|
| Plant Assets | | 100% | 100% |
| Ratio of Known "Cost Free" Capital | | 25% | 25% |
| Plant Assets Less Known "Cost Free" Capital | | 75% | 75% |
| | | | |
| Comparable Group Multiple | | 2.03 | 1.62 |
| Plant Assets Less Known "Cost Free" Capital | ÷ | 75% | 75% |
| Mulitple Without "Cost Free" Capital | | 2.71 | 2.16 |
| Base Risk Factor | x | 90% | 90% |
| Subject Company Adjusted Multiple | | 2.44 | 1.94 |
| | | | |
| Subject Company Adjusted Multiple | | 2.44 | 1.94 |
| Comparable Group Multiple | ÷ | 2.03 | 1.62 |
| Effective Risk/Growth Adjustment | | 120% | 120% |

| | | Net PP&E | Customers |
|---|---|---|---|
| Comparable Group Multiple | | 2.03 | 10,788.00 |
| Implied Capitalization Rate (1÷Multiple) | | 49.26% | 0.0093% |
| Ratio of Net PP&E Mult. to Invest. Capital Mult. | | 113.79% | |
| Less 1 | - | 1.00 | |
| Difference in Capital Source due to Contributions | | 13.79% | |
| Assumed Investor Financed (1-Difference in Capital Source) | | 86.21% | 86.21% |
| Implied Capitalization Rate (1÷Multiple) | x | | 0.0093% |
| Not Contributed Cap. Rate | | | 0.0080% |
| Not Contributed Multiple (1÷Cap. Rate) | | | 12,513.63 |
| Base Risk Factor | x | | 90% |
| Subject Company Adjusted Multiple | | | 11,262.27 |
| | | | |
| Subject Company Adjusted Multiple | | | 11,262.27 |
| Comparable Group Multiple | ÷ | | 10,788.00 |
| Effective Risk/Growth Adjustment | | | 104% |

Selected Transactions Method
For City of Beaver Falls Wastewater System Assets
Summary

| | | Median | Mid-Point | Domestic Customers Value |
|---|---|---|---|---|
| | All Selected Transactions Companies (N = 20) | | | |
| 1. | Asset Items | | | $17,153,574 |
| 2. | Ex-Ante (page 2) | $16,325,842 | $18,728,321 | |
| 3. | Ex-Post (page 3) | $13,622,300 | $19,937,831 | |
| 4. | Demographics Items | | | $32,187,074 |
| 5. | Ex-Ante (page 2) | $29,334,550 | $35,039,597 | |
| 6. | Ex-Post (page 3) | $29,334,550 | $35,039,597 | |
| 7. | | | Indicated Value * | $28,428,699 |
| | Fully Integrated Selected Transactions Companies (N = 8) | | | |
| 8. | Asset Items | | | $16,481,126 |
| 9. | Ex-Ante (page 2) | $16,458,845 | $18,149,391 | |
| 10. | Ex-Post (page 3) | $15,275,966 | $16,040,301 | |
| 11. | Demographics Items | | | $44,805,181 |
| 12. | Ex-Ante (page 2) | $45,215,617 | $44,394,744 | |
| 13. | Ex-Post (page 3) | $45,215,617 | $44,394,744 | |
| 14. | | | Indicated Value * | $37,724,167 |
| | Mostly Collection/Distribution Selected Transactions Companies (N = 12) | | | |
| 15. | Asset Items | | | $16,413,471 |
| 16. | Ex-Ante (page 2) | $14,556,628 | $18,728,321 | |
| 17. | Ex-Post (page 3) | $12,431,106 | $19,937,831 | |
| 18. | Demographics Items | | | $26,066,232 |
| 19. | Ex-Ante (page 2) | $19,145,128 | $32,987,336 | |
| 20. | Ex-Post (page 3) | $19,145,128 | $32,987,336 | |
| 21. | | | Indicated Value * | $23,653,042 |
| | Integrated, Excluding Wholesale Selected Transactions Companies (N = 6) | | | |
| 22. | Asset Items | | | $15,968,735 |
| 23. | Ex-Ante (page 2) | $15,706,676 | $17,768,688 | |
| 24. | Ex-Post (page 3) | $14,359,274 | $16,040,301 | |
| 25. | Demographics Items | | | $43,319,366 |
| 26. | Ex-Ante (page 2) | $42,243,988 | $44,394,744 | |
| 27. | Ex-Post (page 3) | $42,243,988 | $44,394,744 | |
| 28. | | | Indicated Value * | $36,481,708 |

**Conclusion of Selected Transactions Method Valuation For Domestic Customers**

| | | Indicated Values | Weight | |
|---|---|---|---|---|
| 29. | Integrated, Excluding Wholesale Transactions | $36,481,708 | 75% | $27,361,281 |
| 30. | Mostly Collection/Distribution Transactions | 23,653,042 | 25% | 5,913,260 |
| 31. | | | Conclusion | $33,274,541 |

* - Indicated Value based on weighting of 25% Asset Items and 75% Demographics Items

Selected Transactions Method - Ex-Ante
For City of Beaver Falls Wastewater System Assets
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

| Name | Service | System | Announced Purchase Price was: | Investor Provided Capital | Gross PP&E | Net PP&E | Revenues | EBITDA | EBIT | Customers | Population |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Selected Transactions' Metrics | | | | | | | | |
| Municipal Authority of the City of Mckeesport | WW | INT | $156,000,000 | $83,903,219 | $91,435,797 | $73,813,794 | $13,047,844 | $6,180,616 | $3,811,679 | 12,780 | 46,468 |
| New Garden Township/Authority's WW System's Assets | WW | INT | $29,500,000 | $23,001,140 | $25,988,330 | $17,967,319 | $2,261,294 | $907,386 | $499,638 | 1,796 | 12,085 |
| Limerick Township Wastewater System's Assets | WW | INT | $75,100,000 | $43,501,755 | $60,847,250 | $36,113,701 | $4,418,775 | $2,487,775 | $893,600 | 5,416 | 18,798 |
| Steelton Borough (Water) Authority | W | INT | $22,500,000 | NA | NA | NA | NA | NA | NA | 2,472 | 5,932 |
| Exeter Township Wastewater System Assets | WW | INT | $96,000,000 | NA | NA | NA | $7,735,788 | $4,660,967 | $4,660,967 | 8,984 | 27,609 |
| Kane Borough Authority Wastewater System | WW | INT | $17,560,000 | $10,809,115 | $20,265,926 | $8,897,773 | $1,433,978 | $684,830 | $181,672 | 2,019 | 4,645 |
| Borough of Royersford Wastewater System Assets | WW | INT | $13,000,000 | $4,702,972 | $6,883,116 | $4,545,699 | $863,000 | $280,365 | $280,365 | 1,596 | 5,154 |
| York City Sewer Authority Wastewater System Assets | WW | INT | $235,000,000 | $100,493,098 | $120,654,506 | $78,592,332 | $24,641,181 | $9,759,797 | $6,150,926 | 13,747 | 80,929 |
| Sadsbury Township Wastewater Utility | WW | C/D | $9,250,000 | NA | NA | NA | NA | NA | NA | 998 | 3,850 |
| East Bradford Township Wastewater System Assets | WW | C/D | $5,000,000 | $1,298,627 | NA | NA | $1,130,372 | $49,804 | $49,804 | 1,248 | 9,942 |
| Township of Mahoning Water System Assets | W | C/D | $4,734,800 | NA | NA | NA | $753,857 | $151,916 | $91,468 | 1,186 | 4,218 |
| Township of Mahoning Sewer System Assets | WW | C/D | $4,765,200 | NA | NA | NA | $1,193,055 | ($173,564) | ($244,337) | 1,451 | 4,218 |
| Cheltenham Township Wastewater System Assets | WW | C/D | $50,250,000 | NA | NA | NA | $9,290,500 | $4,506,168 | $4,506,168 | 10,219 | 37,841 |
| East Norriton Township Wastewater System Assets | WW | C/D | $21,000,000 | $4,055,138 | NA | NA | $3,320,000 | $612,827 | $612,827 | 4,966 | 14,296 |
| Valley Township Water System Assets | W | C/D | $7,325,000 | NA | NA | NA | $698,550 | $78,704 | $78,704 | 1,669 | 7,493 |
| Valley Township Wastewater System Assets | WW | C/D | $13,950,000 | NA | NA | NA | $2,743,957 | ($408,562) | ($408,562) | 3,125 | 7,493 |
| Upper Pottsgrove Township Wastewater System Assets | WW | C/D | $13,750,000 | NA | $15,295,347 | $11,548,897 | $1,380,242 | $858,878 | $858,878 | 1,428 | 5,530 |
| Lower Makefield Township Wastewater System Assets | WW | C/D | $53,000,000 | $16,525,411 | NA | $17,592,071 | $10,012,924 | $4,053,817 | $3,520,813 | 11,151 | 33,197 |
| Willistown Township Wastewater Systems Assets | WW | C/D | $17,500,000 | $9,866,721 | $8,673,707 | $4,887,532 | $2,148,508 | $297,618 | ($8,933) | 2,294 | 11,214 |
| East Whiteland Township Wastewater System Assets | WW | C/D | $54,930,000 | $42,513,245 | $48,672,940 | $34,143,673 | $4,328,000 | $1,942,553 | $1,209,102 | 3,895 | 14,720 |
| | | | | Subject Company's Metrics | | | | | | | |
| City of Beaver Falls Wastewater System Assets | | | | $8,146,961 | $12,898,487 | $7,850,687 | $3,025,415 | $773,752 | $532,936 | 3,259 | 15,580 |
| | | | | Subject Company's Selected Transactions Multiples Valuations | | | | | | | |
| Municipal Authority of the City of Mckeesport | WW | INT | $27,918,020 | $15,147,523 | $22,006,304 | $16,591,847 | $36,171,856 | $19,529,645 | $21,811,382 | $39,781,221 | $52,304,382 |
| New Garden Township/Authority's WW System's Assets | WW | INT | $28,203,960 | $10,448,845 | $14,641,394 | $12,889,807 | $39,468,438 | $25,155,413 | $31,465,995 | $53,530,345 | $38,031,444 |
| Limerick Township Wastewater System's Assets | WW | INT | $34,163,758 | $14,064,646 | $15,919,805 | $16,325,842 | $51,418,926 | $23,357,714 | $44,789,033 | $45,190,343 | $62,243,749 |
| Steelton Borough (Water) Authority | W | INT | $44,378,984 | NA | NA | NA | NA | NA | NA | $29,663,228 | $59,094,740 |
| Exeter Township Wastewater System Assets | WW | INT | $30,691,294 | NA | NA | NA | $37,544,959 | $15,936,638 | $10,976,658 | $34,824,577 | $54,173,639 |
| Kane Borough Authority Wastewater System | WW | INT | $29,443,642 | $13,235,185 | $11,176,269 | $15,493,547 | $37,048,189 | $19,840,072 | $51,512,358 | $28,344,745 | $58,898,773 |
| Borough of Royersford Wastewater System Assets | WW | INT | $30,167,353 | $22,519,907 | $24,361,108 | $22,451,757 | $45,574,038 | $35,877,408 | $24,711,236 | $26,545,739 | $39,297,633 |
| York City Sewer Authority Wastewater System Assets | WW | INT | $29,555,692 | $19,051,416 | $25,122,513 | $23,474,446 | $28,853,021 | $18,630,675 | $20,361,149 | $55,711,428 | $45,240,890 |
| Sadsbury Township Wastewater Utility | WW | C/D | $33,819,315 | NA | NA | NA | NA | NA | NA | $30,206,162 | $37,432,468 |
| East Bradford Township Wastewater System Assets | WW | C/D | $32,804,214 | $31,367,594 | NA | NA | $13,382,387 | $77,679,654 | $53,503,315 | $13,056,891 | $7,835,446 |
| Township of Mahoning Water System Assets | W | C/D | $20,240,864 | NA | NA | NA | $19,001,927 | $24,115,652 | $27,587,119 | $13,010,719 | $17,488,901 |
| Township of Mahoning Sewer System Assets | WW | C/D | $1,750,164 | NA | NA | NA | $12,083,859 | ($21,243,405) | ($10,393,639) | $10,702,817 | $17,601,189 |
| Cheltenham Township Wastewater System Assets | WW | C/D | $13,529,934 | NA | NA | NA | $16,363,716 | $8,628,398 | $5,942,971 | $16,025,516 | $20,689,067 |
| East Norriton Township Wastewater System Assets | WW | C/D | $23,795,180 | $42,189,978 | NA | NA | $19,136,661 | $26,514,467 | $18,262,335 | $13,781,514 | $22,886,122 |
| Valley Township Water System Assets | W | C/D | $36,574,437 | NA | NA | NA | $31,724,522 | $72,013,236 | $49,600,464 | $14,303,280 | $15,230,682 |
| Valley Township Wastewater System Assets | WW | C/D | $2,863,846 | NA | NA | NA | $15,380,904 | ($26,419,083) | ($18,196,638) | $14,548,176 | $29,005,872 |
| Upper Pottsgrove Township Wastewater System Assets | WW | C/D | $20,302,817 | NA | $11,595,304 | $9,346,949 | $30,139,248 | $12,387,188 | $8,531,907 | $31,380,427 | $38,738,698 |
| Lower Makefield Township Wastewater System Assets | WW | C/D | $17,756,720 | $26,128,786 | NA | $23,651,929 | $16,014,003 | $10,116,103 | $8,022,465 | $15,489,822 | $24,873,934 |
| Willistown Township Wastewater Systems Assets | WW | C/D | ($107,024,644) | $14,449,767 | $26,023,881 | $28,109,693 | $24,642,572 | $45,496,794 | ($1,044,094,809) | $24,861,595 | $24,313,358 |
| East Whiteland Township Wastewater System Assets | WW | C/D | $28,287,749 | $10,526,427 | $14,556,628 | $12,630,107 | $38,397,885 | $21,879,547 | $24,211,490 | $45,960,685 | $58,139,226 |

Definitions: Where "INT" is "Fully Integrated Assets" and "C/D" is "Mostly Collection/Distribution Assets".
Where "WW" is wastewater and "W" is water.

Selected Transactions Method - Ex-Post
For City of Beaver Falls Wastewater System Assets
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

| | | | Ex-Post Selected Transactions' Metrics | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Name | Service | System | Announced Purchase Price was: | Investor Provided Capital | Ex-POST - OCN - Gross PP&E | Ex-Post - OCNLD - Net PP&E | Revenues | EBITDA | EBIT | Customers | Population |
| Municipal Authority of the City of Mckeesport | WW | INT | $156,000,000 | $83,903,219 | $108,231,570 | $80,085,602 | $13,047,844 | $6,180,616 | $3,811,679 | 12,780 | 46,468 |
| New Garden Township/Authority's WW System's Assets | WW | INT | $29,500,000 | $23,001,140 | $27,146,852 | $18,567,728 | $2,261,294 | $907,386 | $499,638 | 1,796 | 12,085 |
| Limerick Township Wastewater System's Assets | WW | INT | $75,100,000 | $43,501,755 | $63,480,402 | $46,153,867 | $4,418,775 | $2,487,775 | $893,600 | 5,416 | 18,798 |
| Steelton Borough (Water) Authority | W | INT | $22,500,000 | NA | $19,739,906 | $14,433,435 | NA | NA | NA | 2,472 | 5,932 |
| Exeter Township Wastewater System Assets | WW | INT | $96,000,000 | NA | $68,404,345 | $42,678,351 | $7,735,788 | $4,660,967 | $4,660,967 | 8,984 | 27,609 |
| Kane Borough Authority Wastewater System | WW | INT | $17,560,000 | $10,809,115 | $21,023,527 | $13,503,901 | $1,433,978 | $684,830 | $181,672 | 2,019 | 4,645 |
| Borough of Royersford Wastewater System Assets | WW | INT | $13,000,000 | $4,702,972 | $7,666,493 | $5,453,064 | $863,000 | $280,365 | $280,365 | 1,596 | 5,154 |
| York City Sewer Authority Wastewater System Assets | WW | INT | $235,000,000 | $100,493,098 | $155,875,776 | $115,727,779 | $24,641,181 | $9,759,797 | $6,150,926 | 13,747 | 80,929 |
| Sadsbury Township Wastewater Utility | WW | C/D | $9,250,000 | NA | $7,480,601 | $6,128,876 | NA | NA | NA | 998 | 3,850 |
| East Bradford Township Wastewater System Assets | WW | C/D | $5,000,000 | $1,298,627 | $8,294,931 | $5,473,948 | $1,130,372 | $49,804 | $49,804 | 1,248 | 9,942 |
| Township of Mahoning Water System Assets | W | C/D | $4,734,800 | NA | $5,294,272 | $3,507,138 | $753,857 | $151,916 | $91,468 | 1,186 | 4,218 |
| Township of Mahoning Sewer System Assets | WW | C/D | $4,765,200 | NA | $4,931,649 | $3,234,859 | $1,193,055 | ($173,564) | ($244,337) | 1,451 | 4,218 |
| Cheltenham Township Wastewater System Assets | WW | C/D | $50,250,000 | NA | $19,818,216 | $15,408,458 | $9,290,500 | $4,506,168 | $4,506,168 | 10,219 | 37,841 |
| East Norriton Township Wastewater System Assets | WW | C/D | $21,000,000 | $4,055,138 | $16,916,212 | $9,251,450 | $3,320,000 | $612,827 | $612,827 | 4,966 | 14,296 |
| Valley Township Water System Assets | W | C/D | $7,325,000 | NA | $6,843,616 | $4,983,659 | $698,550 | $78,704 | $78,704 | 1,669 | 7,493 |
| Valley Township Wastewater System Assets | WW | C/D | $13,950,000 | NA | $13,389,108 | $8,832,690 | $2,743,957 | ($408,562) | ($408,562) | 3,125 | 7,493 |
| Upper Pottsgrove Township Wastewater System Assets | WW | C/D | $13,750,000 | NA | $15,295,347 | $11,548,897 | $1,380,242 | $858,878 | $858,878 | 1,428 | 5,530 |
| Lower Makefield Township Wastewater System Assets | WW | C/D | $53,000,000 | $16,525,411 | $32,003,924 | $19,808,274 | $10,012,924 | $4,053,817 | $3,520,813 | 11,151 | 33,197 |
| Willistown Township Wastewater Systems Assets | WW | C/D | $17,500,000 | $9,866,721 | $19,641,520 | $13,367,274 | $2,148,508 | $297,618 | ($8,933) | 2,294 | 11,214 |
| East Whiteland Township Wastewater System Assets | WW | C/D | $54,930,000 | $42,513,245 | $43,447,309 | $32,955,596 | $4,328,000 | $1,942,553 | $1,209,102 | 3,895 | 14,720 |

| | | | Subject Company's Metrics | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| City of Beaver Falls Wastewater System Assets | | | $8,146,961 | $12,898,487 | $7,850,687 | $3,025,415 | $773,752 | $532,936 | 3,259 | 15,580 |

| | | | Ex-Post Subject Company's Selected Transactions Multiples Valuations | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Municipal Authority of the City of Mckeesport | WW | INT | $27,328,721 | $15,147,523 | $18,591,285 | $15,292,476 | $36,171,856 | $19,529,645 | $21,811,382 | $39,781,221 | $52,304,382 |
| New Garden Township/Authority's WW System's Assets | WW | INT | $28,073,754 | $10,448,845 | $14,016,556 | $12,473,000 | $39,468,438 | $25,155,413 | $31,465,995 | $53,530,345 | $38,031,444 |
| Limerick Township Wastewater System's Assets | WW | INT | $33,637,280 | $14,064,646 | $15,259,456 | $12,774,370 | $51,418,926 | $23,357,714 | $44,789,033 | $45,190,343 | $62,243,749 |
| Steelton Borough (Water) Authority | W | INT | $28,924,561 | NA | $14,701,993 | $12,238,283 | NA | NA | NA | $29,663,228 | $59,094,740 |
| Exeter Township Wastewater System Assets | WW | INT | $27,031,096 | NA | $18,101,990 | $17,659,210 | $37,544,959 | $15,936,638 | $10,976,658 | $34,824,577 | $54,173,639 |
| Kane Borough Authority Wastewater System | WW | INT | $28,732,700 | $13,235,185 | $10,773,522 | $10,208,758 | $37,048,189 | $19,840,072 | $51,512,358 | $28,344,745 | $58,898,773 |
| Borough of Royersford Wastewater System Assets | WW | INT | $29,389,211 | $22,519,907 | $21,871,843 | $18,715,887 | $45,574,038 | $35,877,408 | $24,711,236 | $26,545,739 | $39,297,633 |
| York City Sewer Authority Wastewater System Assets | WW | INT | $27,904,537 | $19,051,416 | $19,445,898 | $15,941,820 | $28,853,021 | $18,630,675 | $20,361,149 | $55,711,428 | $45,240,890 |
| Sadsbury Township Wastewater Utility | WW | C/D | $23,859,165 | NA | $15,949,388 | $11,848,642 | NA | NA | NA | $30,206,162 | $37,432,468 |
| East Bradford Township Wastewater System Assets | WW | C/D | $26,471,395 | $31,367,594 | $7,774,921 | $7,170,955 | $13,382,387 | $77,679,654 | $53,503,315 | $13,056,891 | $7,835,446 |
| Township of Mahoning Water System Assets | W | C/D | $17,619,793 | NA | $11,535,440 | $10,598,794 | $19,001,927 | $24,115,652 | $27,587,119 | $13,010,719 | $17,488,901 |
| Township of Mahoning Sewer System Assets | WW | C/D | $4,682,663 | NA | $12,463,148 | $11,564,675 | $12,083,859 | ($21,243,405) | ($10,393,639) | $10,702,817 | $17,601,189 |
| Cheltenham Township Wastewater System Assets | WW | C/D | $17,993,858 | NA | $32,704,708 | $25,602,628 | $16,363,716 | $8,628,398 | $5,942,971 | $16,025,516 | $20,689,067 |
| East Norriton Township Wastewater System Assets | WW | C/D | $22,075,476 | $42,189,978 | $16,012,345 | $17,820,388 | $19,136,661 | $26,514,467 | $18,262,335 | $13,781,514 | $22,886,122 |
| Valley Township Water System Assets | W | C/D | $29,745,275 | NA | $13,805,774 | $11,538,968 | $31,724,522 | $72,013,236 | $49,600,464 | $14,303,280 | $15,230,682 |
| Valley Township Wastewater System Assets | WW | C/D | $5,736,732 | NA | $13,438,826 | $12,399,063 | $15,380,904 | ($26,419,083) | ($18,196,638) | $14,548,176 | $29,005,872 |
| Upper Pottsgrove Township Wastewater System Assets | WW | C/D | $20,302,817 | NA | $11,595,304 | $9,346,949 | $30,139,248 | $12,387,188 | $8,531,907 | $31,380,427 | $38,738,698 |
| Lower Makefield Township Wastewater System Assets | WW | C/D | $17,876,413 | $26,128,786 | $21,360,500 | $21,005,687 | $16,014,003 | $10,116,103 | $8,022,465 | $15,489,822 | $24,873,934 |
| Willistown Township Wastewater Systems Assets | WW | C/D | ($111,070,087) | $14,449,767 | $11,492,162 | $10,277,864 | $24,642,572 | $45,496,794 | ($1,044,094,809) | $24,861,595 | $24,313,358 |
| East Whiteland Township Wastewater System Assets | WW | C/D | $28,563,515 | $10,526,427 | $16,307,429 | $13,085,433 | $38,397,885 | $21,879,547 | $24,211,490 | $45,960,685 | $58,139,226 |

Definitions: Where "INT" is "Fully Integrated Assets" and "C/D" is "Mostly Collection/Distribution Assets".
Where "WW" is wastewater and "W" is water.

Summar of Selected Transactions Method - Wall Street Transactions
For City of Beaver Falls Wastewater System Assets
Based on Recent Walls Sreet Transactions Without Discount for Cost Free Capital

| | City of Beaver Falls Wastewater System Assets's Domestic Customers Indicated Value |
|---|---|
| Based on Recent SJW Group's Purchase of Connecticut Water Service Inc. | $40,051,121 |
| Based on Recent Aquarion Water Company's Purchase of New England Service Company, Inc. | $33,180,898 |

Summar of Selected Transactions Method - Wall Street Transactions

For City of Beaver Falls Wastewater System Assets

Based on Recent SJW Group's Bid and Purchase of Connecticut Water Service Inc., With and Without Discount for Cost Free Capital

| Connecticut Water Service Inc. (*Financial information reported in 000 of $*) | | | City of Beaver Falls Wastewater System Assets | | | |
|---|---|---|---|---|---|---|
| Purchase Price was: $1,106,267 | | | | | | |
| | Subject Company Statistics | Transaction Multiple | City of Beaver Falls Wastewater System Assets's Company Statistics | Selected Transactions Multiples Valuation | | Domestic Customers Indicated Value * |
| Investor Provided Capital | $573,223 | 1.93 | $8,146,961 | $15,722,877 | | |
| Gross PP&E | $939,050 | 1.18 | $12,898,487 | $15,195,326 | | |
| Net PP&E | $697,723 | 1.59 | $7,850,687 | $12,447,571 | $14,085,224 | |
| Revenues | $107,054 | 10.33 | $3,025,415 | $31,263,819 | | |
| EBITDA | $48,920 | 22.61 | $773,752 | $17,497,461 | | |
| EBIT | $32,236 | 34.32 | $532,936 | $18,289,159 | | $27,851,509 |
| Customers | 135,645 | $8,156 | 3,259 | $26,579,117 | | |
| Population | 450,000 | $2,458 | 15,580 | $38,301,424 | $32,440,270 | |
| Average | | | | $21,912,094 | | |
| | Subject Company Statistics | Transaction Multiple | | | | |
| Investor Provided Capital | $573,223 | 1.93 | $8,146,961 | $15,722,877 | | |
| Gross PP&E (Less "Cost Free" Capital) | $646,723 | 1.71 | $12,898,487 | $22,063,820 | | |
| Net PP&E (Less "Cost Free" Capital) | $480,521 | 2.30 | $7,850,687 | $18,074,041 | $18,893,348 | |
| Revenues | $107,054 | 10.33 | $3,025,415 | $31,263,819 | | |
| EBITDA | $48,920 | 22.61 | $773,752 | $17,497,461 | | |
| EBIT | $32,236 | 34.32 | $532,936 | $18,289,159 | | $40,051,121 |
| Customers (Adj. "Cost Free" Capital) | 93,419 | $11,842 | 3,259 | $38,593,238 | | |
| Population (Adj. "Cost Free" Capital) | 309,914 | $3,570 | 15,580 | $55,614,186 | $47,103,712 | |
| Average | | | | $27,139,825 | | |

* - Indicated Value based on weighting of 25% Capital Items and 75% Demographics Items

Summar of Selected Transactions Method - Wall Street Transactions

For City of Beaver Falls Wastewater System Assets

Based on Recent Aquarion Water Company's Purchase of New England Service Company, Inc., With and Without Discount for Cost Free Capital

| New England Service Company, Inc. | | | City of Beaver Falls Wastewater System Assets | | | |
|---|---|---|---|---|---|---|
| Purchase Price was: $49,290,414 | | | City of Beaver Falls Wastewater System Assets's Company Statistics | Selected Transactions Multiples Valuation | | Domestic Customers Indicated Value * |
| | Subject Company Statistics | Transaction Multiple | | | | |
| Investor Provided Capital | $26,734,587 | 1.84 | $8,146,961 | $15,020,508 | | |
| Gross PP&E | $54,517,263 | 0.90 | $12,898,487 | $11,661,843 | | |
| Net PP&E | $36,566,790 | 1.35 | $7,850,687 | $10,582,378 | $12,801,443 | |
| Revenues | $7,994,088 | 6.17 | $3,025,415 | $18,654,280 | | |
| EBITDA | $2,729,953 | 18.06 | $773,752 | $13,970,399 | | |
| EBIT | $1,559,860 | 31.60 | $532,936 | $16,840,375 | | $20,424,355 |
| Customers | 9,515 | $5,180 | 3,259 | $16,882,549 | | |
| Population | 26,437 | $1,864 | 15,580 | $29,048,101 | $22,965,325 | |
| Average | | | | $16,582,554 | | |
| | Subject Company Statistics | Transaction Multiple | | | | |
| Investor Provided Capital | $26,734,587 | 1.84 | $8,146,961 | $15,020,508 | | |
| Gross PP&E (Less "Cost Free" Capital) | $32,535,719 | 1.51 | $12,898,487 | $19,540,732 | | |
| Net PP&E (Less "Cost Free" Capital) | $21,822,937 | 2.26 | $7,850,687 | $17,731,967 | $17,280,620 | |
| Revenues | $7,994,088 | 6.17 | $3,025,415 | $18,654,280 | | |
| EBITDA | $2,729,953 | 18.06 | $773,752 | $13,970,399 | | |
| EBIT | $1,559,860 | 31.60 | $532,936 | $16,840,375 | | $33,180,898 |
| Customers (Adj. "Cost Free" Capital) | 5,679 | $8,680 | 3,259 | $28,288,614 | | |
| Population (Adj. "Cost Free" Capital) | 15,778 | $3,124 | 15,580 | $48,673,366 | $38,480,990 | |
| Average | | | | $22,340,030 | | |

* - Indicated Value based on weighting of 25% Capital Items and 75% Demographics Items

Market Approach
City of Beaver Falls Wastewater System Assets
Determination of the Value of Ultimate Whole Customers and the
Market Approach Conclusion

| | | | |
|---|---|---|---|
| 1. | Integrated, Excluding Wholesale Transactions | | $36,481,708 |
| 2. | Mostly Collection/Distribution Transactions | − | $23,653,042 |
| 3. | Market Value of Treatment Only | | $12,828,666 |
| 4. | Number of Ultimate Customers | | 7,019 |
| 5. | Number of Domestic Customers | − | 3,259 |
| 6. | Number of Ultimate Wholesale Customers | | 3,760 |
| 7. | Market Value of Treatment Only | | $12,828,666 |
| 8. | Number of Domestic Customers | ÷ | 3,259 |
| 9. | Treatment Value Per Domestic Customer | | $3,936 |
| 10. | Ultimate Wholesale Customer Equivalency Factor * | × | 97% |
| 11. | Treatment Value Per Ultimate Wholesale Customer | | $3,818 |
| 12. | Number of Ultimate Wholesale Customers | × | 3,760 |
| 13. | Value of Ultimate Wholesale Customers | | $14,355,680 |
| 14. | Selected Transactions Method - Domestic Customers | | $33,274,541 |
| 15. | Market Multiples Method - Domestic Customers | | $39,343,441 |
| 16. | Market Approach - Domestic Customers ** | | $36,308,991 |
| 17. | Market Value of Ultimate Wholesale Customers | + | $14,355,680 |
| 18. | Conclusion - Market Approach | | $50,664,671 |

* Based on the review of flows and revenues, see Exhbit 2, page 2.
** Median of lines 14 and 15.

City of Beaver Falls Wastewater System Assets
Summary of Approach Results and
Fair Market Value Conclusion at Appraisal Date

| Valuation Approach | Indicated Value | Conclusion | Consideration |
|---|---|---|---|
| Cost Approach | $32,994,154 | | 25.00% |
| Income Approach | 45,450,675 | | 37.50% |
| Market Approach | 50,664,671 | | 37.50% |
| | | **Conclusion $44,292,000** | |

WORKPAPERS

# Daily Bond Yields and Key Indicators

Updated by 11 am ET with data from the previous business day.

Data as of 6-Dec-21

**Moody's Daily Long-term Corporate Bond Yield Averages**

| | Utilities | Industrial | Corporate |
|---|---|---|---|
| Aaa | NA | 2.54 | 2.54 |
| Aa | 2.82 | 2.57 | 2.7 |
| A | 2.95 | 2.81 | 2.88 |
| Baa | 3.19 | 3.24 | 3.22 |
| Avg | 2.99 | 2.79 | 2.89 |

**Moody's Daily Treasury Yield Averages**

| | |
|---|---|
| Short-Term (3-5 yrs) | 1.07 |
| Medium-Term (5-10 yrs) | 1.3 |
| Long-Term (10+ yrs) | 1.75 |

**Moody's Daily Public Utility Common Stock Yield Averages**

| | |
|---|---|
| Price | 518.33 |
| Yield | 3.74 |
| New Dividend | 19.38 |

**Moody's Commodity and Scrap Price Indexes**

| | |
|---|---|
| Spot Commodity Index | 9,266.03 |
| Industrial Metals Index | 2,907.66 |

* Moody's “Aaa” Utilities Index was suspended on 12/10/01. Since 2000, TVA was the only issuer left in the index as a decade of deregulation, debt growth, competition, and consolidation eliminated the rest of the Aaa universe.

Index Name: S&P Municipal Bond Revenue Index

| As of: | 16-Jun-22 |
|---|---|
| 12/27/2021 | 2.68% |
| 12/28/2021 | 2.68% |
| 12/29/2021 | 2.68% |
| 12/30/2021 | 2.69% |
| 12/31/2021 | 2.68% |
| 1/3/2022 | 2.70% |
| 1/4/2022 | 2.71% |
| 1/5/2022 | 2.71% |
| 1/6/2022 | 2.75% |

**FED H.15**

| DATE | DAAA | DBAA | DGS10 | DGS20 | DGS30 |
|---|---|---|---|---|---|
| 2021-12-27 | 2.73 | 3.34 | 1.48 | 1.92 | 1.88 |
| 2021-12-28 | 2.71 | 3.35 | 1.49 | 1.94 | 1.90 |
| 2021-12-29 | 2.70 | 3.40 | 1.55 | 2.00 | 1.96 |
| 2021-12-30 | 2.71 | 3.37 | 1.52 | 1.97 | 1.93 |
| 2021-12-31 | 2.68 | 3.34 | 1.52 | 1.94 | 1.90 |
| 2022-01-03 | 2.79 | 3.45 | 1.63 | 2.05 | 2.01 |
| 2022-01-04 | 2.82 | 3.50 | 1.66 | 2.10 | 2.07 |
| 2022-01-05 | 2.84 | 3.51 | 1.71 | 2.12 | 2.09 |
| 2022-01-06 | 2.81 | 3.51 | 1.73 | 2.12 | 2.09 |

**FED H.15**

| | | 10-yr T-bond | 20-yr T-bond | 30-yr T-bond |
|---|---|---|---|---|
| Spot | 12/31/21 | 1.52 | 1.94 | 1.90 |

| **FED H.15** | | **AAA Corp** | **BAA CORP** | | A Rated Utility | | |
|---|---|---|---|---|---|---|---|
| | 12/31/21 | 2.68 | 3.34 | Spread | 0.14 | 0.12 | |
| Moody's Spot ===> | | 2.54 | 3.22 | Moody's Spot ===> | 2.95 | 2.95 | |
| | | 0.14 | 0.12 | Implied | 3.09 | 3.07 | 3.08 |

**Moody's Daily Long-term Corporate Bond Yield Averages**

| | 12/6/2021 | Utilities | Industrial | Corporate |
|---|---|---|---|---|
| Spot | Aaa | NA | 2.54 | 2.54 |
| | Aa | 2.82 | 2.57 | 2.7 |
| | A | 2.95 | 2.81 | 2.88 |
| | Baa | 3.19 | 3.24 | 3.22 |
| | Avg | 2.99 | 2.79 | 2.89 |

**S&P Municipal Bond Revenue Index**

12/31/21 2.68%

Utilities
Aa
A **3.08**
Baa

| | | **Decade Spread** | **Annual Spread** |
|---|---|---|---|
| 10-Year | 1.52 | | |
| 20-Year | 1.94 | 0.420 | 0.042 |
| 30-Year | 1.90 | -0.040 | |

| | |
|---|---|
| REVENUE BOND INDEX | 2.68 |
| 10-20 Yr | 0.21 |
| 20-30 Yr | -0.04 |
| | **2.85** |

30-Yr Rev Bond Est. **2.85**

| | | |
|---|---|---|
| 2020 Lt Debt | 3.02 | 3.08 |
| Prf Stk | 5.76 | 191% |
| Pref Stock Est. | 191% | **5.87** |

| | 12/31/21 |
|---|---|
| **A-Rated Rev Bonds** | **2.85** |
| **A-Rated PU Bonds** | **3.08** |
| **A-Rated PU Pref Stk** | **5.87** |
| **30-yr T-bond** | **1.90** |

| | SBBI | SBBI |
|---|---|---|
| Equity Risk Premium | 7.46 | 7.46 |
| Beta (Value Line Med.) | 0.80 | 0.80 |
| Risk Adjusted Equity Premium | 5.97 | 5.97 |
| Yield (RF) | 1.90 | 1.90 |
| Size Premium | 2.48 | 0.00 |
| | 10.35 | 7.87 |

High 10.35
Low 7.87

**0.80**

12.33 Total Return SBBI 1926-2021
4.87 Income Return SBBI 1926-2021

**1.90** 30-yr T-bond

| | Recent Market Value (Mill $) | Market Quartile Name | Market Quartile | Quartile Size Premium | Value Line Beta |
|---|---|---|---|---|---|
| American States Water Co | 3,820.69 | Mid-Cap | 2 | 2.48 | 0.65 |
| American Water Works Co Inc | 34,285.22 | Large-Cap | 1 | 0 | 0.9 |
| Artesian Resources Corp | 434.89 | Mico-Cap | 4 | 6.21 - | |
| California Water Service Gp | 3,780.41 | Mid-Cap | 2 | 2.48 | 0.7 |
| Essential Utilities, Inc. | 13,569.77 | Large-Cap | 1 | 0 | 1 |
| Middlesex Water Co | 2,104.89 | Low-Cap | 3 | 3.95 | 0.7 |
| SJW Corp | 2,183.28 | Low-Cap | 3 | 3.95 | 0.8 |
| York Water Co | 652.35 | Low-Cap | 3 | 3.95 | 0.85 |
| Average | 7,603.940 | Mid-Cap | 2 | 2.48 | 0.80 |
| Median | 2,981.846 | Mid-Cap | 2 | 2.48 | 0.80 |

**6/17/2022**

| 9/30/21 | | | | | | | 12/31/21 | | Book Ratios | | | | | Market Ratios | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Company Name | Ticker Symbol | LT Debt-Total Qtly | Preferred S | Minority In | Common Equity-Total-Qtly | Invested Capital-Total Qtly | Market Value-Mnthly | | LTD | Pref | Equity | | | LTD | Pref | Equity | |
| AMERICAN ST. | **AWR** | 613.982 | 0.000 | 0.000 | 678.935 | 1,292.917 | 3,820.686 | AMERICA | 0.475 | 0.000 | 0.525 | 1.000 | | 0.138 | 0.000 | 0.862 | 1.000 |
| AMERICAN W/ | **AWK** | 10,490.000 | 0.000 | 0.000 | 6,866.000 | 17,356.000 | 34,285.219 | AMERICA | 0.604 | 0.000 | 0.396 | 1.000 | | 0.234 | 0.000 | 0.766 | 1.000 |
| ARTESIAN RES | **ARTN.A** | 145.301 | 0.000 | 0.000 | 174.642 | 319.943 | 434.885 | ARTESIAI | 0.454 | 0.000 | 0.546 | 1.000 | | 0.250 | 0.000 | 0.750 | 1.000 |
| CALIFORNIA W | **CWT** | 1,064.904 | 0.000 | 4.689 | 1,115.971 | 2,185.564 | 3,780.411 | CALIFORI | 0.487 | 0.000 | 0.513 | 1.000 | | 0.220 | 0.000 | 0.780 | 1.000 |
| ESSENTIAL UT | **WTRG** | 5,712.218 | 0.000 | 0.000 | 5,127.862 | 10,840.080 | 13,569.765 | ESSENTIA | 0.527 | 0.000 | 0.473 | 1.000 | | 0.296 | 0.000 | 0.704 | 1.000 |
| MIDDLESEX W | **MSEX** | 278.624 | 2.084 | 0.000 | 362.340 | 643.048 | 2,104.891 | MIDDLES | 0.433 | 0.003 | 0.564 | 1.000 | | 0.117 | 0.001 | 0.882 | 1.000 |
| SJW GROUP | **SJW** | 1,446.320 | 0.000 | 0.000 | 1,000.711 | 2,447.031 | 2,183.280 | SJW GROI | 0.591 | 0.000 | 0.409 | 1.000 | | 0.398 | 0.000 | 0.602 | 1.000 |
| THE YORK WA | **YORW** | 134.400 | 0.000 | 0.000 | 150.660 | 285.060 | 652.347 | THE YORI | 0.471 | 0.000 | 0.529 | 1.000 | | 0.171 | 0.000 | 0.829 | 1.000 |
| | | | | | | | | | 0.505 | 0.000 | 0.494 | | Avg | 0.228 | 0.000 | 0.772 | |
| | | | | | | | | | 0.481 | 0.000 | 0.519 | | Med | 0.227 | 0.000 | 0.773 | |

| Assumptions: | 12/31/2021 |
|---|---|
| Debt Cost | 3.08 |
| Pref. Stock Cost | 5.87 |
| Equity Cost | 10.35 |
| Equity Cost | 7.87 |

| Ratio | Cost | Wt | Shield | Overall | |
|---|---|---|---|---|---|
| 22.70% | 3.080 | 0.70 | 0.72 | 0.5033952 | |
| 0.00% | 5.870 | 0.00 | 1 | 0 | |
| 77.30% | 10.350 | 8.00 | 1 | 8.00055 | |
| | | 8.70 | | **8.50** | **<<<<ANSWER** |
| 22.70% | 3.080 | 0.70 | 0.72 | 0.5033952 | |
| 0.00% | 5.870 | 0.00 | 1 | 0 | |
| 77.30% | 7.868 | 6.08 | 1 | 6.081964 | |
| | | 6.78 | | **6.59** | **<<<<ANSWER** |

| | ROE |
|---|---|
| **Public Meeting held October 7, 2021** | 9.8 |

**DSIC Weighted Cost of Capital**

| Assumptions: | 12/31/2021 |
|---|---|
| Debt Cost | 3.08 |
| Pref. Stock Cost | 5.87 |
| DSIC Equity Cost | 9.8 |

| | Ratio | Cost | Wt | Shield | Overall | |
|---|---|---|---|---|---|---|
| Debt | 48.10% | 3.080 | 1.48 | 0.72 | 1.066666 | |
| Pref | 0.00% | 5.870 | 0.00 | 1 | 0 | |
| Equity | 51.90% | 9.800 | 5.09 | 1 | 5.0862 | |
| | | | 6.57 | | **6.15** | **<<<<ANSWER** |

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# Aqua America's Pennsylvania Subsidiary Enters Agreement to Purchase Cheltenham Township Wastewater System

July 02, 2018 07:00 AM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America announced today that its Pennsylvania subsidiary has signed an asset purchase agreement with Cheltenham Township to purchase its wastewater system, which serves approximately 10,500 connections in Montgomery County, for $50.25 million. The agreement must be approved by the Pennsylvania Public Utility Commission.

The transaction will be Aqua Pennsylvania's fourth acquisition application referred to the Pennsylvania PUC since Act 12, commonly referred to as fair market value legislation, was enacted last year. Aqua Pennsylvania has asset purchase agreements with the 2,100-customer New Garden Township wastewater system in Chester County and the 5,400-customer Limerick Township wastewater system in Montgomery County. The company also has an agreement, signed in December 2017, with East Bradford Township in Chester County to purchase its 1,200-customer wastewater collection system. Aqua already provides water service to East Bradford, as it does with Cheltenham.

These four systems, including Cheltenham, total more than 19,000 wastewater connections and would nearly double Aqua Pennsylvania's current 22,000-customer wastewater operation.

The new law encourages a consolidation of the fragmented industry for the benefit of customers, the environment, and local governments. This transaction will benefit customers by leveraging compliance expertise, purchasing power gained through economies of scale and operational efficiencies to ultimately benefit service to our customers at affordable rates.

"We are pleased with the momentum we are gaining to reach agreements with municipal systems," said Aqua America Chairman and CEO Christopher Franklin. "Act 12 is having its intended impact, allowing municipalities to be compensated for the fair value of their water and wastewater assets and enabling utility professionals to bring expertise to systems in need."

Aqua Pennsylvania President Marc Lucca says his team is ready to work with the Cheltenham community on making needed system improvements.

"As with our pending agreements with New Garden, East Bradford and Limerick, the Aqua Pennsylvania team is looking forward to assuming Cheltenham's sewer utility responsibilities so the township can direct its attention and capital to other priorities," said Lucca. "We are anxious to begin the work necessary to help the township meet the requirements of an outstanding Pennsylvania Department of Environmental Protection consent order, specifically related to inflow and infiltration issues there."

In total, Aqua has plans to spend nearly $50 million over the next 10 years to improve Cheltenham's wastewater system.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

**Forward-Looking Statements**

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 including, among others: the company's ability to successfully close the acquisition of the wastewater systems noted in this release. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, the successful integration of the customers and the facilities, the success of the company's growth efforts including its ability to utilize Act 12, and other factors discussed in our Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission.

**Cheltenham Township**
**1329 Proceeding**
**Cheltenham Twp. - Water Accounts reported for Sewer Billing**

| Type of Service | Gallons | Customers[1] |
|---|---|---|
| Commercial | 280,938,300 | 534 |
| Industrial | 364,400 | 14 |
| Public | 9,962,700 | 23 |
| Residential | 484,692,800 | 9,648 |
| **Total** | **775,958,200** | **10,219** |

1. Customers include all Active and Inactive Accounts

The following table breaks down the above total figures by customer class as of December 31, 2017, 2016, and 2015 :

| | 2017 | 2016 | 2015 |
|---|---|---|---|
| **Customers:** | | | |
| Residential | 118,493 | 111,494 | 110,254 |
| Commercial | 9,386 | 8,626 | 8,569 |
| Industrial | 536 | 479 | 478 |
| Public Authority | 1,072 | 948 | 964 |
| Fire Protection | 3,178 | 2,876 | 2,815 |
| Other (including non-metered accounts) | 2,980 | 545 | 553 |
| Total | 135,645 | 124,968 | 123,633 |
| **Water Revenues** *(in thousands):* | | | |
| Residential | $ 62,831 | $ 59,884 | $ 58,439 |
| Commercial | 13,676 | 12,250 | 11,816 |
| Industrial | 3,196 | 3,176 | 3,229 |
| Public Authority | 3,845 | 3,510 | 3,193 |
| Fire Protection | 20,235 | 18,486 | 18,016 |
| Other (including non-metered accounts) | 3,271 | 1,361 | 1,348 |
| Total | $ 107,054 | $ 98,667 | $ 96,041 |
| **Customer Water Consumption** *(millions of gallons):* | | | |
| Residential | 6,408 | 6,583 | 6,551 |
| Commercial | 2,026 | 1,954 | 1,941 |
| Industrial | 711 | 724 | 777 |
| Public Authority | 575 | 539 | 503 |
| Total | 9,720 | 9,800 | 9,772 |

The Regulated Companies own various small, discrete parcels of land that are no longer required for water supply purposes. At December 31, 2017 , this land totaled over 600 acres. Over the past several years, we have been disposing of these land parcels through sales and/or donations, primarily to towns and municipalities. For more information, please refer to *Segments of Our Business* below.

Additional information on land dispositions can be found in Item 7 – "Management's Discussion and Analysis of Financial Conditions and Results of Operations – Commitments and Contingencies".

*Competition*

Our Regulated Companies face competition from a few small privately-owned water systems operating within, or adjacent to, our franchise areas and from municipal and public authority systems whose service areas in some cases overlap portions of our franchise areas.

*Employees*

As of December 31, 2017 , we employed a total of 294 people. Our employees are not covered by collective bargaining agreements.

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DEALS AUGUST 6, 2018 / 5:11 PM / 6 MONTHS AGO

# SJW Group makes $1.1 billion all-cash offer for Connecticut Water

3 MIN READ

NEW YORK (Reuters) - SJW Group (SJW.N) and Connecticut Water Service Inc (CTWS.O) said on Monday they were changing from a merger to an acquisition agreement, with SJW offering to buy the New England utility for $1.1 billion in cash instead of combining stock.

The switch to an all-cash offer is worth $70 per Connecticut Water share, a 33 percent premium to Connecticut Water's share price prior to the original deal announced in March, according to a joint statement.

It was also higher than the implied $61.86 per share value of the Clinton, Connecticut-based firm under the merger-of-equals transaction, which would have created a combined company in which existing SJW shareholders would hold 60 percent of the stock.

SJW closed 2.3 percent lower, while Connecticut Water was 9 percent higher at $68.50.

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To pay for the acquisition, SJW will initially utilize a $975 million bridge loan from financial adviser JP Morgan Chase (JPM.N). Ultimately, the purchase would be covered by debt and between $450 million and $500 million of equity finance.

The new deal aims to conclude in the first quarter of 2019, subject to approvals from Connecticut Water's shareholders, as well as regulators in Connecticut and Maine.

The duo's original all-stock merger announcement in March triggered competing offers from Eversource Energy (ES.N) and California Water Service Group (CWT.N).

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"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

Switching to an acquisition, versus a merger structure, means that SJW shareholders will no longer be required to vote on approving the deal, the statement said.

RBS sounds alarm over Brexit

CalWater has an open tender offer to acquire SJW that runs until Sept. 28.

However, asked if the change was aimed at heading off any shareholder challenge to the deal, Thornburg told Reuters it "wasn't a consideration" and it had received nothing but support from its shareholders.

CalWater declined to comment. A spokesman for Eversource said the company was evaluating developments but, as it has made clear, it will be disciplined in pursuing this or any other transaction.

Reporting by David French in New York; Additional Reporting by Liana B. Baker; Editing by Lisa Shumaker

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Filed by Eversource Energy
(Commission File No. 001-05324) pursuant
to Rule 425 under the Securities Act of 1933

Subject Company: New England Service Company

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**JOINT NEWS RELEASE**

**New England Service Company To be Acquired by Aquarion Water Company**

*Region's largest private water company expands operations in*
*Connecticut, Massachusetts and New Hampshire*

BRIDGEPORT, CONN. – April 8, 2021 – Aquarion Company (Aquarion), parent of Aquarion Water Company, and New England Service Company (NESC) (OTC Pink Sheets Trading Symbol: NESW) today announced that they have entered into a definitive agreement whereby Aquarion will acquire all outstanding shares of NESC and NESC will become a wholly-owned subsidiary of Aquarion. Aquarion is a water supply company and holding company based in Bridgeport, Connecticut, providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire. NESC is a holding company based in Plainville, Connecticut providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire.

Under the agreement, which was unanimously approved by the Boards of Directors of both Aquarion and NESC, the acquisition will be executed through a stock-for-stock transaction that is structured to be a tax-free reorganization. The agreement provides that the stockholders of NESC will receive 0.51208 shares of the common shares of Aquarion's parent, Eversource Energy (Eversource) (NYSE: ES), in exchange for each share of NESC common stock. The fixed exchange ratio implies a $44.90 per share price based on the $87.68 closing price of Eversource Energy common shares on April 6, 2021. In connection with the exchange, Eversource Energy will issue approximately 463,000 shares of ES Common Stock at closing.

The merger includes NESC's Valley Water System in Connecticut, Colonial Water Company and Mountain Water Systems in Massachusetts, and Abenaki Water Company in New Hampshire, as well as unregulated service operations throughout New England. The merger will add nearly 10,000 customers to Aquarion's existing base of 216,000 customers. Under the agreement, all NESC employees will be retained.

"This merger will create long-term benefits for customers, employees, and the communities we serve," said Donald Morrissey, President of Aquarion Water Company. "We will make investments in these water systems focused on reliability and water quality and deliver a superior customer experience. We also welcome NESC's dedicated employees to the Aquarion team. I'm confident that we share a similar passion for delivering superior water service to customers and the communities we serve and being great stewards of the environment."

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Over the last ten years, Aquarion has integrated over 70 water systems into its operations, strengthening the company's ability to deliver high-quality water to communities throughout the region.

"I am pleased to announce the NESC and Aquarion combination and look forward to working with Aquarion's leadership team on a smooth transition for our customers and employees," said Don Vaughan, NESC Chairman. He also noted, "Aquarion is well-positioned to deliver the reliable high-quality water service that our customers expect." NESC President, Nicholas LaChance, added "The stockholders, customers and employees of NESC will benefit from this deal with Aquarion. We view this transaction with Aquarion as a win for all of our stakeholders, and we look forward to working closely with their team."

The completion of the transaction will require approval by the stockholders of NESC, and the NESC Board of Directors has resolved to recommend the adoption of the merger agreement by the stockholders. The transaction is also subject to the approval of regulatory authorities, including the Connecticut Public Utilities Regulatory Authority, Massachusetts Department of Public Utilities, and New Hampshire Public Utilities Commission, and satisfaction of several other conditions. The parties plan to file all required regulatory applications over the coming months with an anticipated closing by the end of 2021.

***Advisors and Counsel***

Ropes & Gray LLP served as counsel to Aquarion Company and Eversource Energy in the transaction. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of New England Service Company. Cranmore, FitzGerald and Meaney served as counsel to New England Service Company.

***About Aquarion Water Company:***

Aquarion Water Company is the public water supply company for more than 625,000 people in 52 cities and towns throughout Connecticut, as well as serving customers in Massachusetts and New Hampshire. It is the largest investor-owned water utility in New England and among the seven largest in the U.S. Based in Bridgeport, CT, Aquarion has been in the public water supply business since 1857. Across its operations, Aquarion strives to act as a responsible steward of the environment and to assist the communities it serves in promoting sustainable practices. Aquarion Company is a wholly-owned subsidiary of Eversource.

For more information on Aquarion Water Company, please visit www.aquarionwater.com or www.facebook.com/aquarionwater.

***About New England Service Company***

Headquartered in Plainville, Connecticut, NESC is predominantly involved in the operation, management and financing of water systems and other related activities. NESC was formed in 1997 to operate in both regulated and unregulated water markets. NESC is the sole stockholder of four regulated water companies.

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For more information on New England Service Company please visit
www.NewEnglandServiceCompany.com

*This news release includes statements concerning Aquarion and Aquarion Water Company's expectations, beliefs, plans, objectives, goals, strategies, assumptions of future events, future financial performance or growth and other statements that are not historical facts, including statements regarding the planned merger with New England Service Company, the timing of such transaction and benefits anticipated from such transaction. These statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Generally, readers can identify these forward-looking statements through the use of words or phrases such as "will," "estimate," "expect," "anticipate," "intend," "plan," "project," "believe," "forecast," "should," "could" and other similar expressions. Forward-looking statements involve risks and uncertainties that may cause actual results or outcomes to differ materially from those included in the forward-looking statements. Factors that may cause actual results to differ materially from those included in the forward-looking statements include, but are not limited to: the transaction is subject to conditions to closing, including regulatory approvals, that may not be satisfied; it may take longer than anticipated to consummate the transaction; we may not realize the benefits we anticipate from the transaction; unforeseen liabilities; risks relating to integration of the acquired business; and other presently unknown or unforeseen factors.*

*Other risk factors are detailed in Eversource Energy's reports filed with the Securities and Exchange Commission (SEC) and updated as necessary, and are available on Eversource Energy's website at www.eversource.com and on the SEC's website at www.sec.gov. All such factors are difficult to predict and contain uncertainties that may materially affect Aquarion or Aquarion Water Company's actual results, many of which are beyond our control. You should not place undue reliance on the forward-looking statements; each speaks only as of the date on which such statement is made, except as required by federal securities laws, and Aquarion Water Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.*

***Additional Information***

*This communication does not constitute an offer to buy or solicitation of any offer to sell securities. This communication relates to a proposed business combination transaction between Aquarion Company and New England Service Company. In connection with the proposed business combination, Eversource Energy will file a registration statement with the SEC. This communication is not a substitute for any registration statement, prospectus/proxy statement or other document Eversource Energy, Aquarion Company and/or New England Service Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF NEW ENGLAND SERVICE COMPANY ARE URGED TO READ CAREFULLY THE REGISTRATION STATEMENT, PROSPECTUS, PROXY STATEMENT AND OTHER DOCUMENTS FILED WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT EVERSOURCE ENERGY, AQUARION COMPANY, NEW ENGLAND SERVICE COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's web site at www.sec.gov or by directing a request to Eversource's Investor Relations department at (860) 665-5154 or by email to jeffrey.kotkin@eversource.com.*

***Certain Information Regarding Participants***

*This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and New England Service Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and New England Service Company may be deemed "participants" in the solicitation of proxies from stockholders of New England Service Company in favor of the proposed merger. You can find information about Eversource's trustees and executive officers in Eversource's annual report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 17, 2021 and its proxy statement for its 2021 annual meeting filed with the SEC on March 26, 2021. Information regarding the persons who may, under the rules of the SEC, be considered participants in the solicitation of the stockholders of New England Service Company in connection with the proposed merger will be set forth in the registration statement, prospectus/proxy statement or other documents filed with the SEC if any when they become available. You may obtain these documents (when they become available) free of charge at the SEC's web site at www.sec.gov and from Investor Relations at Eversource as described above.*

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NLaChance@NewEnglandServiceCompany.com

###

**VALLEY WATER SYSTEMS, INC.**

Notes to Financial Statements
Years Ended December 31, 2020 and 2019

## 1. Description of the Company

Valley Water Systems, Inc. (the "Company"), a wholly owned subsidiary of New England Service Company ("NESC"), is a public utility distributing water to approximately 6,760 customers in the towns of Plainville, Farmington, and Southington, Connecticut area. As a public utility operating in Connecticut, the Company functions under rules and regulations prescribed by the State of Connecticut Public Utilities Regulatory Authority ("PURA").

## 2. Summary of Significant Accounting Policies

### *Basis of Presentation*

The Company maintains its accounts in accordance with the PURA Uniform System of Accounts as prescribed for Water Utilities Class A. The Company prepares its financial statements in accordance with accounting principles generally accepted in the United States of America which include the provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 980, *Regulated Operations* ("ASC 980"). Under ASC 980, regulated companies defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that those costs and credits will be recognized in the rate setting process in a period different from the period in which they would have been reflected in income by an unregulated company. These deferred regulatory assets and liabilities are then reflected in the income statement in the period in which the same amounts are reflected in rates charged for service.

### *Use of Estimates*

The preparation of financial statements require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Accordingly, actual results could differ from these estimates.

### *Cash and Cash Equivalents*

Cash and cash equivalents includes cash balances held in bank accounts and highly liquid debt instruments with maturities of three months or less at the time of purchase.

From time to time, the Company had on deposit at financial institutions cash and cash equivalents which exceed current federal deposit insurance limitations. The Company had not experienced any losses in such accounts to date and believes it is not exposed to any significant credit risk on cash and cash equivalents.

### *Accounts Receivable*

Accounts receivable are stated at the amount management expects to collect from outstanding balances. The Company continuously monitors the creditworthiness of customers and establishes, when necessary, an allowance for amounts that may become uncollectible in the future based on current economic trends, historical payment and bad debt write-off experience.

Page 415

CONSUMPTION INFORMATION (Dover Division)

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | | |
| 2. Estimated population reached by the distributing system | | |
| 3. Estimated population actually supplied | | 1,809 |
| 4. Total consumption during the year in gallons | | 50,866,736 |
| 5. Average daily consumption ( in gallons) | | 138,429 |
| 6. Day on which the greatest amount was pumped | | 8/13/2020 |
| 7. Gallons pumped on above day | | 368,000 |
| 8. Week during which greatest amount was pumped | 8/9/20-8/15/20 | |
| 9. Gallons pumped during above week | | 1,906,000 |
| 10. Gallons per day per service | | 218 |
| 11. Consumption metered | | 50,866,736 |
| 12. Consumption metered, | 100 percent of total consumption | |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 637 | 1 | 0 | 636 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Dover, MA | 636 |

Sixty-four of these connections represent contractual service to Town of Dover plus one master meter at town connection.

Page 415

CONSUMPTION INFORMATION (Plymouth Division)

| | |
|---|---|
| 1. Estimated total population of territory covered by franchise | 2,513 |
| 2. Estimated population reached by the distributing system | 2,513 |
| 3. Estimated population actually supplied | 2,513 |
| 4. Total consumption during the year (GALS) | 101,211,880 |
| 5. Average daily consumption | 294,414 |
| 6. Day on which the greatest amount was pumped | 7/27/2020 |
| 7. Gallons pumped on above day | 724,300 |
| 8. Week during which greatest amount was pumped | 7/26/2020-8/1/2020 |
| 9. Gallons pumped during above week | 4,544,900 |
| 10. Gallons per day per service | 219 |
| 11. Consumption metered | 101,211,880 |
| 12. Consumption metered, | 100% percent of total consumption |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 853 | 0 | 9 | 862 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Plymouth, MA | 862 |

Page 415

CONSUMPTION INFORMATION (Springdale Division)

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | | 115 |
| 2. Estimated population reached by the distributing system | | 115 |
| 3. Estimated population actually supplied | | 115 |
| 4. Total consumption during the year (GALS) | | 7,463,606 |
| 5. Average daily consumption | | 20,448 |
| 6. Day on which the greatest amount was pumped | | 6/27/2020 |
| 7. Gallons pumped on above day | | 88,000 |
| 8. Week during which greatest amount was pumped | 6/21/20-6/27/20 | |
| 9. Gallons pumped during above week | | 407,000 |
| 10. Gallons per day per service | | 418 |
| 11. Consumption metered | | 7,463,606 |
| 12. Consumption metered, | 100 percent of total consumption | |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 41 | 0 | 1 | 42 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Dover, MA | 42 |

## A-6 LIST OF TOWNS SERVED

List by operating divisions the towns served directly, indicating those in which franchise is for limited area by an asterisk (*) after name. Give population of the area and the number of customers.

| Line No. | Town | Population of Area | Number of Customers | Line No. | Town | Population of Area | Number of Customers |
|---|---|---|---|---|---|---|---|
| | | | | | Sub Totals Forward: | 30,120 | 725 |
| 1 | Belmont N. H. | 7,356 | 160 | 16 | | | |
| 2 | Bow, N.H. | 7,519 | 95 | 17 | | | |
| 3 | Carroll, N.H. | 763 | 409 | 18 | | | |
| 4 | Belmont, NH | 7,356 | 22 | 19 | | | |
| 5 | Gilford, NH | 7,126 | 39 | 20 | | | |
| 6 | | | | 21 | | | |
| 7 | | | | 22 | | | |
| 8 | | | | 23 | | | |
| 9 | | | | 24 | | | |
| 10 | | | | 25 | | | |
| 11 | | | | 26 | | | |
| 12 | | | | 27 | | | |
| 13 | | | | 28 | | | |
| 14 | | | | 29 | | | |
| 15 | Sub Totals Forward: | 30,120 | 725 | 30 | Total | 30,120 | 725 |

## A-7 PAYMENTS TO INDIVIDUALS

List names of all individuals, partnerships, or corporations to whom payments totaling $10,000 or more for services rendered were made or accrued during the year, and the amount paid or accrued to each. Where payments or accruals to the individual members of a partnership or firm together total $10,000 or more, list each individual and the amount paid or due each.

| Line No. | Name | Address | Amount |
|---|---|---|---|
| 1 | NESC | Plainville,, Ct. | 222,877 |
| 2 | City of Laconia | Laconia, NH | 91,004 |
| 3 | Rowell's Services | Northfield, NH | 57,242 |
| 4 | Eversource | Boston, MA | 43,226 |
| 5 | CoBank | Greenwood Village, CO | 43,000 |
| 6 | Stephen P. St. Cyr & Associates | Biddeford, Me. | 40,959 |
| 7 | NH Brown Law | Somersworth, NH | 37,206 |
| 8 | PKF O'Conner Davies | Shelton, Ct. | 36,020 |
| 9 | State of NH | Concord, NH | 16,544 |
| 10 | Fortin Construction | Londonderry, NH | 16,155 |
| 11 | Town of Carroll | Carroll, NH | 15,201 |
| 12 | Town of Belmont | Belmont, NH | 14,953 |
| 13 | Harcros Chemicals | Chicago, IL | 12,909 |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | Total | | $ 647,296 |

Page 415

CONSUMPTION INFORMATION

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | 1100 | |
| 2. Estimated population reached by the distributing system | 1100 | |
| 3. Estimated population actually supplied | 1100 | |
| 4. Total consumption during the year | 31,956,826 | gals. |
| 5. Average daily consumption | 87,553 | gals. |
| 6. Day on which the greatest amount was pumped | 7/20/2020 | |
| 7. Gallons pumped on above day | 173,596 | |
| 8. Week during which greatest amount was pumped | 7/16/20-7/25/20 | |
| 9. Gallons pumped during above week | 975,066 | |
| 10. Gallons per day per service | 180 | |
| 11. Consumption metered | 31,956,826 | gals. |
| 12. Consumption metered, | 100 | % of total consumption |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 487 | 0 | | 487 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Sheffield, MA | |
| *487 metered customers, 3 fixed fee customers | 490 |

Wastewater treatment is provided by the Borough of West Chester pursuant to a Sewer Capacity Agreement dated November 14, 2017, by and between the Borough and East Bradford Township. Copies of West Chester's 2017 Chapter 94 Reports to DEP for the Goose Creek WWTP and for the Taylor Run WWTP are attached hereto as **Exhibit E3** and **Exhibit E4**.

15. The Goose Creek WWTP has a permitted treatment capacity of 1.672 MGD. The Taylor Run WWTP has a permitted treatment capacity of 1.50 MGD. The elevation of the Goose Creek WWTP is generally about EL 370. The elevation of the Taylor Run WWTP is generally about EL 260. The elevation of the Requested Territory ranges from approximately EL 365 to EL 280.

16. Water service in the Requested Territory is provided by both Aqua Pennsylvania, Inc. and private wells.

17. The original cost, by year and major plant category, of the East Bradford Township used and useful plant in service is $8,294,931 with a related calculation depreciation reserve of $2,820,983. The original cost value includes a series of capped sewers along the North Benjamin Drive area of the Township. The capped sewers include approximately 3,300 linear feet of 8" Gravity PVC pipe and 20 manholes, with an estimated original cost value of approximately $100,000 as estimated by Aqua. The pipe and manholes are included in the totals on page 2-11 and 2-12 of Exhibit W. Aqua will categorize the capped sewer pipe and manholes as plant held for future use in its asset allocation upon closing. The area of capped sewers along North Benjamin Drive is not included in the Requested Territory.

18. Tentative journal entries to record the transaction are presented in Section IV.

## IV. ASSET PURCHASE AGREEMENT

19. The *Assets Purchase Agreement* is dated December 20, 2017. The *First Amendment to Assets Purchase Agreement* is dated April 18, 2018. The purchase price is Five Million Dollars

($5,000,000.00). In addition to the purchase price, Section 1.5 of the Agreement provides that Aqua will assume certain defined liabilities and pay certain out-of-pocket costs incurred by East Bradford Township.

20. The purchase price and Agreement are based on arm's length negotiations. Aqua and East Bradford Township are not affiliated with each other. Aqua will use short term debt initially for the purchase of the assets with the expectation that the short term debt will be converted to long term debt and equity capital at a later date.

21. The wastewater system assets to be acquired are the "Assets" and have the meaning specified in Section 1.1 of the Agreement. The Assets include the assets, properties and rights of East Bradford Township that comprise the wastewater system or that are owned by East Bradford Township and used by it solely in connection with operation of the system.

22. "Excluded Assets," which are those assets not being transferred to Aqua, have the meaning specified in Section 1.4 of the Agreement. Excluded Assets include customer service laterals that run from the curb area to individual customer residences or structures; piping and fixtures internal to each customer residence or structure; cash and cash equivalents; and the items set forth in Schedule 1.4 of the Agreement.

23. "Assumed Liabilities" has the meaning specified in Section 1.6 of the Agreement and include the liabilities and obligations under the Assumed Contracts that arise after Closing, liabilities incurred or arising from and after Closing under or from failure to comply with permits, approvals or licenses related to the system that are transferred to Aqua and the obligation to provide wastewater service after Closing. The Assumed Contracts, which are listed in Schedule 1.6 of the APA and attached hereto as **Exhibit F1** and **Exhibit F2**, are the Sewer Capacity Agreement dated November 14, 2017, by and between the Borough of West Chester and East Bradford Township and the Intergovernmental Cooperation Agreement dated March 15, 1999, between East Bradford and Birmingham Township.

## East Bradford Township

| | # of Customers | Annual Gallons Treated (2017) |
|---|---|---|
| Residential- Single Family | 399 | 23,783,560 |
| Residential- Townhomes | 814 | 36,390,635 |
| | | |
| **Commercial** | | |
| Bradford Retail - The Bistro | | 112,800 |
| Bradford Retail - Strip Stores | | 688,000 |
| Brookworth Plaza - Dunkin Donuts | | 147,200 |
| Brookworth Plaza - CVS | | 35,300 |
| Brookworth Plaza - empty building | | - |
| Brookworth Plaza - Strip Stores | | 142,000 |
| Brookworth Plaza - PNC Bank | | 17,000 |
| Countryside Food Mart | | 52,700 |
| Antique Ice Museum | | 3,600 |
| Mrs. Mike's Restaurant | | 103,110 |
| Brandywine Hall Nursing Home | | 8,281,000 |
| Daily Local News - now empty building | | 24,400 |
| Bradford Plaza - Strip Stores | | 1,991,430 |
| Bradford Plaza - Giant Food Store | | 2,527,700 |
| Bradford Plaza - Walgreens | | 47,000 |
| Bradford Plaza - Giant Gas Station | | 6,200 |
| Chester County Art Association | | 120,100 |
| | | |
| **Industrial** | | |
| Diesel Systems | | 66,300 |
| Chem Service | | 173,400 |
| | | |
| | | |
| **Other Class(?)*** | | |
| Goddard School | | 252,800 |
| Hillsdale Elementary School | | 649,700 |
| WCU S Campus Apts - 144 | | 24,200 |
| WCU S Campus Apts - 167 | | 583,900 |
| WCU S Campus Apts - 168 | | 500,900 |
| WCU S Campus Apts - 169 | | 441,900 |
| WCU S Campus Apts - 170 | | 570,900 |
| WCU S Campus Apts - 171 | | 318,900 |
| WCU S Campus Apts - 172 | | 422,000 |
| WCU S Campus Apts - 173 | | 306,400 |
| WCU S Campus Apts - 174 | | 424,500 |
| WCU S Campus Apts - 175 | | 323,400 |
| WCU S Campus Apts - 176 | | 340,000 |
| WCU S Campus Apts - 177 | | 356,000 |
| University Student Housing 1 | | 4,463,500 |
| University Student Housing 2 | | 5,429,000 |
| | | |
| Total | | 90,121,435 |

*May include church, school, public, etc… (please insert a line for each)

420,000
153,300,000

35
399
814
1,248

**Q. How many customers will the acquisition add?**

A. The acquisition of East Norriton will add 4,966 customers to Aqua's existing 28,000 wastewater customers. This is an increase in customers of 17.7% (or about 20%).[23]

**Q. Will the acquisition increase rates for the customers to be acquired?**

A. Yes. Aqua witness Packer states that he reasonably expects that rates for East Norriton customers will increase under Aqua ownership.[24] As discussed above, Aqua calculates that if the entire revenue deficiency resulting from the acquisition is applied to East Norriton Township customers, the adjusted average bill for customers using four thousand gallons per month would increase from approximately $39 per month to $52 per month, which would be a 35% rate increase.[25]

**Q. Will the acquisition increase rates for existing Aqua customers?**

A. Yes. Mr. Packer's testimony shows that, as a result of the acquisition, rates for existing Aqua water customers and existing Aqua wastewater customers will increase if the revenue deficiency is not fully borne by the East Norriton Township customers. Mr. Packer's schedules show estimated increases to existing total Aqua water and wastewater customers ranging from $0.17 per month to $1.66 per month ($2.04 per year to $19.92 per year).[26] If the costs were spread to only existing wastewater customers, and not water customers, the

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[23] Exhibit U, Direct Testimony of William C. Packer, p. 9, lines 2-3 and 11-12, p. 16, lines 11-12.

[24] Exhibit U, Direct Testimony of William C. Packer, p. 18, lines 17-20 and Appendix A, p.1; Response to OCA-II-4, Attachment 1, p. 22 (attached as OCA Exhibit DJG-12).

[25] Exhibit U, Direct Testimony of William C. Packer, Appendix A, pp. 1-2 ($38.52 + $13.42 = $51.94). ($13.42 ÷ $38.52) x 100 = 34.84%.

[26] Exhibit U, Direct Testimony of William C. Packer, Appendix A, p. 1.

**Q. Describe the scope and organization of your testimony.**

A. My testimony addresses the application filed by Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company") for the acquisition of the East Norriton Township (the "Township") wastewater collection system assets. My testimony responds to the fair market value ("FMV") approaches addressed in the testimonies of Harold Walker, III of Gannett Fleming, who sponsors the FMV appraisals commissioned by the Company, and Jerome C. Weinert, who sponsors the appraisal commissioned by the Township. I also discuss the sufficiency of the notices sent to the customers of Aqua and the Township regarding the impact on rates of the proposed acquisition.

## II. EXECUTIVE SUMMARY

### A. Overview

**Q. Please summarizes Aqua's application in this proceeding.**

A. Aqua's application proposes to acquire the Township's wastewater assets under Sections 1102 and 1329 of the Public Utility Code (the "Code"). According to Section 1329(c)(2) of the Code, the ratemaking rate base is the lesser of the negotiated purchase price and the average of two FMV appraisals. The FMV estimated by Gannett Fleming and AUS Consultants is $24.2 million and $25.1 million, respectively. The purchase price negotiated by Aqua and the Township is $21 million. Thus, the proposed rate base in the application is $21 million.

**Report by Class**

| Account | Name / Service Address | Tax ID | Book | Status | Alert Code |
|---|---|---|---|---|---|
| 97990.00 | F M BROWN SONS INC | 43-5345-07-68-8539 | | A | |
| | 790 DANIEL BOONE ROAD | BIRDSBORO | PA | 19508-8737 | |
| 99991.00 | DIEROLF, CANDACE | | | A | |
| | 21 PINE AVENUE | BIRDSBORO | PA | 19508 | |
| 99992.00 | TELFORD, MARK | | | A | |
| | 19-6 CRANBERRY RIDGE | READING | PA | 19606-3934 | |

**Total Class: R: 8,708**

**Class: TRAILER PARK**

| | | | | | |
|---|---|---|---|---|---|
| 20000.00 | KLIEWER, KIM B | 43-5325-08-79- | 100 | A | |
| | 4851 PERKIOMEN AVENUE | READING | PA | 19606 | |
| (610)670-0191 | | | | | |
| 20010.00 | KL MHC LLC | 43-5335-14-34- | 201 | A | |
| | 44 KEYSTONE ROAD | READING | PA | 19606-3655 | |
| 20020.00 | BORDIC MOBILE HOME PARK | 43-5335-09-16- | 200 | A | |
| | 214 BORDIC ROAD | READING | PA | 19606-3605 | |
| 20030.00 | KL MHC LLC | 43-5335-10-35- | 201 | A | |
| | 44 KEYSTONE ROAD | READING | PA | 19606-3655 | |
| 20060.00 | ALSACE TOWNSHIP | | 101 | A | |
| | 240 SPIES CHURCH ROAD | READING | PA | 19606 | |
| 20070.00 | KL MHC LLC | 43-5335-14-34-2494 | | A | |
| | 44 KEYSTONE ROAD | READING | PA | 19606-3655 | |
| 91230.00 | PENN VIEW MOBILE PARK | 43-5327-14-42- | 200 | A | |
| | BROADWAY AVENUE | READING | PA | 19606 | |
| (610)779-4202 | | | | | |

**Total Class: T: 7**

**Total: 8,984**

# Exeter Township supervisors agree to sell municipal wastewater system for $96 million

readingeagle.com/news/article/exeter-township-supervisors-agree-to-sell-municipal-wastewater-system-for-96-million

**Share**

**Adjust font size:** A A A

The sale to Pennsylvania American Water Co. will keep taxes steady for 10 years and do other things for Exeter, the township manager said.

Written by Mike Urban

Exeter Township, PA —

The Exeter Township supervisors have agreed to sell the township's wastewater treatment plant and system to a private company for $96 million, a move they expect will save taxpayers money and put the township on much better financial footing.

The supervisors voted 4-1 on April 23 to approve the sale to Pennsylvania American Water Co., which supplies water to the township and operates 15 wastewater treatment systems statewide.

The two sides must finalize the asset purchase agreement, and the sale will require Pennsylvania Utility Commission approval, meaning the earliest the company is likely to take ownership would be early next year.

Township Manager John A. Granger said that if the sale goes through as planned, it will allow the township to hold real estate taxes steady for 10 years or more; pay for future capital projects including equipment replacement, township building relocation and storm sewer improvements; and still leave $48 million in the bank.

The current property tax rate is 2.14 mills, but that would have increased 32.6 percent to 2.8 mills in 2019 if the township retained ownership of the plant, he said.

The township is expected to raise sewer rates 29 percent before the sale is completed, but that rate hike would likely have been higher if the township held onto the system and made necessary upgrades, said Supervisor John Cusatis.

And the supervisors plan to enact a homestead tax exemption that would more than cover the rate increase for most homeowners, he said.

There are about 9,000 properties in Exeter connected to the wastewater system, and Pennsylvania American spokesman Terry M. Maenza said that they shouldn't notice any changes in sewer service once the company takes control of the system.

"It should be seamless," he said.

The company plans to retain the township's six wastewater employees, he said.

Cusatis and fellow Supervisors Lisa VanderLaan, William F. White and David G. Speece Jr. voted for the sale, saying it was a tough decision but the economic benefits were too good to turn down.

"The sale will pay off the library and sewer debt, stabilize the tax base and improve the township's credit rating," Cusatis said.

Supervisor Gary E. Lloyd Jr. voted against the sale, saying he didn't want to lose the valuable asset.

Cusatis said that most Exeter residents he spoke with support the move, but at the April 23 meeting several expressed concern about selling public property to private industry and giving up control of the wastewater system.

A written handout from resident Sherrie Greene noted that: "I have done some research and read that many municipalities have taken this route, then regretted it later. Once our sewer system is sold, it is gone forever and we cannot get it back."

Pennsylvania American, headquartered in Hershey, is a subsidiary of American Water Works Co., based in Vorhees, N.J.

This would be Pennsylvania American's first wastewater treatment system in Berks.

(Correspondent Valdis I. Lacis contributed to this story.)

Contact Mike Urban: 610-371-5023 or murban@readingeagle.com.

1. The collection of a DSIC prior to inclusion of the acquired assets in a base rate case;
2. The accrual of Allowance for Funds Used During Construction (AFUDC) on non-DSIC eligible post-acquisition improvements; and
3. The deferral of depreciation for book and ratemaking purposes on non-DSIC eligible post-acquisition improvements.

**Q. Please briefly summarize the Acquisition Transaction that the Joint Applicants are proposing.**

A. Under the terms of the Proposed Transaction, PAWC would acquire the wastewater utility assets of Kane for $17.56 million.

**Q. Please describe the Kane wastewater utility.**

A. Kane owns and operates a sanitary wastewater collection system that provides sanitary wastewater service to approximately 2,019 customers in Kane Borough and a portion of Westmore Township in McKean County. The breakout of Kane's customer count is: 1,847 residential, 162 commercial, 3 industrial, and 7 municipal. The $17.56 million purchase price for a wastewater utility assets serving 2,019 customers equates to a cost of approximately $8,700 per customer.

**Q. Does the Application provide the terms of the Proposed Transaction?**

A. Yes, the Asset Purchase Agreement ("APA") dated November 4, 2019 was included with the Application. The APA states that the purchase price is Seventeen Million, Five Hundred Sixty Thousand Dollars ($17,560,000). The Application indicates that the purchase price is based on arm's length negotiations. PAWC and Kane Borough are not affiliated with each other.

| | Service Address | Customer Number | Edu Purchased | Group Code | Drainage Basin | SPA Amt | SPA Qty | SWR Amt | SWR Qty | Swr Base Amt | PEN Amt | INT Amt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3793 | 900 FOXMEADOW DR | 12133 | 16 | King Road | SOUTHEAST (6) | - | 116,300.00 | F | - | $ 1,348.80 | - | - |
| 3794 | 1000 FOXMEADOW DR | 12134 | 16 | King Road | SOUTHEAST (6) | - | 94,400.00 | F | - | $ 1,348.80 | - | - |
| 3795 | 1100 FOXMEADOW DR | 12135 | 16 | King Road | SOUTHEAST (6) | $ 216.44 | 153,200.00 | F | - | $ 1,348.80 | - | - |
| 3796 | 1200 FOXMEADOW DR | 12136 | 16 | King Road | SOUTHEAST (6) | $ 69.15 | 130,400.00 | F | - | $ 1,348.80 | - | - |
| 3799 | 1500 FOXMEADOW CIR | 12139 | 16 | King Road | SOUTHEAST (6) | $ 43.95 | 126,500.00 | F | - | $ 1,348.80 | - | - |
| 3800 | 1600 FOXMEADOW CIR | 12140 | 16 | King Road | SOUTHEAST (6) | - | 82,300.00 | F | - | $ 1,348.80 | - | - |
| 3801 | 1700 FOXMEADOW CIR | 12141 | 16 | King Road | SOUTHEAST (6) | - | 84,300.00 | F | - | $ 1,348.80 | - | - |
| 3802 | 1800 FOXMEADOW CIR | 12142 | 16 | King Road | SOUTHEAST (6) | - | 92,500.00 | F | - | $ 1,348.80 | - | - |
| 3803 | 1900 FOXMEADOW DR | 12143 | 16 | King Road | SOUTHEAST (6) | - | 111,200.00 | F | - | $ 1,348.80 | - | - |
| 3804 | 2000 FOXMEADOW CIR | 12144 | 16 | King Road | SOUTHEAST (6) | $ 8.42 | 121,000.00 | F | - | $ 1,348.80 | - | - |
| 3805 | 2100 FOXMEADOW CIR | 12145 | 16 | King Road | SOUTHEAST (6) | $ 160.88 | 144,600.00 | F | - | $ 1,348.80 | - | - |
| 3806 | 2200 FOXMEADOW DR | 12146 | 16 | King Road | SOUTHEAST (6) | - | 101,000.00 | F | - | $ 1,348.80 | - | - |
| 3807 | 2300 FOXMEADOW DR | 12147 | 16 | King Road | SOUTHEAST (6) | $ 176.38 | 147,000.00 | F | - | $ 1,348.80 | - | - |
| 3808 | 2400 FOXMEADOW CIR | 12148 | 16 | King Road | SOUTHEAST (6) | $ 94.99 | 134,400.00 | F | - | $ 1,348.80 | - | - |
| 3809 | 2500 FOXMEADOW CIR | 12149 | 16 | King Road | SOUTHEAST (6) | $ 107.26 | 136,300.00 | F | - | $ 1,348.80 | - | - |
| 161 | 640 N LEWIS RD | 275 | 17 | King Road | SOUTHEAST (6) | $ 1,932.95 | 306,700.00 | F | - | $ 84.30 | - | - |
| 3674 | 7-27 W RIDGE PIKE/STRP ML | 12005 | 18 | King Road | SOUTHEAST (6) | $ 63.37 | 92,100.00 | F | - | $ 927.30 | - | - |
| 3727 | 125 SUNSET RD | 12065 | 18 | King Road | 282 GRATERFORD RD (20) | $ 1,198.45 | 193,000.00 | F | - | $ 84.30 | - | - |
| 3772 | 15 KEYSTONE DR | 12112 | 18 | King Road | TRINLEY (5) | $ 2,452.98 | 387,200.00 | F | - | $ 84.30 | - | - |
| 5199 | 256 SWAMP PIKE/SCHOOL | 60965 | 18 | Possum Hollow | RAVENS CLAW (18) | $ 2,015.24 | 334,400.00 | F | - | $ 252.90 | - | - |
| 162 | 339 N LEWIS RD | 276 | 19 | King Road | SOUTHEAST (6) | $ 1,256.59 | 202,000.00 | F | - | $ 84.30 | - | - |
| 3706 | W RIDGE PIKE/STRIP/BANK | 12039 | 19 | King Road | SOUTH LIMERICK (3) | $ 1,373.73 | 272,500.00 | F | - | $ 674.40 | - | - |
| 3745 | 542 N LEWIS RD | 12084 | 19 | King Road | TRINLEY (5) | $ 112.65 | 32,400.00 | F | - | $ 168.60 | - | - |
| 3411 | 70 BUCKWALTER RD/1350/APPLEB | 11737 | 20 | King Road | SOUTHEAST (6) | $ 3,375.47 | 530,000.00 | F | - | $ 84.30 | - | - |
| 5389 | 206 JONES BLVD/MICROCOAX | 70011 | 20 | Possum Hollow | BROOKE EVANS (16) | $ 14,938.23 | 2,319,900.00 | F | - | $ 84.30 | - | - |
| 3445 | 70 BUCKWALTER RD/1250/TEXAS | 11771 | 21 | King Road | SOUTHEAST (6) | $ 2,419.39 | 382,000.00 | F | - | $ 84.30 | - | - |
| 3707 | 22 ANCHOR PARKWAY | 12040 | 23 | King Road | SOUTHEAST (6) | $ 1,958.79 | 310,700.00 | F | - | $ 84.30 | - | - |
| 3773 | 77 GRATERFORD RD | 12113 | 23 | King Road | 282 GRATERFORD RD (20) | $ 1,208.14 | 194,500.00 | F | - | $ 84.30 | - | - |
| 64 | 677 ELM ST | 170 | 24 | Royersford | ORCHARD TERRACE (OT) | - | 12,000.00 | F | - | $ 2,023.20 | - | - |
| 3863 | 430 W LINFIELD TRAPPE RD | 12208 | 24 | King Road | TRINLEY (5) | $ 4,782.46 | 747,800.00 | F | - | $ 84.30 | - | - |
| 794 | 1101 ENTERPRISE DR | 2573 | 28 | King Road | TRINLEY (5) | $ 1,182.95 | 190,600.00 | F | - | $ 84.30 | - | - |
| 2502 | 196 W RIDGE PK/FLEA MRKT | 10679 | 29 | King Road | RIDGE PIKE (10) | $ 629.07 | 247,000.00 | F | - | $ 1,686.00 | $ 1.80 | - |
| 3869 | 420 LINFIELD TRAPPE RD | 12214 | 30 | King Road | TRINLEY (5) | $ 852.20 | 139,400.00 | F | - | $ 84.30 | - | - |
| 5410 | 14 W LIGHTCAP RD | 70032 | 34 | Possum Hollow | POSSUM HOLLOW (17) | $ 7,741.14 | 1,205,800.00 | F | - | $ 84.30 | - | - |
| 3401 | 19 W LINFIELD TRAPPE RD | 11727 | 36 | King Road | SOUTHEAST (6) | $ 5,421.59 | 846,736.00 | F | - | $ 84.30 | - | - |
| 107 | 475 N LEWIS RD | 216 | 52 | King Road | SOUTHEAST (6) | $ 3,921.34 | 614,500.00 | F | - | $ 84.30 | - | - |
| 3761 | 88 ANCHOR PARKWAY | 12101 | 52 | King Road | SOUTHEAST (6) | $ 3,746.92 | 587,500.00 | F | - | $ 84.30 | - | - |
| 2292 | 420 W LINFIELD TRAPPE RD | 10357 | 59 | King Road | TRINLEY (5) | $ 5,568.64 | 869,500.00 | F | - | $ 84.30 | - | - |
| 167 | 350 S LEWIS RD | 282 | 60 | King Road | SOUTHEAST (6) | $ 3,791.50 | 594,400.00 | F | - | $ 84.30 | - | - |
| 2465 | 827 N LEWIS RD | 10630 | 80 | King Road | SOUTH LIMERICK (3) | - | 150,200.00 | F | - | $ 6,744.00 | - | - |
| 3091 | FOX RIDGE APTS | 11378 | 97 | King Road | SOUTH LIMERICK (3) | $ 2,050.04 | 1,043,000.00 | F | - | $ 8,177.10 | - | - |
| 2685 | 165 W RIDGE PIKE/TRLR PK | 10913 | 115 | King Road | SOUTHEAST (6) | $ 6,018.69 | 1,792,000.00 | F | - | $ 9,694.50 | - | - |
| 5397 | EXELON LIM GEN STA | 70019 | 137 | Possum Hollow | POSSUM HOLLOW (17) | N | - | $ 8,659.75 | 1,348,000.00 | $ 84.30 | $ 1,041.07 | - |
| 5400 | 18 LIGHTCAP RD | 70022 | 200 | Possum Hollow | POSSUM HOLLOW (17) | $ 4,006.31 | 1,278,500.00 | F | - | $ 7,418.40 | - | - |
| | | **5416** | **8402** | | | **$ 299,707.92** | **89,160,697** | **$ 25,039.14** | **7,288,556** | **$ 600,843.05** | **$ 14,296.74** | **$ 1,169.98** |

**ASSET PURCHASE AGREEMENT**

7. Aqua and Limerick are parties to an Asset Purchase Agreement dated November 16, 2016. Aqua Exhibit 1, Application ¶ 5 and ¶ 18; *see also* Aqua Exhibit No. 1, Exhibit C.

8. The negotiated purchase price, which is based on arms' length negotiation, is Seventy-Five Million One Hundred Thousand Dollars ($75,100,000.00). Aqua and Limerick are not affiliated with each other. Aqua Exhibit No. 1, Application ¶ 18 and Aqua St. No. 1 at 6, lines 6 through 10.

9. Aqua will use short term credit lines to fund the transaction. The short term credit funding will be converted to a mix of long-term debt and equity capital shortly after closing. Aqua St. No. 1 at 7, lines 18 through 20; *see also* Aqua Exhibit No. 1, Application ¶ 18.

**ASSETS BEING TRANSFERRED**

10. The wastewater system assets to be transferred are the "Acquired Assets" and have the meaning specified in Section 2.01 of the Agreement. The Acquired Assets include all real property Limerick owns and uses in the operation of the wastewater system and all sanitary wastewater related treatment and conveyance facilities, including the Possum Hollow Waste Water Treatment Plant ("PHWWTP"), the King Road Waste Water Treatment Plant ("KRWWTP") and all pipes, pumping stations, manholes and pipelines and billing and collections related assets necessary to run the system. Aqua Exhibit No. 1, Application ¶ 19.

11. Acquired Assets also include the contracts identified on Schedule 4.15 of the Agreement to which Limerick is a party (the "Assigned Contracts"). Since contract parties, other than Limerick, are identified by name, Schedule 4.15 and the Assigned Contracts are considered CONFIDENTIAL. Copies of CONFIDENTIAL Schedule 4.15 and the CONFIDENTIAL Assigned Contracts were included with the Application as Confidential Exhibit F and admitted into evidence as CONFIDENTIAL Aqua Exhibit No. 4. Aqua Exhibit No. 1, Application ¶ 20 and Tr. 13 and 20.

$5,572,770. Exh. A-14-a, SWPA St. 1 at 11-12. The allocated purchase price for the water system is $4,734,800 and the wastewater system is $4,765,200. Appendix A-14, SWPA St. 2 at 4-5.

The valuation experts were paid $59,145 for the Fair Market Value Appraisal Reports for both the water and wastewater systems. Exh. A-8-a. SWPA also indicates that it will incur transaction and closing costs of approximately $1,000,000 between the Water System and the Wastewater System, which will be included in rate base. Appendix A-14, SWPA St.1 at 5-6; Appendix A-12.

OCA will examine the ratemaking rate base claims to determine if the claims are reasonable and appropriate for ratemaking purposes.

2. Proposed Rates: SWPA proposes to charge customers of the Mahoning Township system the Mahoning Township water and wastewater rates in effect at closing. Application at 6, 11; Appendix A-13. Those rates will remain in effect until SWPA's next base rate case but SWPA may impose any fee or surcharge permitted by its Commission-approved tariff. Id.

The proposed rates do not appear to match the existing Mahoning Township rates. The OCA will investigate this apparent discrepancy. The OCA will investigate the impacts on the current customers as well as on Mahoning Township customers of the various assumptions and proposals.

3. The OCA submits that additional information is necessary to determine how the transaction will substantially and affirmatively benefit Suez's existing customers.

4. Conditions: Whether any conditions should be imposed upon the proposed transfer to ensure that Suez's customers are treated in a fair and just manner in accord with Pennsylvania law and Commission rules and regulations.

**MAHONING TOWNSHIP CUSTOMER LIST**

| Customer No | Name | Service Address | Service | SWR EDUs | EDU | Count |
|---|---|---|---|---|---|---|
| 11470.01 | T & S REALTY | 304 HOLLOW DR | Sewer | 1 | 1 | 1431 |
| 11471.01 | T & S REALTY | 306 HOLLOW DR | Sewer | 1 | 1 | 1432 |
| 11472.01 | T & S REALTY | 308 HOLLOW DR | Sewer | 1 | 1 | 1433 |
| 11473.01 | T & S REALTY | 310 HOLLOW DR | Sewer | 1 | 1 | 1434 |
| 11474.01 | T & S REALTY | 312 HOLLOW DR | Sewer | 1 | 1 | 1435 |
| 11475.01 | DAVID & JOANNE BROOKO\ | 32 TERRE LANE | Sewer | 1 | 1 | 1436 |
| 11476.02 | JAYA SUGUNARAJ & JESSITA | 214 ABBEY RD | Sewer | 1 | 1 | 1437 |
| 11478.01 | DAVID BULBIN & BARBARA | 74 WOODLAND DR | Sewer | 1 | 1 | 1438 |
| 11479.01 | JEFFREY MOLINARO | 1318 BLOOM RD | Sewer | 1 | 1 | 1439 |
| 11480.01 | CRYSTAL DOMETITA | 91 WOODLAND DR | Sewer | 1 | 1 | 1440 |
| 11482.01 | AYUSA SINHA | 672 LOWER ST | Sewer | 1 | 1 | 1441 |
| 11483.01 | MADIAN YAHYA | 676 LOWER ST | Sewer | 1 | 1 | 1442 |
| 11484.01 | JEFF WATSON | 168 KASEVILLE RD | Sewer | 1 | 1 | 1443 |
| 11485.01 | ANWER & SARAH QURESHI | 656 LOWER ST | Sewer | 1 | 1 | 1444 |
| 11486.01 | ROSS & ASHLEY PETERS | 83 TERRE LN | Sewer | 1 | 1 | 1445 |
| 11488.01 | QUESHI ANWER | 664 LOWER STREET | Sewer | 1 | 1 | 1446 |
| 11489.01 | MATHUR HERSH | 660 LOWER STREET | Sewer | 1 | 1 | 1447 |
| 11490.01 | PRASANNA SANKEPALLI & S | 668 LOWER ST | Sewer | 1 | 1 | 1448 |
| 11491.01 | MARK GATSKI & CATHERINI | 82 DELWOOD DR | Sewer | 1 | 1 | 1449 |
| 11492.01 | JONATHAN & LAURA SPAHF | 78 TERRE LN | Sewer | 1 | 1 | 1450 |
| 11166.02 | DANKO HOLDINGS LP | 1301 BLOOM RD | Sewer | 0 | 1 | 1451 |
| | TOTALS | | | | 2195 | 1451 |

eport Criteria:
Customer.Final bill date = {IS NULL}

5/30/18

| stomer # | Name | Service Address | Meter ID | Customer Type | Size |
|---|---|---|---|---|---|
| 11104.01 | ANIMAL CARE | 32 ENTERPRISE DR | 0049503582 | Commercial | 1 |
| 11107.01 | EMMANUEL HOME | MONTOUR BLVD. 11107 | 8280982952 | Commercial | 1 |
| 11120.02 | REDEEMER ORTHODOX PRESBYTER | 1820 MONTOUR BLVD. | 1540802894 | Commercial | 1 |
| 11121.01 | FAB-TEX | 29 WOODBINE LANE | 0004695133 | Commercial | 1 |
| 11137.01 | GEISINGER HEALTH SYSTEMS - MCB | MCBRIDE | 1541355520 | Commercial | 1 |
| 11151.01 | ROAT-KRINER ROAT | 1133 BLOOM RD. | 1541286282 | Commercial | 1 |
| 11157.01 | TRINITY METHODIST CHURCH | 84 LOMBARD AVE | 1018010545 | Commercial | 1 |
| 11159.01 | VINTAGE KNOLLS ASSISTED LIVING | 9 JUSTIN DR 101 | 1541313242 | Commercial | 1 |
| 11160.01 | GEISINGER COMMUNITY HEALTH - VI | 44 WOODBINE LANE | 0048920994 | Commercial | 1 |
| 11165.01 | RINEHART DENTAL | 20 WESNER LANE | 1481726108 | Commercial | 1 |
| Total 1: 10 | | | | 10 | 10 |
| 11110.01 | BUSY BEAVER | 23 WESNER LN | 0053635505 | Commercial | 1.5 |
| 11139.01 | MEADOWS COMM. | 77 TOWER VIEW CIRCLE | 0051583844 | Commercial | 1.5 |
| 11148.01 | SHANER HOTEL GRP | 43 PINE BARN PLACE | 1832339361 | Commercial | 1.5 |
| 11170.01 | HAWKINS CHEVROLET | 1856 MONTOUR BLVD. | 1852732193 | Commercial | 1.5 |
| 11439.01 | GEORGE HEIM CAR WASH | 1802 MONTOUR BLVD | 1541551330 | Commercial | 1.5 |
| Total 1.5: 5 | | | | 5 | 5 |
| 11102.01 | ATLANTIC EQUIP | 15 ENTERPRISE DR | 0048304212 | Commercial | 2 |
| 11108.01 | EMMANUEL NAZARETH | 1707 MONTOUR BLVD. 11108 | 1007034764 | Commercial | 2 |
| 11117.01 | T & S REALTY | 1083 BLOOM RD | 0046645520 | Commercial | 2 |
| 11126.01 | GUM REALTY GROUP LLC | 74 SCHOOL HOUSE RD STE 101 | 0022379100 | Commercial | 2 |
| 11134.01 | MARIA JOSEPH AL CENTER | MONTOUR BLVD. 11134 | 1832120637 | Commercial | 2 |
| 11136.01 | GEISINGER HEALTH SYSTEMS - HUG | HUGHES CENTER SOUTH | 0052693508 | Commercial | 2 |
| 11146.01 | SHANER HOTEL GRP | 43 PINE BARN PLACE A | 0043702654 | Commercial | 2 |
| 11166.02 | DANKO HOLDINGS LP | 1301 BLOOM RD | 1548931502 | Commercial | 2 |
| Total 2: 8 | | | | 8 | 8 |
| 11101.01 | NAILS TO TAILS GROOMING SALON | 938 BLOOM RD. | 1810172132 | Commercial | 3/4 |
| 11109.01 | BROKENSHIRE JOHN | 769 BLOOM RD. | 1541276964 | Commercial | 3/4 |
| 11111.01 | CERO JAMES PATRICK | 795 BLOOM RD | 1541282452 | Commercial | 3/4 |
| 11113.01 | COLE'S HARDWARE | 25 ENTERPRISE ROAD | 1541310306 | Commercial | 3/4 |
| 11115.01 | HAWKINS JAMES | 1581 MONTOUR BLVD. | 1852924202 | Commercial | 3/4 |
| 11116.01 | HAWKINS COLLISION CENTER | MONTOUR BLVD. 11116 | 1541425432 | Commercial | 3/4 |

Commercial Water Meters
70

Residential Water Meters
1116

+ 1 = 15 Wesner Lane added 5/24/18

Total Meters
=
1186

37

21. Second, Ms. Vicari used inconsistent purchase price values to calculate the average costs per customer. Id. at 21-22.

(a) Incorrect Use of Projected Customers

Ms. Vicari used an incorrect number of customers for MACM. In Appendix A-17-a, it states that MACM has 12,780 customers, yet Ms. Vicari used 21,953 customers. OCA St. 1 at 20-21. She explained that she used that number because she counted the individual connections for each bulk customer. Id. She never supplied her calculation of the individual connections for the four bulk customers. Id.

Ms. Vicari does not necessarily apply that logic to the other acquisitions in her sample group by reflecting individual connections for any bulk customers. OCA St. 1S at 16-17. By using the actual number of customers for the other systems, she achieved a higher average cost per customer. She then multiplied this overstated cost per customer times the unsupported number of bulk customers' individual connection, compounding the error. Ms. Everette was not able to confirm whether all of the customer numbers in Ms. Vicari's sample group were consistently counted. She therefore used the 21,953 customer number used by Ms. Vicari to minimize the issues in the proceeding.

(b) Inconsistent Purchase Price Values

Similar to the problem with the customer count, MACM witness Vicari did not use consistent purchase price values. OCA St. 1 at 21-22. For the comparative acquisitions, she used the purchase price plus the value of capital improvements required by the agreement of sale. For MACM, however, she uses only the purchase price and does not consider the $62.7 million of capital investments that PAWC anticipates making over the next 10 years. Including the cost

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# McKeesport sewer system to be sold for $156 million

September 16, 2016 12:00 AM

By Deana Carpenter

The Municipal Authority of the City of McKeesport has agreed to sell its sewer system to Pennsylvania American Water for approximately $156 million.

The sale is needed to bring the city to more stable financial ground and avoid Act 47, the program for financially distressed municipalities, or municipal bankruptcy, McKeesport Mayor Michael Cherepko said at the Sept. 7 council meeting.

“It became very clear to this administration that the only way to save our community from municipal bankruptcy, while continuing to offer the same level of services our residents deserve, would be to transfer our local sewage system to a regional or national utility company,” Mr. Cherepko said in a news release.

A purchase agreement was signed by both parties last Friday following votes by city council and the municipal authority to sell the sewer system. The sale is expected to be finalized in the second half of next year pending regulatory approvals and other closing conditions.

The system serves 22,000 customers in McKeesport and the communities of Dravosburg, Duquesne, East McKeesport, Elizabeth Township, Glassport, Liberty, Lincoln, North Versailles, Port Vue, Versailles and White Oak.

“We look forward to closing the proposed acquisition and to providing wastewater services that reflect our commitment to environmental stewardship and quality customer service,” said

Kathy L. Pape, president of Pennsylvania American Water, said that after the deal is closed, the company looks forward “to welcoming the Municipal Authority of the City of McKeesport’s employees and customers to the Pennsylvania American Water family.”

She said the company also looks forward to “providing wastewater services that reflect our commitment to environmental stewardship and quality customer service.”

The next step is approval of the acquisition by the Pennsylvania Public Utility Commission along with other approvals, such as from the state Department of Environmental Protection.

In June, state Auditor General Eugene DePasquale said McKeeesport erred when it accidentally spent $729,275 in state funds earmarked for pension costs and subsequently couldn't pay its $2.3 million annual pension obligation last year.

McKeesport officials said then they would remedy the shortfall through "the sale of an asset in the near future."

“The total proceeds of the pending sale of the Municipal Authority of the City of McKeesport will solidify the City of McKeesport’s financial position for years to come,” Mr. Cherepko said this week. “The down payment associated with this

EXHIBIT 22
Page 40 or 307

sale will generate enough revenue to cover all of the city's outstanding financial obligations, including the minimum municipal obligations associated with the city's pension funds."

*Deana Carpenter, freelance writer: suburbanliving@post-gazette.com.*

## EAST END SEWER ACCOUNTS

| Type | 2015-4 | 2015-3 | 2015-2 | 2015-1 | 2014-4 | 2014-3 | 2014-2 | 2014-1 |
|---|---|---|---|---|---|---|---|---|
| CO1 | 2,070,000 | 2,060,000 | 1,831,000 | 2,284,000 | 2,971,000 | 2,665,000 | 1,498,000 | 1,278,000 |
| CO2 | 739,000 | 1,050,000 | 885,000 | 793,000 | 1,028,000 | 1,061,000 | 873,000 | 873,000 |
| IND | | | | | | | | |
| MIX | 15,000 | 9,000 | 10,000 | 4,000 | 17,000 | 14,000 | 12,000 | 18,000 |
| RES | 13,780,000 | 13,367,000 | 12,924,000 | 13,280,000 | 12,700,000 | 14,137,000 | 14,241,000 | 12,874,000 |
| **Grand Total** | **16,604,000** | **16,486,000** | **15,650,000** | **16,361,000** | **16,716,000** | **17,877,000** | **16,624,000** | **15,043,000** |
| # DAYS | 94 | 90 | 89 | 91 | 87 | 94 | 93 | 91 |

| Type | 2015-4 GPD | 2015-3 GPD | 2015-2 GPD | 2015-1 GPD | 2014-4 GPD | 2014-3 GPD | 2014-2 GPD | 2014-1 GPD |
|---|---|---|---|---|---|---|---|---|
| CO1 | 22,021 | 22,889 | 20,573 | 25,099 | 34,149 | 28,351 | 16,108 | 14,044 |
| CO2 | 7,862 | 11,667 | 9,944 | 8,714 | 11,816 | 11,287 | 9,387 | 9,593 |
| IND | | | | | | | | |
| MIX | 160 | 100 | 112 | 44 | 195 | 149 | 129 | 198 |
| RES | 146,596 | 148,522 | 145,213 | 145,934 | 145,977 | 150,394 | 153,129 | 141,473 |
| **Grand Total** | **176,638** | **183,178** | **175,843** | **179,791** | **192,138** | **190,181** | **178,753** | **165,308** |

| Type | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| CO1 | 145 | 109 | 65 |
| CO2 | 40 | 16 | 13 |
| IND | | | |
| MIX | 8 | 7 | 3 |
| RES | 1,043 | 1012 | 823 |
| **Grand Total** | **1,236** | **1,144** | **904** |

| Type | 2015 Total | 2014 Total |
|---|---|---|
| CO1 | 8,245,000 | 8,412,000 |
| CO2 | 3,467,000 | 3,835,000 |
| IND | | |
| MIX | 38,000 | 61,000 |
| RES | 53,351,000 | 53,952,000 |
| **Grand Total** | **65,101,000** | **66,260,000** |

| Service Area | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| BP | 290 | 282 | 107 |
| BR | 52 | 51 | 52 |
| BW | 99 | 90 | 56 |
| CR | 5 | 4 | 5 |
| CW | 110 | 109 | 110 |
| EE | 1 | | 1 |
| GL | 132 | 110 | 70 |
| HD | 127 | 110 | 112 |
| PD | 31 | 31 | 31 |
| PM | 48 | 47 | 48 |
| PS | 66 | 66 | 66 |
| SC | 65 | 37 | 40 |
| SH | 132 | 132 | 132 |
| SRO | 2 | 2 | 2 |
| WB | 76 | 73 | 72 |
| **Grand Total** | **1,236** | **1,144** | **904** |

## SOUTH END SEWER ACCOUNTS

| Type | 2015-4 | 2015-3 | 2015-2 | 2015-1 | 2014-4 | 2014-3 | 2014-2 | 2014-1 |
|---|---|---|---|---|---|---|---|---|
| CO1 | 163,000 | 68,000 | 33,000 | 27,000 | 277,000 | 265,000 | 28,000 | 25,000 |
| RES | 7,444,000 | 7,494,000 | 7,172,000 | 7,565,000 | 7,109,000 | 7,576,000 | 7,233,000 | 7,750,000 |
| **Grand Total** | **7,607,000** | **7,562,000** | **7,205,000** | **7,592,000** | **7,386,000** | **7,841,000** | **7,261,000** | **7,775,000** |
| # DAYS | 94 | 90 | 89 | 91 | 87 | 94 | 93 | 91 |

| Type | 2015-4 GPD | 2015-3 GPD | )15-2 GPD | 2015-1 GPD | 2014-4 GPD | 2014-3 GPD | 2014-2 GPD | 2014-1 GPD |
|---|---|---|---|---|---|---|---|---|
| CO1 | 1,734 | 756 | 371 | 297 | 3,184 | 2,819 | 301 | 275 |
| RES | 79,191 | 83,267 | 80,584 | 83,132 | 81,713 | 80,596 | 77,774 | 85,165 |
| **Grand Total** | **80,926** | **84,022** | **80,955** | **83,429** | **84,897** | **83,415** | **78,075** | **85,440** |

| Type | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| CO1 | 6 | 2 | 2 |
| RES | 611 | 605 | 607 |
| **Grand Total** | **617** | **607** | **609** |

| Type | 2015 Total | 2014 Total |
|---|---|---|
| CO1 | 291,000 | 595,000 |
| RES | 29,675,000 | 29,668,000 |
| **Grand Total** | **29,966,000** | **30,263,000** |

| Service Area | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| ES | 178 | 174 | 174 |
| HGN | 129 | 125 | 125 |
| HGS | 30 | 29 | 30 |
| MG | 21 | 21 | 21 |
| WS | 259 | 258 | 259 |
| **Grand Total** | **617** | **607** | **609** |

## AVONDALE SEWER ACCOUNTS SEWER ACCOUNTS

| Type | 2015-4 | 2015-3 | 2015-2 | 2015-1 | 2014-4 | 2014-3 | 2014-2 | 20144 |
|---|---|---|---|---|---|---|---|---|
| CO1 | 2,833,000 | 3,044,000 | 2,895,000 | 3,014,000 | 2,844,000 | 2,681,000 | 2,598,000 | 2,992,000 |
| CO2 | 191,000 | 208,000 | 235,000 | 228,000 | 224,000 | 195,000 | 192,000 | 179,000 |
| MIX | 301,000 | 312,000 | 255,000 | 273,000 | 227,000 | 258,000 | 276,000 | 332,000 |
| RES | 4,090,000 | 3,750,000 | 3,588,000 | 4,089,000 | 3,506,000 | 4,183,000 | 4,716,000 | 3,705,000 |
| TWP | 31,000 | 24,000 | 20,000 | 19,000 | 21,000 | 22,000 | 19,000 | 74,000 |
| **Grand Total** | **7,446,000** | **7,338,000** | **6,993,000** | **7,623,000** | **6,822,000** | **7,339,000** | **7,801,000** | **7,282,000** |
| # DAYS | 94 | 90 | 89 | 91 | 87 | 94 | 93 | 91 |

| Type | 2015-4 GPD | 2015-3 GPD | )15-2 GPD | 2015-1 GPD | 2014-4 GPD | 2014-3 GPD | 2014-2 GPD | 2014-1 GPD |
|---|---|---|---|---|---|---|---|---|
| CO1 | 30,138 | 33,822 | 32,528 | 33,121 | 32,690 | 28,521 | 27,935 | 32,879 |
| CO2 | 2,032 | 2,311 | 2,640 | 2,505 | 2,575 | 2,074 | 2,065 | 1,967 |
| MIX | 3,202 | 3,467 | 2,865 | 3,000 | 2,609 | 2,745 | 2,968 | 3,648 |
| RES | 43,511 | 41,667 | 40,315 | 44,934 | 40,299 | 44,500 | 50,710 | 40,714 |
| TWP | 330 | 267 | 225 | 209 | 241 | 234 | 204 | 813 |
| **Grand Total** | **79,213** | **81,533** | **78,573** | **83,769** | **78,414** | **78,074** | **83,882** | **80,022** |

| Type | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| CO1 | 397 | 48 | 38 |
| CO2 | 4 | 4 | 4 |
| MIX | 8 | 22 | 8 |
| RES | 306 | 282 | 230 |
| TWP | 3 | 3 | 3 |
| **Grand Total** | **718** | **359** | **283** |

| Type | 2015 Total | 2014 Total |
|---|---|---|
| CO1 | 11,786,000 | 11,115,000 |
| CO2 | 862,000 | 790,000 |
| MIX | 1,141,000 | 1,093,000 |
| RES | 15,517,000 | 16,110,000 |
| TWP | 94,000 | 136,000 |
| **Grand Total** | **29,400,000** | **29,244,000** |

| Service Area | Total Units | Total Active Units | Total Accounts |
|---|---|---|---|
| 41 | 308 | 76 | 46 |
| BH | 123 | 120 | 121 |
| BH2 | 6 | 6 | 6 |
| RR | 130 | 119 | 79 |
| TK | 151 | 38 | 31 |
| **Grand Total** | **718** | **359** | **283** |

Dilworth Paxson LLP



# The PA PUC Approves First Wastewater Sale Under New Act 12

**06/14/2017**

June 14, 2017 (Philadelphia, PA) - On June 14, 2017, the Pennsylvania Public Utility Commission approved, in a four-to-one vote, Aqua Pennsylvania Wastewater, Inc.'s application to acquire the wastewater system of New Garden Township and its Sewer Authority, and to begin providing wastewater service to the residents of New Garden and Kennett Townships in Chester County. The transaction is the first to be approved using the fair market valuation approach established by the Pennsylvania State Legislature and Governor Tom Wolf with Act 12 of 2016 (Act of Apr. 14, 2016, P.L. 76, No. 12, 66 Pa. C.S. § 1329).

Act 12 is changing the landscape for municipal sales of water and wastewater systems to PUC-regulated public utility companies. The new law allows the parties to the transaction to opt in to a new method of valuation, which takes the value of the system for ratemaking purposes as either the lower of the average of two independent fair market value appraisals—one obtained by the utility buyer and one by the municipal seller—or by the negotiated purchase price. Prior to Act 12, system value for ratemaking was based on depreciated original cost, which would likely always result in a lower sale price than fair market value. In addition, the new law requires the PUC to act within six months of the acceptance of the application.

Act 12 became effective mid-June 2016, and the PUC issued its final implementation order in October 2016. The New Garden transaction was the first Act 12 application, submitted for approval in December 2016. Aqua, New Garden, and the Authority agreed to a negotiated purchase price of $29,500,000, which turned out to be less than the average of the two appraisals commissioned by Aqua and New Garden. The valuation for ratemaking purposes was therefore set at $29,500,000.

A protest to Aqua's application for PUC approval pursuant to Act 12 in the New Garden transaction was filed by the Bureau of Investigation and Enforcement, which sought a review of both of the fair market appraisals used, additional information about the proposed rate freeze agreed to by the parties, and a determination of whether the transaction was in the public interest under Section 1102 of the Public Utility Code.

An additional protest was filed by the Office of Consumer Advocates requesting further information to determine whether supplementary conditions should be imposed on the transaction to ensure that Aqua's existing customers are treated in a fair and just manner; how the transaction will substantially and affirmatively benefit Aqua's existing customers; and whether the agreement sufficiently provides for safe, adequate, and reasonable service at just and reasonable rates.

An evidentiary hearing was held before an administrative law judge on February 16, 2017. After the hearing, the judge recommended the denial of Aqua's application, concluding that Aqua had failed to demonstrate by a preponderance of the evidence that the acquisition was in the public interest because it failed to demonstrate that the transaction will result in affirmative public benefits to its existing customers. The judge also concluded that Aqua had failed to support its rate stabilization plan with evidence to show its basis and impact. The judge did

**Related Lawyers**

Skye C.A. Nickalls

Marc A. Feller

**Related Practices**

Corporate and Business

**Related Offices**

Philadelphia, PA

invest in necessary capital improvements and resources, and experienced managerial and operating personnel necessary to provide safe and reliable sewer services to the residents of the TOS and surrounding areas. PAWC is currently the water provider within TOS and is the operator of TOS's System pump station.

**Q. PLEASE DESCRIBE PAWC'S HISTORICAL RELATIONSHIP WITH TOS.**

A. Since PAWC's acquisition of the water and wastewater assets of the City of Coatesville Authority ("CCA") in March 2001, PAWC has been the regional wastewater (and water) provider in the City of Coatesville and surrounding communities. . PAWC's treats the wastewater from the communities of Sadsbury Township, City of Coatesville, East Fallowfield Township, Caln Township, West Caln Township, Valley Township, West Sadsbury Township, Highland Township, West Brandywine Township and Parksburg Borough. TOS has been a bulk wastewater customer of PAWC since PAWC's acquisition of CCA's water and wastewater system assets. We maintain a relationship with TOS and other local municipalities by participating in local events, providing environmental and firefighting grants, offering the "H2O Assistance Program," and supporting economic growth through infrastructure improvements in the communities we serve.

**Q. HOW MANY CUSTOMERS DOES THE TOS SYSTEM CURRENTLY SERVE AND HOW MANY CUSTOMERS DOES PAWC CURRENTLY SERVE?**

**A.** As of December 31, 2016, TOS furnished wastewater services to 998 customers. This number includes 950 residential and 48 commercial customer connections. Of these

interest in discussing the potential acquisition of the System and the use of Section 1329, the fair market value approach. TOS's representatives executed the Letter of Interest on December 6 and 7, 2016 and returned it to PAWC. This "Letter of Interest" was extended through amendments on March 9, 2017, May 2, 2017, June 6, 2017, and July 5, 2017 to allow the parties to enter into a definitive agreement. Through these extensions, PAWC and TOS jointly retained the services of Herbert E. MacCombie, Jr., P.E., of Media Pennsylvania to complete the Engineer's Assessment of Tangible Assets pursuant to Section 1329. The Engineer's Assessment of Tangible Assets is included as **Schedule 1.1** of the APA and included with the UVE fair market valuation reports at **Appendix A-5**. PAWC, pursuant to Section 1329, retained the services of AUS Consultants of Greenfield Wisconsin to complete an appraisal of the System. TOS retained the services of Herbert, Rowland & Grubic, Inc. of Harrisburg, Pennsylvania to also complete an appraisal of the System. These appraisals accompany the Application at **Appendix A-5** (together with electronic working documents at **Appendix A-4**) and are included as **Schedule 2.2** of the APA. After receipt of the two appraisals and subsequent arms-length negotiations, on May 1, 2018 TOS's Board of Supervisors approved the APA, which was subsequently executed by PAWC and TOS that day too. This APA includes a negotiated purchase price of $9,250,000.

**Q. CAN YOU PLEASE PROVIDE AN OVERVIEW OF THE APA?**

**A.** Yes. The APA is attached as **Appendix A-24-a** to the Application **(PAWC Exhibit KEG-1)**. The APA sets forth the terms and conditions pursuant to which the TOS will sell, and PAWC will purchase, the System, as well as substantially all assets, properties and rights

Elizabeth Rose Triscari, Esquire
Pennsylvania-American Water Company
800 West Hersheypark Drive
Hershey, PA 17033
(717) 520-4606
elizabeth.triscari@amwater.com

The Applicant's attorneys are authorized to receive all notices and communications regarding this Application.

6. PAWC is a regulated public utility corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania, and is engaged in the business of collecting, treating, storing, supplying, distributing and selling water to the public, and collecting, treating, transporting and disposing of wastewater for the public. Water and wastewater services are furnished by PAWC to the public in a service territory encompassing more than 400 communities across the Commonwealth with a combined population of over 2,400,000. A description of PAWC's existing certificated water and wastewater service territory is found in **Appendix B**, along with a detailed corporate history, outlining all of the mergers, acquisitions and consolidations, which have created PAWC as it exists on the date of this Application.

7. Steelton is a municipal water authority, organized by the Borough of Steelton in accordance with the Municipality Authorities Act, 53 Pa. C.S. §5601, et seq., with its offices located at 123 North Front Street, Steelton, Pennsylvania. Steelton owns and operates the Steelton System, providing water service to the public in the Borough of Steelton and a portion of Swatara Township (the "Service Area"), in Dauphin County, Pennsylvania.

8. As of November 30, 2018, Steelton furnishes water service to 2,472 customers including 2,289 residential, 124 commercial, 13 industrial, 34 institutional, 11 municipal, and one bulk sales customer connection.

PENNSYLVANIA REAL-TIME NEWS

# Steelton water sale closer to completion as Pa. American Water signs $22.5 million agreement

Updated Nov 15, 2018;
Posted Nov 15, 2018




Pennsylvania American Water announced today it signed an agreement to acquire the water assets of the Steelton Borough Authority. Pending regulatory approvals, the sale should be complete by the third quarter of 2019.

1
8
shares

**By Steve Marroni | smarroni@pennlive.com**

The sale of Steelton's water system is one step closer to completion.

Pennsylvania American Water announced today it has signed an agreement to acquire the water assets of the Steelton Borough Authority for $22.5 million.

The two will next seek approval of the acquisition from the Pennsylvania Public Utility Commission and other necessary approvals from the Pennsylvania Department of Environmental Protection, according to the company.

| Cust No | Name | Customer Type | Group Code | Service No | Description | Unit/Share |
|---|---|---|---|---|---|---|
| )33438358 | Morath, Christina | Commercial | None | 1 | SEWER | 1 |
| )33453937 | Baeder, William | Commercial | None | 1 | SEWER | 1 |
| )33521786 | Sanders, Debra | Commercial | None | 1 | SEWER | 1 |
| )33757653 | Advanced Auto Parts | Commercial | None | 1 | SEWER | 1 |
| )34016546 | Nelson's Ice Cream | Commercial | None | 1 | SEWER | 1 |
| )34030702 | Pitcher, Paul | Commercial | None | 1 | SEWER | 1 |
| )34083232 | Beck, Katharine G | Commercial | None | 1 | SEWER | 1 |
| )34862572 | LK Miller Properties LLC | Commercial | None | 1 | SEWER | 1 |
| )02939458 | Fuhrman, Steve | Commercial | None | 1 | SEWER | 1 |
| )03198199 | Sarangpur Realty LLC | Commercial | None | 1 | SEWER | 1 |
| )03373167 | Wilhelm, Rosemarie | Commercial | None | 1 | SEWER | 1 |
| )04397982 | Pragi Enterprises LLC | Commercial | None | 1 | SEWER | 1 |
| )06085025 | Plank Jr, Robert E | Commercial | None | 1 | SEWER | 1 |
| )06197065 | LD Hedge Associates LLC | Commercial | None | 1 | SEWER | 1 |
| )06197096 | LD Hedge Associates LLC | Commercial | None | 1 | SEWER | 1 |
| )07394708 | Fissinger, Matthew | Commercial | None | 1 | SEWER | 1 |
| )07425268 | Snyder, Joseph | Commercial | None | 1 | SEWER | 1 |
| )07461417 | Varlotta, Michael | Commercial | None | 1 | SEWER | 1 |
| )07487679 | CG Complex LLC | Commercial | None | 1 | SEWER | 1 |
| )07519040 | Bristol Road Partners Inc. | Commercial | None | 1 | SEWER | 1 |
| )08908308 | Superior Credit Union | Commercial | None | 1 | SEWER | 1 |
| )09217890 | Hoff Properties LLC | Commercial | None | 1 | SEWER | 1 |
| )10722804 | AMA Realty Properties LLC | Commercial | None | 1 | SEWER | 1 |
| )11184863 | Attilio, Thomas | Commercial | None | 1 | SEWER | 1 |
| )12032330 | 310 Chestnut Street LLC | Commercial | None | 1 | SEWER | 1 |
| )13068080 | Branch Banking & Trust Company | Commercial | None | 1 | SEWER | 1 |
| )13286185 | White, Elaine & Bruce | Commercial | None | 1 | SEWER | 1 |
| )15089717 | C&R Property Management LLC | Commercial | None | 1 | SEWER | 1 |
| )15089748 | C&R Property Management LLC | Commercial | None | 1 | SEWER | 1 |
| )15292810 | Preston, Aaron | Commercial | None | 1 | SEWER | 1 |
| )16240812 | Shalom, Jan | Commercial | None | 1 | SEWER | 1 |
| )16276750 | Copenhafer, Fay | Commercial | None | 1 | SEWER | 1 |
| )16612479 | Donohue, Patrick R | Commercial | None | 1 | SEWER | 1 |
| )17470098 | Lewis Group Ltd Partnership | Commercial | None | 1 | SEWER | 1 |
| )17961983 | Qawasmy, John | Commercial | None | 1 | SEWER | 1 |
| )18085592 | Christman, Lewis | Commercial | None | 1 | SEWER | 1 |
| )18305104 | Tarquini Herrera, Rachel | Commercial | None | 1 | SEWER | 1 |
| )18888302 | Florence Attilio Rental Acct. | Commercial | None | 1 | SEWER | 1 |
| )18888319 | Attilio, Thomas | Commercial | None | 1 | SEWER | 1 |
| )19364687 | Conigliaro, Vito | Commercial | None | 1 | SEWER | 1 |
| )21630875 | Chesterview Apartments | Commercial | None | 1 | SEWER | 1 |
| )22621041 | Main Street Royersford LLC | Commercial | None | 1 | SEWER | 1 |
| )22621096 | Spring Mountain Brewing Co | Commercial | None | 1 | SEWER | 1 |
| )23796115 | Kassam, Tashir | Commercial | None | 1 | SEWER | 1 |
| )26295581 | JD Arnold LLC | Commercial | None | 1 | SEWER | 1 |
| )26393133 | Ostebo, Kurt | Commercial | None | 1 | SEWER | 1 |
| | | 158 | | | | |

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Commercial, Industrial, Residential

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Industrial, Residential

| Cust No | Name | Customer Type | Group Code | Service No | Description | Unit/Share |
|---|---|---|---|---|---|---|
| )28611137 | Lewis Group Ltd. Partnership | Industrial | None | 1 | SEWER | 1 |
| )28619292 | Giftwares Co Inc | Industrial | None | 1 | SEWER | 1 |
| )28619407 | Specialty Chemical Systems Inc | Industrial | None | 1 | SEWER | 1 |
| )28619759 | Accumetrics Limited | Industrial | None | 1 | SEWER | 1 |
| )28619773 | Accumetrics Limited | Industrial | None | 1 | SEWER | 1 |
| )28620339 | Nelson's Ice Cream Inc. | Industrial | None | 1 | SEWER | 1 |
| )28620858 | American Machine & Tool Co. | Industrial | None | 1 | SEWER | 1 |
| )29486532 | A.C. Miller Concrete Company | Industrial | None | 1 | SEWER | 1 |
| )29651213 | Borough of Royersford | Industrial | None | 1 | SEWER | 1 |
| )29709754 | Royersford Spring Company | Industrial | None | 1 | SEWER | 1 |
| )29784885 | Advanced Fluid Systems Inc | Industrial | None | 1 | SEWER | 1 |
| | | 11 | | | | |

| Cust No | Name | Customer Type | Group Code | Service No | Description | Unit/Share |
|---|---|---|---|---|---|---|
| )25581487 | Sakal, Brian J | Residential | None | 1 | SEWER | 1 |
| )25581852 | Barbara Berman Ricci | Residential | None | 1 | SEWER | 1 |
| )25590276 | Tallman, William | Residential | None | 1 | SEWER | 1 |
| )25596441 | Tarantino, Joseph | Residential | None | 1 | SEWER | 1 |
| )25635087 | Benson, Merrill G | Residential | None | 1 | SEWER | 1 |
| )25760044 | Blamey, Chad & Katrin | Residential | None | 1 | SEWER | 1 |
| )25762972 | Whitmore, Andrew | Residential | None | 1 | SEWER | 1 |
| )25807684 | Mecca, Jessica | Residential | None | 1 | SEWER | 1 |
| )25824139 | Gerber, Jenna | Residential | None | 1 | SEWER | 1 |
| )25859012 | Creciun, Peter | Residential | None | 1 | SEWER | 1 |
| )25869156 | Seiders, Lester & Monica | Residential | None | 1 | SEWER | 1 |
| )25879108 | Chesterview Apartments | Residential | None | 1 | SEWER | 1 |
| )25930898 | US Bank NA | Residential | None | 1 | SEWER | 1 |
| )25948684 | Findley, Nicole M | Residential | None | 1 | SEWER | 1 |
| )25987108 | Craft, Elena | Residential | None | 1 | SEWER | 1 |
| )26021179 | John McDonald & Karlyn Eyre | Residential | None | 1 | SEWER | 1 |
| )26043841 | Blanche, Camile | Residential | None | 1 | SEWER | 1 |
| )26160869 | Hirst, Sharon A | Residential | None | 1 | SEWER | 1 |
| )26161459 | John Marlatt & Rebecca Gardner | Residential | None | 1 | SEWER | 1 |
| )26204967 | Niemczuk, Joseph W | Residential | None | 1 | SEWER | 1 |
| )26223333 | Weiss, Joseph | Residential | None | 1 | SEWER | 1 |
| )26239376 | C&R Property Management LLC | Residential | None | 1 | SEWER | 1 |
| )26300278 | Millard, Barry & Sheryl | Residential | None | 1 | SEWER | 1 |
| )26310954 | Nevin, Sean | Residential | None | 1 | SEWER | 1 |
| )26326843 | Davis, Jeff | Residential | None | 1 | SEWER | 1 |
| )26340238 | Jacobs, Jamie | Residential | None | 1 | SEWER | 1 |
| )26352002 | Slifer, Richard | Residential | None | 1 | SEWER | 1 |
| )26353432 | Lynch, Heather | Residential | None | 1 | SEWER | 1 |
| )26380250 | Tallman, William | Residential | None | 1 | SEWER | 1 |
| )26381130 | Stem, Matt & Heather | Residential | None | 1 | SEWER | 1 |
| )26403078 | Petaccio, Andrea | Residential | None | 1 | SEWER | 1 |
| )26630702 | O'Donnell, Kaitlyn | Residential | None | 1 | SEWER | 1 |
| )26660253 | Ilyas, Asif | Residential | None | 1 | SEWER | 1 |
| )26713911 | Hernandez, S & Murphy, M | Residential | None | 1 | SEWER | 1 |
| )26746591 | Gieske and Niemann LLC | Residential | None | 1 | SEWER | 1 |
| )26875659 | Speck, Erin | Residential | None | 1 | SEWER | 1 |
| )26880804 | Raser, Randy | Residential | None | 1 | SEWER | 1 |
| )26909682 | Perez, Waldemar & Aracelis | Residential | None | 1 | SEWER | 1 |
| )26969219 | Macelwee-Todd, Lisa | Residential | None | 1 | SEWER | 1 |
| | | 1427 | | | | |

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Residential

permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.15, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE

**Section 3.01. Purchase Price.** The purchase price for the Acquired Assets is Thirteen Million Dollars ($13,000,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall provide for payment in full of the total amount of Outstanding Indebtedness directly to Seller's obligees on account of the Purchase Price;

(b) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(c), to Seller by wire transfer of immediately available funds the balance of the Purchase Price (remaining after the debt repayment pursuant to Section 3.01(a)) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

(c) Final Billing: The Buyer is entitled to all customer billings with respect to sanitary wastewater customers services for the period on or after the Closing Effective Time, and Seller is entitled to all such billings for the period before the Closing Effective Time. The Parties

Report Criteria:
Service.Service number = 10,16
Group Code.Group code = "A","B","C"
Customer.Final bill date = {IS NULL}
Billing.Temporary disconnect date = {IS NULL}
Billing.Final disconnect date = {IS NULL}

| Customer Number | Customer Name | Service Address | Customer Type | Units |
|---|---|---|---|---|
| **10** | | | | |
| **UP Commercial** | | | | |
| 18011257.01 | POTTSTOWN 1257 INC | 1257 N CHARLOTTE ST | UP Commercial | 2 |
| 18011277.01 | CONIGLIARO, VITO | 1277 N CHARLOTTE ST | UP Commercial | 1 |
| 18011293.01 | BURGER KING #4651 | 1293 N CHARLOTTE ST | UP Commercial | 8 |
| 24010861.02 | DCM PROPERTY INVESTMENTS LLC | 861 WILLOW ST | UP Commercial | 1 |
| 24010929.01 | CREATIVE HEALTH SERVICES | 929 WILLOW ST | UP Commercial | 4 |
| 25100799.01 | FULTON FINANCIAL CORP | 799 STATE ST - FULTON BANK | UP Commercial | 1 |
| 41020175.02 | POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO | RENT-A-CENTER #50 | UP Commercial | 2 |
| 41020177.02 | POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO | DOLLAR ADVANTAGE | UP Commercial | 2 |
| 41020178.02 | POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO | RADIO SHACK #60 | UP Commercial | 2 |
| 41021066.01 | GEORGE EVANS | 1066 FARMINGTON AVE | UP Commercial | 1 |
| 41021173.01 | SHUKOWITSH, STEVEN & JESSICA | 1173 FARMINGTON AVE | UP Commercial | 1 |
| 41021189.01 | ARTIM, ROBERT | 1189 FARMINGTON AVE | UP Commercial | 1 |
| 41021320.01 | STROGUS, BARRY | 1320 FARMINGTON AVE | UP Commercial | 1 |
| 41021346.01 | AMERICAN METAL FINISHERS | 1346 FARMINGTON AVE | UP Commercial | 1 |
| 41021359.02 | BOWERS, TODD | 1359 FARMINGTON AVE | UP Commercial | 1 |
| 41021391.01 | MCGINNIS, DENNIS | 1361 FARMINGTON AVE | UP Commercial | 1 |
| 41021393.01 | SDM INVESTMENTS LLC | 1393 FARMINGTON AVE | UP Commercial | 1 |
| 41021403.01 | ARTIMS AUTOMOTIVE INC | 1403 FARMINGTON AVE | UP Commercial | 2 |
| 41021446.02 | 1446 FARMINGTON AVE LLC | 1446 FARMINGTON AVE | UP Commercial | 4 |
| 41021507.01 | RICHARDSON, GLORIA MAUGER & THOMAS | 1507 FARMINGTON AVE | UP Commercial | 1 |
| 41021525.01 | YOUNG, SHANE & KATHY | 1525 FARMINGTON AVE | UP Commercial | 1 |
| 41021587.01 | BURGYONE, BARRY | 1587 FARMINGTON AVE | UP Commercial | 1 |
| Total UP Commercial: | | | | |
| 22 | | | | 40 |
| **UP Mixed Use** | | | | |
| 20010875.01 | SJW PROPERTIES LLC | 875 N HANOVER ST -salon & apts | UP Mixed Use | 2 |
| 20010933.02 | MCGONIGLE, MICHAEL | 933 N HANOVER ST | UP Mixed Use | 2 |
| 20010943.01 | STRAUSS, PAUL | 943 N HANOVER ST | UP Mixed Use | 3 |
| 20010955.01 | BRODI, GERALD & ELAINE | 955 N HANOVER ST | UP Mixed Use | 11 |
| 21070842.01 | DAVIDHEISER, ALLEN & BEVERLY | 842 FARMINGTON AVE | UP Mixed Use | 1 |
| 24010940.01 | TOLENTINO, ROBERT & ASUNCION | 940 WILLOW ST | UP Mixed Use | 3 |
| 41050013.01 | OLOCK, ANDREW | 941 N HANOVER ST | UP Mixed Use | 4 |
| Total UP Mixed Use: | | | | |
| 7 | | | | 26 |
| **UP Public** | | | | |
| 16030233.01 | HOLY TRINITY ORTHODOX CHURCH | 1256 JUNIPER ST | UP Public | 1 |
| 20011351.01 | POTTSGROVE SCHOOL DISTRICT - ADMIN BLDG | 1351 N HANOVER ST - MULTI | UP Public | 30 |
| 41230093.01 | CHURCH OF LATTER - DAY SAINTS | 93 MAUGERS MILL RD | UP Public | 1 |
| Total UP Public: | | | | |
| 3 | | | | 32 |
| **UP Residential** | | | | |
| 10140863.02 | MILLS, LUCAS | 863 FARMINGTON AVE | UP Residential | 1 |
| 10140871.01 | POLLOCK, ANTHONY FILLMAN & BRENDA | 871 FARMINGTON AVE | UP Residential | 1 |

| Customer Number | Customer Name | Service Address | Customer Type | Units |
|---|---|---|---|---|
| 42061525.02 | HUTELMYER, JULIA & GREG | 1525 CLOVERHILL RD | UP Residential | 1 |
| 42071000.01 | HEATH, TERENCE M & CATHERINE | 1000 FALLBROOK LN | UP Residential | 1 |
| 42071002.02 | DAVIS, STEPHEN & KATHRYN | 1002 FALLBROOK LN | UP Residential | 1 |
| 42071004.02 | GALLINA, GAETANO | 1004 FALLBROOK LN | UP Residential | 1 |
| 42071006.02 | LIANG, JIE LIN & XIUYAN | 1006 FALLBROOK LN | UP Residential | 1 |
| 42071007.01 | STEELE, CORTNEY & DANIEL | 1007 FALLBROOK LN | UP Residential | 1 |
| 42071008.02 | FENOGLIO, CASEY & RICHARD | 1008 FALLBROOK LN | UP Residential | 1 |
| 42071009.02 | SHAW, SCOTT & THERESA | 1009 FALLBROOK LN | UP Residential | 1 |
| 42071010.02 | JOHNSON, FRANKLIN & KIMBERLY | 1010 FALLBROOK LN | UP Residential | 1 |
| 42071011.01 | HUBBARD, ANNA | 1011 FALLBROOK LN | UP Residential | 1 |
| 42071012.02 | DIXON, JULIAN & ERICA | 1012 FALLBROOK LN | UP Residential | 1 |
| 42071013.01 | HARISH, BIDADI & LAKSHMI | 1013 FALLBROOK LN | UP Residential | 1 |
| 42071014.02 | RICHARDSON, KATRINA | 1014 FALLBROOK LN | UP Residential | 1 |
| 42071015.02 | DZIUNYCZ, MATTHEW & EMILY | 1015 FALLBROOK LN | UP Residential | 1 |
| 42071016.02 | ISHLER, KARI KLAUS & MICHAEL | 1016 FALLBROOK LN | UP Residential | 1 |
| 42071017.03 | CONNER IV, SAMUEL | 1017 FALLBROOK LN | UP Residential | 1 |
| 42071018.01 | SHORT, CHRISTOPHER & RONNA | 1018 FALLBROOK LN | UP Residential | 1 |
| 42071019.01 | MCPHILLIMEY, MARK & ANN KOREEN | 1019 FALLBROOK LN | UP Residential | 1 |
| 42071020.01 | MCWILLIAMS, DAVID & LAURI | 1020 FALLBROOK LN | UP Residential | 1 |
| 42071021.01 | RIZZETTO, NINA | 1021 FALLBROOK LN | UP Residential | 1 |
| 42071022.02 | PASQUAL, MICHAEL & MARIA | 1022 FALLBROOK LN | UP Residential | 1 |
| 42071024.01 | COLLINGS, MARK | 1024 FALLBROOK LN | UP Residential | 1 |
| 42071026.01 | GAINES, NICOLE | 1026 FALLBROOK LN | UP Residential | 1 |
| 42071028.02 | SPRING HILL REALTY | 1028 FALLBROOK LN | UP Residential | 1 |
| 42071030.03 | HOUSEAL JR, JOSEPH & CARA | 1030 FALLBROOK LN | UP Residential | 1 |
| 42071032.03 | DAILY, ALBERT & REGINA | 1032 FALLBROOK LN | UP Residential | 1 |
| 42071034.01 | FELTENBERGER, CHAD & HEATHER | 1034 FALLBROOK LN | UP Residential | 1 |
| 42071036.02 | SOLIVAN, GINA & ADRIAN | 1036 FALLBROOK LN | UP Residential | 1 |
| 42071038.03 | THAO, DAVID | 1038 FALLBROOK LN | UP Residential | 1 |
| 42071040.01 | JORGENSON, TRISHA & ERICK | 1040 FALLBROOK LN | UP Residential | 1 |
| 42071042.01 | KROENING, TERRY | 1042 FALLBROOK LN | UP Residential | 1 |
| 42071044.01 | SCHURR, JEFFREY KENT | 1044 FALLBROOK LN | UP Residential | 1 |
| 42071045.01 | PURKAYASTHA, DEBASHISH & SUDDATTA | 1045 FALLBROOK LN | UP Residential | 1 |
| 42071046.03 | WILLIS, FRANK & FAITH | 1046 FALLBROOK LN | UP Residential | 1 |
| 42071047.02 | CONG, MY | 1047 FALLBROOK LN | UP Residential | 1 |
| 42071048.01 | HAINES, LARRY & DONNA | 1048 FALLBROOK LN | UP Residential | 1 |
| 42071050.02 | MIDDLETON, JAMES | 1050 FALLBROOK LN | UP Residential | 1 |
| 42071052.01 | SEMETER, DANIEL | 1052 FALLBROOK LN | UP Residential | 1 |
| 42071513.04 | ROMANO, DANIEL & SARA | 1513 CLOVER HILL RD | UP Residential | 1 |
| 42081600.02 | GOMEZ, ODETTE | 1600 APPLEGATE LN | UP Residential | 1 |
| 42081601.01 | RODRIGUEZ, RUTH & JUAN | 1601 APPLEGATE LN | UP Residential | 1 |
| 42081602.02 | EGARIAN, CHRISTOPHER | 1602 APPLEGATE LN | UP Residential | 1 |
| 42081604.01 | LAWLOR, CARL & LORETTA | 1604 APPLEGATE LN | UP Residential | 1 |
| 42081606.01 | COHEN, SIDNEY & RUTH | 1606 APPLEGATE LN | UP Residential | 1 |
| 42081608.01 | ROCHA, WILL & CARMEN | 1608 APPLEGATE LN | UP Residential | 1 |
| 42081609.01 | EVANS, GARETH | 1609 APPLEGATE LN | UP Residential | 1 |
| 42081610.01 | DUNKEL, CAROL | 1610 APPLEGATE LN | UP Residential | 1 |
| 42081611.02 | SORG, GREGORY & TRICIA | 1611 APPLEGATE LN | UP Residential | 1 |
| 42081612.01 | MANCINI, MICHAEL & AMIE | 1612 APPLEGATE LN | UP Residential | 1 |
| 42091501.02 | HULL, KEVIN & AMY | 1501 MAYWOOD LN | UP Residential | 1 |
| 42091503.02 | EPSTEIN, CARL & LINDA | 1503 MAYWOOD LN | UP Residential | 1 |
| 410512005.01 | CUTLER, ROBERT & ELIZABETH | 2005 PROUT FARM RD | UP Residential | |
| 4102152012.01 | SCHAEFFER, JACK & AUDREY | 1520 FARMINGTON AVE | UP Residential | 1 |
| 4152006901.01 | BUCK, WILLIAM | 69 MICKLITZ DR | UP Residential | 1 |
| Total UP Residential: 1,390 | | | | 1429 |

| Customer Number | Customer Name | Service Address | Customer Type | Units |
|---|---|---|---|---|
| Total 10: | | | | |
| 1,422 | | | | 1527 |
| **16** | | | | |
| **UP Commercial** | | | | |
| 10140882.01 | DICKENSON, CHARLES | 882 FARMINGTON AVE | UP Commercial | 2 |
| 10140902.01 | CMD SERVICES INC | 902 FARMINGTON AVE | UP Commercial | 3 |
| 18011263.02 | H & E PALERMO REAL ESTATE | 1263 N CHARLOTTE ST | UP Commercial | 2 |
| 20010863.01 | SJW PROPERTIES LLC | 871 N HANOVER ST -comm.bldg | UP Commercial | 6 |
| 41020179.01 | APPLEBEES RESTAURANT - ROSE CAS DIN LP | 815 STATE ST | UP Commercial | 30 |
| 41021495.01 | KIM, JONG Y & YUN K | 1495 FARMINGTON AVE | UP Commercial | 3 |
| Total UP Commercial: | | | | |
| 6 | | | | 46 |
| Total 16: | | | | |
| 6 | | | | 46 |
| Grand Totals: | | | | |
| 1,428 | | | | 1573 |

Report Criteria:
Service.Service number = 10,16
Group Code.Group code = "A","B","C"
Customer.Final bill date = {IS NULL}
Billing.Temporary disconnect date = {IS NULL}
Billing.Final disconnect date = {IS NULL}

https://www.pottsmerc.com/news/upper-pottsgrove-votes-4-1-to-sell-sewer-system-for-13-7m/article_f8f493d8-8408-11ea-8425-07388a90f968.html

FEATURED

# Upper Pottsgrove votes 4-1 to sell sewer system for $13.7M

Evan Brandt ebrandt@21st-centurymedia.com @PottstownNews on Twitter
Apr 22, 2020




Upper Pottsgrove Township Commissioner Martin Schreiber, framed in yellow, outlines his objections to the sale of the township's sewer collection system during Monday's online meeting.

Photo from Screenshot

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UPPER POTTSGROVE — Township Commissioners voted 4-1 Monday night to sell the township's sewer collection system for $13.75 million to Pennsylvania American Water.

Commissioners Martin Schreiber cast the lone vote against the sale.

As The Mercury reported on April 8, the presentation provided at four online informational sessions earlier in the month forecast that sewer rates would drop by about 9.6 percent under Pennsylvania American Water ownership.

However, the decrease — from the current $71.87 per month to $65 per month — would be short-lived, according to Bernie Grundusky, senior director for business development for the water company.

A chart he shared as part of the online meetings showed rates would return to the current rate in three or four years after the sale, and then increase annually by an average of 4.5 to 5.2 percent.

By comparison, the township's sewer rates, which have increased in a more haphazard fashion, average out to between 4.6 to 6 percent a year, according to the presentation.

Now that the sale has been approved, the average homeowner will save $1,260 between the time rates were dropped to when they return to their current level, according to the presentation.

The deal must still be approved by the Pennsylvania Public Utility Commission, a process that could take longer than a year to be finalized.

As a result of the vote, PFM Financial Advisors LLC will be paid more than $250,000.

As noted by Commissioners' Chairman Trace Slinkerd, who, prior to the vote, praised the consultants for taking a risk, if the commissioners had voted against the sale, PFM would have been paid only its $7,500 fee for preliminary work.

Scott Shearer, managing director of PFM, insisted during Monday's meeting that the firm "did not make a recommendation. We're not trying to sell this system."

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During the four public information sessions the township staged online, not one negative aspect of the sale was identified. Township Manager Michelle Reddick said the presentations were put together by PFM and the staff.

During those meetings, Slinkerd restricted all interaction to questions from residents, which were mostly answered by the consultants or township staff. He said public comments would be accepted at the April 20 meeting.

When that happened Monday night, the online meeting was attended by more than 50 people.

Eight residents spoke. All but one asked the commissioners to vote against the sale or, even more frequently, delay the vote until next month or later.

Many cited the fact that the Pennsylvania American Water's bid does not expire until June 30, and there is still time to answer residents' questions.

Don Read, a former member of the Pottstown Borough Authority and a current member of the township's sewer committee, was the only person to speak fully in favor of the sale.

As he did at the April 16 meeting, Read said the best reason to sell the system is the risk inherent in running it.

He said the potential capital costs of problems with sewer lines and pump stations, as well as capital costs imposed by the Pottstown Borough Authority, which runs the plant that receives and treats Upper Pottsgrove's sewage, are too big a financial risk for a four-person staff.

"The price is on the high side of what we projected," he said of the winning bid. The other bidder was Aqua America.

"What's another month going to do? It's frustrating to watch people come in at the last hour and ask for a delay," said Read.

He was referring, presumably, to other speakers who said they were unaware of the potential sale of the system until they received a township letter in the mail, a letter which arrived after the first two public information sessions had already occurred.

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"I am imploring you all to take an opportunity to table the vote until the May 20 meeting," said Turnberry Farms resident Stephanie Rowe.

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"This is beneficial in several ways, the first being it allows all residents to be able to digest and question this decision that seems to be on a fast track for a reason that has not been satisfied by any of the presentations that you allowed to happen with little or no response from the board — almost every question was deferred to either PFM or PA American Water," Rowe said.

Darryle Tillman, who appeared in scrubs while caring "for 104 patients, one third to one half of which have COVID-19," also urged a delay.

"This plan has its good points and its bad points, but it is ridiculous to do this in a Zoom meeting in the middle of a pandemic," he said in reference to the on-line platform used for the meeting.

Al Leach, who is also the vice president of the Pottsgrove School Board, also urged a pause.

"I'm sure you've all done your due diligence, but a lot of residents are just finding out about this and would like to see if they can get more involved," Leach said.

"There are a lot of questions that need to get answered, like how the board intends to spend the proceeds, and the open space question," he said.

Although the presentation has identified the proceeds as paying down the sewer system debt; making the pension system whole and paying off general fund and road fund debt, two other proposed uses have raised questions.

One is paying off debt undertaken by the open space fund, which is paid off with a voter-approved earned income tax; and infrastructure improvements to the police station and township offices in the firehouse.

No specific plan for those improvements has been presented as part of the sewer system sale proposal, said resident Doug Kern.

"We have no access to the paperwork, no ability to examine this ourselves," said Kern, who said he did not find out about the proposal until two of the public information sessions had already passed.

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"All I have is a bunch of slides, which changed after almost every meeting, and a lot of 'take-my-word-for-it-answers. It sounds like you have a 90-day window to make a decision," said Kern, urging a delay or a no vote.

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Dustin Schreiber said his research indicates American Water, the parent company of the high bidder, "is owned by a German conglomerate called RFWAG. I'd prefer we support an American company if we sell, and I'm not convinced we should sell."

Hanover Drive resident Keith Plumadore said he sees the sale as a short-term fix for the township's finances. "It's a temporary reprieve from amateur fiscal management. The township did a good job with the (request for proposals) but I see no evidence the township will execute and bring better fiscal governance with the proceeds."

"When I moved here in 2000, the commissioners and the people all worked together," said Leach. "I implore you to at least consider the idea of tabling this motion, It would be so easy to delay this vote so we can get all our ducks in a row and demonstrate transparency we always used to have in this community."

Slinkerd closed public comment and then called on Schreiber to outline the objections he has been posting on his Facebook page and the Turnberry Farms Facebook page.

However, as Schreiber spoke, Slinkerd repeatedly interrupted him, talked over him and told him his points were not relevant to the subject at hand.

"The sewer customers paid for the sewer, if they were stockholders, they should be getting a bonus check, they're getting the short end of the stick," said Schreiber.

"What about people who pay school taxes but don't have any children in the system," Slinkerd interjected. "Should they not be taxed?"

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The areas in green on this map of Upper Pottsgrove show the areas served by the township sewer system.

Official township sewer map

"Everyone has a chance to send to send students to school," Schreiber replied. "What about open space, Martin?" Slinkerd interrupted again. "That's paid with earned income tax, but seniors don't pay that. Should we put signs up telling them they can't use the open space?" Slinkerd asked.

"We taxed ourselves for that," Schreiber started to reply and Slinkerd pressed on. "We don't separate our residents into septic or sewer residents. Are you saying that's the way we should go?"

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As Schreiber tried to raise further points, Slinkerd continued to interrupt him. "That's what you've been doing, going down this rabbit hole trying to dislodge what we're talking about," Slinkerd said.

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"You keep trying to throw things at the wall at the 11th hour to see what sticks to make it seem like you did research," he continued. "You've had a year to think about this stuff."

"Are you going to let me finish?" Schreiber finally asked. "I never stopped you," Slinkerd replied, finally allowing Schreiber to speak uninterrupted.

The other commissioners, Dave Waldt, Cathy Paretti and Renee Spaide all were permitted to speak uninterrupted, except when Schrieber spoke, thinking Paretti was finished with her point.

He apologized for interrupting her and urged her to go on.

The other commissioners joined in disputing Schreiber's points.

Spaide, who has served on the board for many years with Schreiber, read from a prepared statement that noted, in part, "all the commissioners have been involved."

She said she agrees with Read that running the sewer system is a risk. "We have a road crew, not a sewer crew and Pennsylvania American Water does this for a living," said Spaide.

Waldt said he and Paretti "ran on concern about the township's finances. People were very unhappy." He disputed Schreiber's characterization that he was left out of discussions. "We've spent hours on the budget and I never see you. You never participate," said Waldt.

"Dave and I started to get to get acquainted with this while we were running," said Paretti. "We don't have any business running a sewer business. If we keep it, our taxes would rise and the rates would be higher than if we didn't own it."

She added, "I don't wait to be invited into things, I ask for the information I need."

When Schreiber tried to point out he had asked Reddick for information and it took two days to get an answer, the other commissioners leaped to her defense. "Michelle has a lot on her plate," said Paretti.

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"Michelle has done an outstanding job," said Slinkerd.

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Paretti pointec out that while people last night were complaining about having the meeting over Zoom, it had more participants than most in-person township meetings.

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"It's great to see so many people participate. This is not as many as we get at regular meetings. I've had people tell me they like this better," said Paretti. "You're never going to make everyone happy."

But even in a pandemic, "the one thing that can't stop is your government," Paretti said.

After the vote, Slinkerd said the next steps would be discussed at a future meeting.

*This article first appeared as a post in The Digital Notebook blog.*

> "All I have is a bunch of slides, which changed after almost every meeting, and a lot of 'take-my-word-for-it-answers."
>
> — Doug Kern, Upper Pottsgrove resident

> "This plan has its good points and its bad points, but it is ridiculous to do this in a Zoom meeting in the middle of a pandemic."
>
> — Darryle Tillman, Upper Pottsgrove resident

> "What's another month going to do? It's frustrating to watch people come in at the last hour and ask for a delay."
>
> — Don Read, Upper Pottsgrove Sewer Committee

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> "I am imploring you all to take an opportunity to table the vote until the May 20 meeting."
>
> — Stephanie Rowe, Upper Pottsgrove resident

> "You keep trying to throw things at the wall at the 11th hour to see what sticks to make it seem like you did research."
>
> — Trace Slinkerd, Upper Pottsgrove Commissioners chairman

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Evan Brandt
@PottstownNews on Twitter

Evan Brandt has been a staff reporter for The Mercury for more than 20 years. He covers municipal, school district, political, state government, federal government and environmental news.

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Va Township

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

| Service | Charge | Rate | Current Charge | Prior Due | Total Billed | w\Penalty |
|---|---|---|---|---|---|---|

**Billing Summary By Class**

| Class | # of Units | # of Accounts | Consumption charges | Fixed charges | Special charges | Unit charges | Taxes | Prior Due | Total | Consumption |
|---|---|---|---|---|---|---|---|---|---|---|
| CH | 0.00 | 6 | $1,903.57 | $0.00 | $0.00 | $0.00 | $0.00 | $588.17 | $2,491.74 | 0.00 |
| COM | 0.00 | 119 | $57,834.48 | $0.00 | $0.00 | $0.00 | $0.00 | $4,543.43 | $62,377.91 | 1,636.00 |
| DAY | 0.00 | 2 | $2,006.87 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $2,006.87 | 0.00 |
| IND | 0.00 | 13 | $11,785.09 | $0.00 | $0.00 | $0.00 | $0.00 | -$967.10 | $10,817.99 | 27.00 |
| MH | 0.00 | 4 | $1,087.76 | $0.00 | $0.00 | $0.00 | $0.00 | $1,003.61 | $2,091.37 | 0.00 |
| RES | 1.00 | 3,022 | $943,941.94 | $0.00 | $0.00 | $0.00 | $0.00 | $224,214.75 | $1,168,156.69 | 31,458.00 |
| SCH | 0.00 | 3 | $4,074.10 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $4,074.10 | 338.00 |
| Grand Totals | 1.00 | | $1,022,633.81 | $0.00 | $0.00 | $0.00 | $0.00 | $229,382.86 | $1,252,016.67 | 33,459.00 |

65

| | Metered Sewer | Sewer | Trash | Water | Total |
|---|---|---|---|---|---|
| CH | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>6<br>$1463.00<br>0.00 | 0.00<br>6<br>$440.57<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>6<br>$1903.57<br>0.00 |
| COM | 0.00<br>26<br>$9447.60<br>555.00 | 0.00<br>90<br>$41339.82<br>526.00 | 0.00<br>17<br>$1258.76<br>0.00 | 0.00<br>27<br>$5788.30<br>555.00 | 0.00<br>119<br>$57834.48<br>1,636.00 |
| DAY | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$1881.00<br>0.00 | 0.00<br>1<br>$125.87<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$2006.87<br>0.00 |
| IND | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>12<br>$11495.00<br>0.00 | 0.00<br>1<br>$62.94<br>0.00 | 0.00<br>1<br>$227.15<br>27.00 | 0.00<br>13<br>$11785.09<br>27.00 |
| MH | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>4<br>$836.00<br>0.00 | 0.00<br>4<br>$251.76<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>4<br>$1087.76<br>0.00 |

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service Charge Rate Current Charge Prior Due Total Billed w\Penalty

| | Metered Sewer | Sewer | Trash | Water | Total |
|---|---|---|---|---|---|
| RES | 0.00<br>1,638<br>$326585.47<br>15,718.00 | 0.00<br>1,344<br>$274835.00<br>0.00 | 1.00<br>2,741<br>$178743.69<br>0.00 | 0.00<br>1,641<br>$163777.78<br>15,740.00 | 1.00<br>3,022<br>$943941.94<br>31,458.00 |
| SCH | 0.00<br>2<br>$2026.80<br>169.00 | 0.00<br>1<br>$627.00<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$1420.30<br>169.00 | 0.00<br>3<br>$4074.10<br>338.00 |
| Total | 0.00<br>1,666<br>$338059.87<br>16,442.00 | 0.00<br>1,459<br>$332476.82<br>526.00 | 1.00<br>2,770<br>$180883.59<br>0.00 | 0.00<br>1,671<br>$171213.53<br>16,491.00 | 1.00<br>3,169<br>$1022633.81<br>33,459.00 |

Billing Summary By District

| District | Accounts | Consumption charges | Fixed charges | Special charges | Unit charges | Total Taxes | Prior Due | Total | Consumption |
|---|---|---|---|---|---|---|---|---|---|
| | 98 | $31,793.07 | $0.00 | $0.00 | $0.00 | $0.00 | $7,493.77 | $39,286.84 | 1,308.00 |
| 01 | 227 | $89,098.00 | $0.00 | $0.00 | $0.00 | $0.00 | $11,780.00 | $100,878.00 | 5,375.00 |
| 02 | 180 | $66,337.00 | $0.00 | $0.00 | $0.00 | $0.00 | $7,045.26 | $73,382.26 | 3,734.00 |
| 03 | 373 | $140,804.30 | $0.00 | $0.00 | $0.00 | $0.00 | $12,388.59 | $153,192.89 | 8,152.00 |
| 04 | 128 | $45,371.52 | $0.00 | $0.00 | $0.00 | $0.00 | $3,462.92 | $48,834.44 | 2,402.00 |
| 05 | 79 | $29,618.51 | $0.00 | $0.00 | $0.00 | $0.00 | $1,527.02 | $31,145.53 | 1,676.00 |
| 06 | 507 | $168,878.38 | $0.00 | $0.00 | $0.00 | $0.00 | -$1,009.62 | $167,868.76 | 7,332.00 |
| A | 522 | $156,120.45 | $0.00 | $0.00 | $0.00 | $0.00 | $53,216.98 | $209,337.43 | 1,346.00 |
| B | 662 | $191,212.44 | $0.00 | $0.00 | $0.00 | $0.00 | $96,144.83 | $287,357.27 | 1,172.00 |
| C | 364 | $92,570.36 | $0.00 | $0.00 | $0.00 | $0.00 | $36,930.04 | $129,500.40 | 436.00 |
| EF | 9 | $3,446.52 | $0.00 | $0.00 | $0.00 | $0.00 | $91.36 | $3,537.88 | 218.00 |
| WC | 20 | $7,383.26 | $0.00 | $0.00 | $0.00 | $0.00 | $311.71 | $7,694.97 | 308.00 |
| Grand Totals | | $1,022,633.81 | $0.00 | $0.00 | $0.00 | $0.00 | $229,382.86 | $1,252,016.67 | 33,459.00 |

(b) Until such time as a Nonassignable Asset is transferred to Buyer pursuant to this Article II, Buyer and Seller shall cooperate in any commercially reasonable and economically feasible arrangements (such as subleasing, sublicensing or subcontracting) to provide to the Parties the economic and, to the extent permitted under Law, operational equivalent of the transfer of such Nonassignable Asset to Buyer at the Closing and the performance by Buyer of its obligations with respect thereto, and so long as Seller transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.13, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.13 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.13 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE AND ADDITIONAL PURCHASE PRICE

**Section 3.01. Purchase Price.**
The purchase price for the Acquired Assets is Thirteen Million Nine Hundred Fifty Thousand Dollars ($13,950,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(b), to Seller by wire transfer of immediately available funds the Purchase Price (remaining after the payments required in Section 3.01(a)) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

Va Township

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

| Service | Charge | Rate | Current Charge | Prior Due | Total Billed | w\Penalty |
|---|---|---|---|---|---|---|

**Billing Summary By Class**

| Class | # of Units | # of Accounts | Consumption charges | Fixed charges | Special charges | Unit charges | Taxes | Prior Due | Total | Consumption |
|---|---|---|---|---|---|---|---|---|---|---|
| CH | 0.00 | 6 | $1,903.57 | $0.00 | $0.00 | $0.00 | $0.00 | $588.17 | $2,491.74 | 0.00 |
| COM | 0.00 | 119 | $57,834.48 | $0.00 | $0.00 | $0.00 | $0.00 | $4,543.43 | $62,377.91 | 1,636.00 |
| DAY | 0.00 | 2 | $2,006.87 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $2,006.87 | 0.00 |
| IND | 0.00 | 13 | $11,785.09 | $0.00 | $0.00 | $0.00 | $0.00 | -$967.10 | $10,817.99 | 27.00 |
| MH | 0.00 | 4 | $1,087.76 | $0.00 | $0.00 | $0.00 | $0.00 | $1,003.61 | $2,091.37 | 0.00 |
| RES | 1.00 | 3,022 | $943,941.94 | $0.00 | $0.00 | $0.00 | $0.00 | $224,214.75 | $1,168,156.69 | 31,458.00 |
| SCH | 0.00 | 3 | $4,074.10 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $4,074.10 | 338.00 |
| Grand Totals | 1.00 | | $1,022,633.81 | $0.00 | $0.00 | $0.00 | $0.00 | $229,382.86 | $1,252,016.67 | 33,459.00 |

68

| | Metered Sewer | Sewer | Trash | Water | Total |
|---|---|---|---|---|---|
| CH | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>6<br>$1463.00<br>0.00 | 0.00<br>6<br>$440.57<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>6<br>$1903.57<br>0.00 |
| COM | 0.00<br>26<br>$9447.60<br>555.00 | 0.00<br>90<br>$41339.82<br>526.00 | 0.00<br>17<br>$1258.76<br>0.00 | 0.00<br>27<br>$5788.30<br>555.00 | 0.00<br>119<br>$57834.48<br>1,636.00 |
| DAY | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$1881.00<br>0.00 | 0.00<br>1<br>$125.87<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$2006.87<br>0.00 |
| IND | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>12<br>$11495.00<br>0.00 | 0.00<br>1<br>$62.94<br>0.00 | 0.00<br>1<br>$227.15<br>27.00 | 0.00<br>13<br>$11785.09<br>27.00 |
| MH | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>4<br>$836.00<br>0.00 | 0.00<br>4<br>$251.76<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>4<br>$1087.76<br>0.00 |

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

| Service | Charge | Rate | Current Charge | Prior Due | Total Billed | w\Penalty |
|---|---|---|---|---|---|---|

| | Metered Sewer | Sewer | Trash | Water | Total |
|---|---|---|---|---|---|
| RES | 0.00<br>1,638<br>$326585.47<br>15,718.00 | 0.00<br>1,344<br>$274835.00<br>0.00 | 1.00<br>2,741<br>$178743.69<br>0.00 | 0.00<br>1,641<br>$163777.78<br>15,740.00 | 1.00<br>3,022<br>$943941.94<br>31,458.00 |
| SCH | 0.00<br>2<br>$2026.80<br>169.00 | 0.00<br>1<br>$627.00<br>0.00 | 0.00<br>0<br>$0.00<br>0.00 | 0.00<br>2<br>$1420.30<br>169.00 | 0.00<br>3<br>$4074.10<br>338.00 |
| Total | 0.00<br>1,666<br>$338059.87<br>16,442.00 | 0.00<br>1,459<br>$332476.82<br>526.00 | 1.00<br>2,770<br>$180883.59<br>0.00 | 0.00<br>1,671<br>$171213.53<br>16,491.00 | 1.00<br>3,169<br>$1022633.81<br>33,459.00 |

Billing Summary By District

| District | Accounts | Consumption charges | Fixed charges | Special charges | Unit charges | Total Taxes | Prior Due | Total | Consumption |
|---|---|---|---|---|---|---|---|---|---|
| | 98 | $31,793.07 | $0.00 | $0.00 | $0.00 | $0.00 | $7,493.77 | $39,286.84 | 1,308.00 |
| 01 | 227 | $89,098.00 | $0.00 | $0.00 | $0.00 | $0.00 | $11,780.00 | $100,878.00 | 5,375.00 |
| 02 | 180 | $66,337.00 | $0.00 | $0.00 | $0.00 | $0.00 | $7,045.26 | $73,382.26 | 3,734.00 |
| 03 | 373 | $140,804.30 | $0.00 | $0.00 | $0.00 | $0.00 | $12,388.59 | $153,192.89 | 8,152.00 |
| 04 | 128 | $45,371.52 | $0.00 | $0.00 | $0.00 | $0.00 | $3,462.92 | $48,834.44 | 2,402.00 |
| 05 | 79 | $29,618.51 | $0.00 | $0.00 | $0.00 | $0.00 | $1,527.02 | $31,145.53 | 1,676.00 |
| 06 | 507 | $168,878.38 | $0.00 | $0.00 | $0.00 | $0.00 | -$1,009.62 | $167,868.76 | 7,332.00 |
| A | 522 | $156,120.45 | $0.00 | $0.00 | $0.00 | $0.00 | $53,216.98 | $209,337.43 | 1,346.00 |
| B | 662 | $191,212.44 | $0.00 | $0.00 | $0.00 | $0.00 | $96,144.83 | $287,357.27 | 1,172.00 |
| C | 364 | $92,570.36 | $0.00 | $0.00 | $0.00 | $0.00 | $36,930.04 | $129,500.40 | 436.00 |
| EF | 9 | $3,446.52 | $0.00 | $0.00 | $0.00 | $0.00 | $91.36 | $3,537.88 | 218.00 |
| WC | 20 | $7,383.26 | $0.00 | $0.00 | $0.00 | $0.00 | $311.71 | $7,694.97 | 308.00 |
| Grand Totals | | $1,022,633.81 | $0.00 | $0.00 | $0.00 | $0.00 | $229,382.86 | $1,252,016.67 | 33,459.00 |

and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.13, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.13 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.13 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE AND ADDITIONAL PURCHASE PRICE

**Section 3.01. Purchase Price.**

The purchase price for the Acquired Assets is Seven Million Three Hundred Twenty-Five Thousand Dollars ($7,325,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(b) and to release Liens, to Seller by wire transfer of immediately available funds the Purchase Price to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

(b) Final Billing: The Buyer is entitled to all customer billings with respect to drinking water customers services for the period on or after the Closing Effective Time, and Seller is entitled to all such billings for the period before the Closing Effective Time. The Parties

respect thereto, and so long as Seller or the City transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under applicable Law and the terms of any applicable contract that constitutes a Nonassignable Asset, as agent or subcontractor for Seller or the City, pay, perform and discharge the Liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would constitute Assumed Liabilities if the applicable consent or approval had been obtained on or prior to the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under applicable Law, Seller or the City shall, at Seller's or the City's expense, hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and prior to the Closing, Buyer identifies any contract to which Seller or the City is a party which is not identified on Schedule 4.15 as an Assigned Contract as of the Effective Date, and Buyer reasonably determines such contract is necessary to the operation of the System, Buyer shall give notice of such determination to Seller or the City and Seller or the City shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 identifying such contract, and such contract shall thereafter constitute and be deemed an Assigned Contract for all purposes hereunder.

(d) In the event that, during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller or the City was a party as of the Closing and which (i) was not set forth on or properly identified on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary to the operation of the System, Seller or the City shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract shall be deemed an Assigned Contract for all purposes hereunder.

## ARTICLE III.

## PURCHASE PRICE

**Section 3.01 Purchase Price; Agreement Proposal Security.**

(a) **Purchase Price for the Assets; Adjustment for City Deposit.** Subject to the terms and conditions of this Agreement, the purchase price ("**Purchase Price**") for the Acquired Assets shall be (i) $235,000,000, *plus* (ii) the Average Daily AR Payment. The Purchase Price shall be delivered as follows:

(i) Within 60 days of the Effective Date, Buyer shall deposit Twenty Million Dollars ($20,000,000) of the Purchase Price, payable to the City in immediately available funds ("**City Deposit**"), subject to Sections 4.03, 6.06, 9.05 and 13.02 and secured by the City with a tax and revenue anticipation note (the "**Deposit Note**") substantially in the form attached hereto as Exhibit A; and

**Application of Pennsylvania-American Water Company for the Acquisition of the Wastewater Collection and Treatment System Owned by the York City Sewer Authority (the "Authority") and Operated by the City of York (the "City") (collectively "York")**

**66 Pa. C.S. § 1329**
**Application Filing Checklist – Water/Wastewater**
**Docket No. A-2021-3024681**

17. Customers.

a. State the seller's actual number of customers by class and quantify the related consumption or gallons treated in the current calendar year and future number of connections anticipated for the next 10 years.

**RESPONSE:**

a. As of April 2021, York provided direct wastewater service to approximately 13,747 customers and seven bulk customers:

1. Manchester Township
2. West Manchester Township
3. York Township
4. North York Borough
5. The York Water Company (owner of the West York Borough Collection System)
6. Spring Garden Township
7. Springettsbury Township

The York does not differentiate by customer class.

**Consumption (annual):**

Based on 2020 monthly average flow data from the 2020 Chapter 94 Report, the annual gallon treated is 3,341,575,000 gallons, inclusive of the seven bulk customers' sewage.

Please refer to **Appendix A-20-c,** Chapter 94 Report for future EDU projections.

**Appendix A-17-a**

system at an agreed-upon price of $53,000,000.[9] Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the FMV of the wastewater system assets and the ratemaking rate base. As required by Section 1329, Aqua and LMT jointly retained the services of Ebert Engineering, Inc., Consulting Engineers (Ebert) to complete the engineering assessment and original cost estimate of the wastewater system (Assessment of Tangible Property). Aqua St. 1 at 20; Application at ¶ 11. Aqua selected Gannett Fleming, and the Township selected AUS, as their respective UVEs to prepare FMV appraisals of the wastewater system. Application at ¶ 53. Gannett Fleming's FMV report concluded that the value of the wastewater system was $55,505,000; AUS' FMV was $54,430,591. Application Exhs. Q and R. Both appraisals were prepared in compliance with the USPAP standards. Application at ¶ 61; Application Exhs. T1 and T2.

In its Application, Aqua proposed a ratemaking rate base of $53,000,000 based on the agreed-to purchase price of $53,000,000. This amount is less than the average of the two UVE appraisals for the wastewater system (($55,505,000 + $54,430,591)/2 = $54,967,796). OCA M.B. at 6; *See* 66 Pa. C.S. § 1329(c)(2).

In addition, Aqua is seeking approval of the APA with LMT. Application Exh. B. The APA requires Aqua to implement rates that are no higher than the Township's rates in effect at closing. Application Exh. B at Section 7.04. The APA also provides that Aqua intends to bill customers on a monthly basis instead of an annual basis. *Id*. Moreover, in accordance with Section 1102 of the Code, Aqua is requesting a Certificate in order to provide wastewater services to the Township customers. Application at ¶ 5. Separate customer notices were sent to the Township customers and

[9] All assets are located in the Township except for a portion of a main that collects wastewater from a small segment of residents in Yardley Borough. The main is located on University Blvd. and is owned by LMT which loops into, then out of, Yardley Borough. The residents in Yardley Borough that are connected to this main are billed by Yardley Borough. Application at 3.

adopted without comment unless they are either expressly or by necessary implication rejected or modified by this Opinion and Order.

As we proceed in our review of the various positions of the Parties in this proceeding, we are reminded that the Commission is not required to consider expressly or at length each contention or argument raised by the parties. *Consolidated Rail Corp. v. Pa. PUC*, 625 A.2d 741 (Pa. Cmwlth. 1993); *also see, generally, University of Pennsylvania v. Pa. PUC*, 485 A.2d 1217 (Pa. Cmwlth. 1984). Exceptions that we do not specifically address shall be deemed to have been duly considered and denied without further discussion.

## III. Transaction Overview

Aqua is a certificated provider of wastewater service, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua provides wastewater service to approximately 45,000 customer accounts in various counties throughout Pennsylvania including parts of Bucks County. Application at ¶ 7.

LMT owns a sanitary wastewater collection system operated by the Municipal Sewer Authority of the Township of Lower Makefield, which provides direct wastewater service to 11,151 customers in the Township. Application at ¶ 8; Aqua St. 2 at 10. LMT does not own a wastewater treatment plant. Wastewater treatment is mainly provided by the Municipal Authority of the Borough of Morrisville and also by Yardley Borough Sewer Authority. Application at ¶ 15.

On September 17, 2020, Aqua and LMT entered into an APA for the sale of substantially all of the assets, properties, and rights related to the Township's wastewater

## II. Transaction Overview

Aqua is a certificated provider of wastewater service, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua provides wastewater service to approximately 45,000 customer accounts in various counties throughout Pennsylvania, including parts of Chester County and within the Township itself, and currently operates thirty-nine wastewater treatment plants. Application at ¶ 7; Aqua St. 1 at 8-9.

EWT is a Pennsylvania Second Class township, which owns the sanitary wastewater collection system (the System) providing sanitary wastewater service to approximately 3,895 customers in EWT. Application at ¶ 8. Although EWT owns the Malvern Hunt Wastewater Treatment Plant (WWTP), wastewater treatment is mainly provided by the Valley Forge Sewer Authority (VFSA).[3] Application at ¶ 15.

On January 8, 2021, Aqua and EWT entered into an APA for the sale of the assets, properties, and rights related to the Township's System at an agreed-upon price of $54,930,000. Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the fair market value (FMV) of the System assets and the ratemaking rate base. As required by Section 1329, Aqua and EWT jointly retained the services of Pennoni Associates, Inc. (Pennoni) to complete the engineering assessment and original cost estimate of the System (Engineering Assessment).

[3] In the Application, Aqua stated that Malvern Hunt WWTP was in the process of being decommissioned and converted to a pump station. Following the decommissioning, all wastewater flows will be treated at the VFSA WWTP. EWT, in addition, collects/conveys flow to/from its system from the Borough of Malvern, Tredyffrin Township, Charlestown Township, and Willistown Township, which then flows for treatment at the VFSA. EWT also has several areas of its system that are on the border between EWT and East Goshen Township. While EWT owns the facilities within its borders, flows from these customers are sent to the East Goshen Municipal Authority (EGMA) WWTP. Aqua St. 2 at 5-6.

Willistown is a Pennsylvania Second Class township, which owns the sanitary wastewater collection and treatment system (the System) providing sanitary wastewater service to approximately 2,294 customers in Willistown. Application at ¶ 8. Although Willistown owns one wastewater treatment plant (WWTP), Penn's Preserve, which treats wastewater to a small community system, wastewater treatment is mainly provided by the Valley Forge Sewer Authority (VFSA).[5] Application at ¶ 15.

On January 20, 2021, Aqua and Willistown entered into an APA for the sale of the assets, properties, and rights related to the Township's wastewater system at an agreed-upon price of $17,500,000. Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the FMV of the wastewater system assets and the ratemaking rate base. As required by Section 1329, Aqua and Willistown jointly retained the services of Pennoni Associates, Inc. (Pennoni) to complete the engineering assessment and original cost estimate of the System (Engineering Assessment). Aqua St. 1 at 19; Application at ¶ 11. Aqua selected Gannett Fleming, and the Township selected AUS, as their respective Utility Valuation Engineers (UVEs) to prepare FMV appraisals of the System. Application at ¶ 53. Gannett Fleming's FMV report concluded that the value of the System was $25,612,805; AUS' FMV was $19,113,140. Application Exhs. Q and R, respectively.[6, 7] Both appraisals were prepared in compliance with the Uniform Standards of Professional Appraisal Practice (USPAP) standards. Application at ¶ 61; Application Exhs. T1 and T2.

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[5] Willistown accepts flows into the System from users on the borders of Willistown, including from neighboring municipalities: Borough of Malvern (Malvern), East Goshen Township (East Goshen), and East Whiteland Township (EWT). While most flows from these users flow to the VFSA WWTP for treatment, some flows sent to East Goshen are treated at the East Goshen Municipal Authority (EGMA) Ridley Creek WWTP or the West Goshen Sewer Authority (WGSA) WWTP. Aqua St. 2 at 5-6.

[6] Application Exhibit Q, Gannett Fleming Fair Market Value Appraisal Report (hereinafter "Application Exh. Q" or "Gannett Fleming FMV Appraisal").

[7] Aqua Application, Exhibit R, AUS Fair Market Value Appraisal Report (hereinafter "Application Exh. R" or "AUS FMV Appraisal").

| Municipality | Final Sewer Customers |
|---|---|
| City of Beaver Falls | 3,252 |
| North Sewickley | 1,094 |
| Patterson Township | 1,191 |
| Big Beaver | 166 |
| Eastvale | 104 |
| West Mayfield | 521 |
| White Township | 421 |
| Patterson Heights | 270 |
| **Total** | **7,019** |

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**PROPRIETARY FUNDS**
**DECEMBER 31, 2017**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 996,456 | $ 9,666 | $ 1,006,122 |
| Due from Other Fund | 180,324 | 100,479 | 280,803 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 181,575 | 181,575 |
| Other | 193,960 | - | 193,960 |
| Total Current Assets | $ 1,370,740 | $ 291,720 | $ 1,662,460 |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 30,894 | 11,885 | 42,779 |
| Vehicles | 108,226 | 148,570 | 256,796 |
| Machinery & Equipment | - | 404,698 | 404,698 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (5,917,335) | (625,729) | (6,543,064) |
| Total Noncurrent Assets | 5,932,661 | 726,497 | 6,659,158 |
| **TOTAL ASSETS** | **$ 7,303,401** | **$ 1,018,217** | **$ 8,321,618** |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 24,668 | $ 9,202 | $ 33,870 |
| Due to other funds | 53,763 | 180,324 | 234,087 |
| Total Current Liabilities | $ 78,431 | $ 189,526 | $ 267,957 |
| **TOTAL LIABILITIES** | **$ 78,431** | **$ 189,526** | **$ 267,957** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,932,661 | $ 726,497 | $ 6,659,158 |
| Unrestricted | 1,292,309 | 102,194 | 1,394,503 |
| **TOTAL NET POSITION** | **$ 7,224,970** | **$ 828,691** | **$ 8,053,661** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,303,401** | **$ 1,018,217** | **$ 8,321,618** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2017**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,516,759 | $ 1,283,432 | $ 2,800,191 |
| Tap-In Fees | 33,719 | - | 33,719 |
| Permit Fees | 500 | - | 500 |
| Miscellaneous | 1,294 | - | 1,294 |
| **TOTAL OPERATING REVENUES** | **$ 1,552,272** | **$ 1,283,432** | **$ 2,835,704** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 681,208 | $ 681,208 |
| Wages and Benefits | 600,030 | 79,200 | 679,230 |
| Administrative | 30,000 | 180,000 | 210,000 |
| Office | 2,743 | - | 2,743 |
| Repair and maintenance | 66,599 | 101,922 | 168,521 |
| Billing expense | - | 20,084 | 20,084 |
| Depreciation | 215,037 | 34,803 | 249,840 |
| Engineering | 9,665 | 21,281 | 30,946 |
| Utilities | 123,779 | - | 123,779 |
| Chemicals/Chlorine | 27,374 | - | 27,374 |
| Sludge/grit removal | 47,756 | - | 47,756 |
| Janitorial Supplies | 3,029 | - | 3,029 |
| Gas and Oil | 2,340 | - | 2,340 |
| Equipment | 2,263 | - | 2,263 |
| Uniforms | 2,135 | - | 2,135 |
| Permits and testing | 13,022 | 500 | 13,522 |
| Certification & Training | 830 | 375 | 1,205 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | - | 2,016 | 2,016 |
| Line Rental Expense | 40,000 | - | 40,000 |
| Sewer-Line Reimbursement | - | 100,000 | 100,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,216,875** | **$ 1,221,389** | **$ 2,438,264** |
| **OPERATING INCOME (LOSS)** | **$ 335,397** | **$ 62,043** | **$ 397,440** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 1,268 | $ 444 | $ 1,712 |
| Interest expense | (21,815) | - | (21,815) |
| Operating Transfers In | 964,629 | - | 964,629 |
| Operating Transfers Out | (497,238) | - | (497,238) |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ 446,844** | **$ 444** | **$ 447,288** |
| **CHANGE IN NET POSITION** | **$ 782,241** | **$ 62,487** | **$ 844,728** |
| NET POSITION - January 1, 2017 | 6,442,729 | 766,204 | 7,208,933 |
| **NET POSITION - December 31, 2017** | **$ 7,224,970** | **$ 828,691** | **$ 8,053,661** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF CASH FLOWS**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2017**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,523,415 | $ 1,290,322 | $ 2,813,737 |
| Miscellaneous Revenue | 1,294 | - | 1,294 |
| Cash Paid to Vendors for Goods and Services | (1,004,677) | (1,181,844) | (2,186,521) |
| **Net cash provided (used) by operating activities** | **$ 520,032** | **$ 108,478** | **$ 628,510** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ (7,749) | $ - | $ (7,749) |
| Principal debt service payments | (940,000) | - | (940,000) |
| Interest expense | (24,629) | - | (24,629) |
| **Net cash provided (used) by capital and related financing activities** | **$ (972,378)** | **$ -** | **$ (972,378)** |
| **CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:** | | | |
| Transfers to Other Funds | $ 496,656 | $ (169,854) | $ 326,802 |
| **Net cash provided (used) by noncapital financing activities** | **$ 496,656** | **$ (169,854)** | **$ 326,802** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 1,268 | $ 444 | $ 1,712 |
| **Net cash provided by investing activities** | **$ 1,268** | **$ 444** | **$ 1,712** |
| **Net increase (decrease) in cash and cash equivalents** | $ 45,578 | $ (60,932) | $ (15,354) |
| **Cash and cash equivalents - January 1, 2017** | 950,878 | 70,598 | 1,021,476 |
| **Cash and cash equivalents - December 31, 2017** | **$ 996,456** | **$ 9,666** | **$ 1,006,122** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 335,397 | $ 62,043 | $ 397,440 |
| Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities: | | | |
| Depreciation | 215,037 | 34,803 | 249,840 |
| Changes in assets and liabilities: | | | |
| (Increase) decrease in sewer/refuse receivables | - | 6,890 | 6,890 |
| (Increase) decrease in other accounts receivable | (27,563) | - | (27,563) |
| Increase (decrease) in accounts payable | (2,839) | 4,742 | 1,903 |
| **Net cash provided (used) by operating activities** | **$ 520,032** | **$ 108,478** | **$ 628,510** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**PROPRIETARY FUNDS**
**DECEMBER 31, 2018**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 1,187,520 | $ 22,457 | $ 1,209,977 |
| Due from Other Fund | 177,811 | 395,725 | 573,536 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 181,157 | 181,157 |
| Other | 182,827 | - | 182,827 |
| **Total Current Assets** | **$ 1,548,158** | **$ 599,339** | **$ 2,147,497** |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 30,894 | 11,885 | 42,779 |
| Vehicles | 108,226 | 148,570 | 256,796 |
| Machinery & Equipment | - | 410,644 | 410,644 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (6,128,323) | (660,978) | (6,789,301) |
| **Total Noncurrent Assets** | **$ 5,721,674** | **$ 697,193** | **$ 6,418,867** |
| **TOTAL ASSETS** | **$ 7,269,832** | **$ 1,296,532** | **$ 8,566,364** |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 18,323 | $ 2,854 | $ 21,177 |
| Due to other funds | 186 | 177,811 | 177,997 |
| **Total Current Liabilities** | **$ 18,509** | **$ 180,665** | **$ 199,174** |
| **TOTAL LIABILITIES** | **$ 18,509** | **$ 180,665** | **$ 199,174** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,721,674 | $ 697,193 | $ 6,418,867 |
| Unrestricted | 1,529,649 | 418,674 | 1,948,323 |
| **TOTAL NET POSITION** | **$ 7,251,323** | **$ 1,115,867** | **$ 8,367,190** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,269,832** | **$ 1,296,532** | **$ 8,566,364** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2018**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,607,524 | $ 1,446,894 | $ 3,054,418 |
| Miscellaneous | 1,577 | - | 1,577 |
| **TOTAL OPERATING REVENUES** | **$ 1,609,101** | **$ 1,446,894** | **$ 3,055,995** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 705,420 | $ 705,420 |
| Wages and Benefits | 664,761 | 65,700 | 730,461 |
| Administrative | 41,053 | 180,000 | 221,053 |
| Office | 3,533 | - | 3,533 |
| Repair and maintenance | 65,885 | 49,157 | 115,042 |
| Billing expense | - | 20,187 | 20,187 |
| Depreciation | 210,987 | 35,249 | 246,236 |
| Engineering | 4,252 | 5,142 | 9,394 |
| Utilities | 134,647 | - | 134,647 |
| Chemicals/Chlorine | 24,827 | - | 24,827 |
| Sludge/grit removal | 56,054 | - | 56,054 |
| Janitorial Supplies | 2,589 | - | 2,589 |
| Gas and Oil | 6,533 | - | 6,533 |
| Equipment | 5,732 | - | 5,732 |
| Small Tools | 40 | - | 40 |
| Uniforms | 2,244 | - | 2,244 |
| Permits and testing | 14,042 | 500 | 14,542 |
| Certification & Training | 480 | - | 480 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | 793 | 255 | 1,048 |
| Line Rental Expense | 40,000 | - | 40,000 |
| Sewer-Line Reimbursement | - | 100,000 | 100,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,308,725** | **$ 1,161,610** | **$ 2,470,335** |
| **OPERATING INCOME (LOSS)** | **$ 300,376** | **$ 285,284** | **$ 585,660** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 6,446 | $ 1,892 | $ 8,338 |
| Refund Prior Year Revenues | (30,469) | - | (30,469) |
| Operating Transfers Out | (250,000) | - | (250,000) |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ (274,023)** | **$ 1,892** | **$ (272,131)** |
| **CHANGE IN NET POSITION** | **$ 26,353** | **$ 287,176** | **$ 313,529** |
| NET POSITION - January 1, 2018 | 7,224,970 | 828,691 | 8,053,661 |
| **NET POSITION - December 31, 2018** | **$ 7,251,323** | **$ 1,115,867** | **$ 8,367,190** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF CASH FLOWS**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2018**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,618,657 | $ 1,447,312 | $ 3,065,969 |
| Miscellaneous Revenue | 1,577 | - | 1,577 |
| Cash Paid to Vendors for Goods and Services | (1,104,083) | (1,132,709) | (2,236,792) |
| **Net cash provided (used) by operating activities** | **$ 516,151** | **$ 314,603** | **$ 830,754** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ - | $ (5,945) | $ (5,945) |
| Refund Prior Year Revenues | (30,469) | - | (30,469) |
| **Net cash provided (used) by capital and related financing activities** | **$ (30,469)** | **$ (5,945)** | **$ (36,414)** |
| **CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:** | | | |
| Transfers to Other Funds | $ (301,064) | $ (297,759) | $ (598,823) |
| **Net cash provided (used) by noncapital financing activities** | **$ (301,064)** | **$ (297,759)** | **$ (598,823)** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 6,446 | $ 1,892 | $ 8,338 |
| **Net cash provided by investing activities** | **$ 6,446** | **$ 1,892** | **$ 8,338** |
| **Net increase (decrease) in cash and cash equivalents** | **$ 191,064** | **$ 12,791** | **$ 203,855** |
| **Cash and cash equivalents - January 1, 2018** | 996,456 | 9,666 | 1,006,122 |
| **Cash and cash equivalents - December 31, 2018** | **$ 1,187,520** | **$ 22,457** | **$ 1,209,977** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 300,376 | $ 285,284 | $ 585,660 |
| Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities: | | | |
| Depreciation | 210,987 | 35,249 | 246,236 |
| Changes in assets and liabilities: | | | |
| (Increase) decrease in sewer/refuse receivables | - | 418 | 418 |
| (Increase) decrease in other accounts receivable | 11,133 | - | 11,133 |
| Increase (decrease) in accounts payable | (6,345) | (6,348) | (12,693) |
| **Net cash provided (used) by operating activities** | **$ 516,151** | **$ 314,603** | **$ 830,754** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**PROPRIETARY FUNDS**
**DECEMBER 31, 2019**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 1,270,734 | $ 214,063 | $ 1,484,797 |
| Due from Other Fund | 176,039 | - | 176,039 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 216,531 | 216,531 |
| Other | 111,159 | - | 111,159 |
| **Total Current Assets** | **$ 1,557,932** | **$ 430,594** | **$ 1,988,526** |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 33,705 | 11,885 | 45,590 |
| Vehicles | 108,226 | 148,570 | 256,796 |
| Machinery & Equipment | - | 410,644 | 410,644 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (6,336,236) | (696,525) | (7,032,761) |
| **Total Noncurrent Assets** | **$ 5,516,572** | **$ 661,646** | **$ 6,178,218** |
| **TOTAL ASSETS** | **$ 7,074,504** | **$ 1,092,240** | **$ 8,166,744** |
| **LIABILITIES AND NET POSITION** | | | |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 11,878 | $ 24 | $ 11,902 |
| Due to other funds | 117 | 176,039 | 176,156 |
| **Total Current Liabilities** | **$ 11,995** | **$ 176,063** | **$ 188,058** |
| **TOTAL LIABILITIES** | **$ 11,995** | **$ 176,063** | **$ 188,058** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,516,572 | $ 661,646 | $ 6,178,218 |
| Unrestricted | 1,545,937 | 254,531 | 1,800,468 |
| **TOTAL NET POSITION** | **$ 7,062,509** | **$ 916,177** | **$ 7,978,686** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,074,504** | **$ 1,092,240** | **$ 8,166,744** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2019**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,557,579 | $ 1,589,785 | $ 3,147,364 |
| Tap-In Fees | 11,700 | - | 11,700 |
| Miscellaneous | 1,337 | - | 1,337 |
| **TOTAL OPERATING REVENUES** | **$ 1,570,616** | **$ 1,589,785** | **$ 3,160,401** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 704,155 | $ 704,155 |
| Wages and Benefits | 693,120 | 200,000 | 893,120 |
| Administrative | 29,507 | 180,000 | 209,507 |
| Office | 1,947 | - | 1,947 |
| Repair and maintenance | 130,597 | 116,023 | 246,620 |
| Billing expense | - | 18,635 | 18,635 |
| Depreciation | 207,914 | 35,546 | 243,460 |
| Engineering | 3,900 | 2,487 | 6,387 |
| Utilities | 134,699 | - | 134,699 |
| Chemicals/Chlorine | 29,195 | - | 29,195 |
| Sludge/grit removal | 55,940 | - | 55,940 |
| Janitorial Supplies | 3,349 | - | 3,349 |
| Gas and Oil | 2,211 | - | 2,211 |
| Equipment | 16,674 | - | 16,674 |
| Uniforms | 2,586 | - | 2,586 |
| Permits and testing | 22,496 | 500 | 22,996 |
| Certification & Training | 1,359 | - | 1,359 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | 207 | 391 | 598 |
| Line Rental Expense | 40,000 | - | 40,000 |
| Sewer-Line Reimbursement | - | 200,000 | 200,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,405,974** | **$ 1,457,737** | **$ 2,863,711** |
| **OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES) AND TRNSFERS** | **$ 164,642** | **$ 132,048** | **$ 296,690** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 20,163 | $ 8,624 | $ 28,787 |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ 20,163** | **$ 8,624** | **$ 28,787** |
| **TRANSFERS:** | | | |
| Operating Transfers Out | $ (373,619) | $ (340,362) | $ (713,981) |
| **TOTAL TRANSFERS** | **$ (373,619)** | **$ (340,362)** | **$ (713,981)** |
| **CHANGE IN NET POSITION** | **$ (188,814)** | **$ (199,690)** | **$ (388,504)** |
| NET POSITION - January 1, 2019 | 7,251,323 | 1,115,867 | 8,367,190 |
| **NET POSITION - December 31, 2019** | **$ 7,062,509** | **$ 916,177** | **$ 7,978,686** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF CASH FLOWS**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2019**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,640,946 | $ 1,554,411 | $ 3,195,357 |
| Miscellaneous Revenue | 1,337 | - | 1,337 |
| Cash Paid to Vendors for Goods and Services | (1,202,802) | (1,031,067) | (2,233,869) |
| **Net cash provided (used) by operating activities** | **$ 439,481** | **$ 523,344** | **$ 962,825** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ (2,811) | $ - | $ (2,811) |
| **Net cash provided (used) by capital and related financing activities** | **$ (2,811)** | **$ -** | **$ (2,811)** |
| **CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:** | | | |
| Transfers to Other Funds | $ (373,619) | $ (340,362) | $ (713,981) |
| **Net cash provided (used) by noncapital financing activities** | **$ (373,619)** | **$ (340,362)** | **$ (713,981)** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 20,163 | $ 8,624 | $ 28,787 |
| **Net cash provided by investing activities** | **$ 20,163** | **$ 8,624** | **$ 28,787** |
| **Net increase (decrease) in cash and cash equivalents** | **$ 83,214** | **$ 191,606** | **$ 274,820** |
| **CASH AND CASH EQUIVALENTS - January 1, 2019** | 1,187,520 | 22,457 | 1,209,977 |
| **CASH AND CASH EQUIVALENTS - December 31, 2019** | **$ 1,270,734** | **$ 214,063** | **$ 1,484,797** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 164,642 | $ 132,048 | $ 296,690 |
| **Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:** | | | |
| Depreciation | 207,914 | 35,546 | 243,460 |
| **Changes in assets and liabilities:** | | | |
| (Increase) decrease in sewer/refuse receivables | - | (35,374) | (35,374) |
| (Increase) decrease in other accounts receivable | 71,667 | - | 71,667 |
| (Increase) decrease in due from other funds | 1,703 | 393,953 | 395,656 |
| Increase (decrease) in accounts payable | (6,445) | (2,829) | (9,274) |
| **Net cash provided (used) by operating activities** | **$ 439,481** | **$ 523,344** | **$ 962,825** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF NET POSITION**
**PROPRIETARY FUNDS**
**DECEMBER 31, 2020**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **ASSETS** | | | |
| **Current Assets:** | | | |
| Cash and cash equivalents | $ 1,725,909 | $ 178,199 | $ 1,904,108 |
| Due from Other Fund | - | 2,934 | 2,934 |
| Accounts receivable: | | | |
| Sanitation/Sewage (Net) | - | 216,453 | 216,453 |
| Other | 89,309 | - | 89,309 |
| **Total Current Assets** | **$ 1,815,218** | **$ 397,586** | **$ 2,212,804** |
| **Noncurrent Assets:** | | | |
| Buildings and improvements | $ 10,010,405 | $ - | $ 10,010,405 |
| Office Equipment | 78,355 | 11,885 | 90,240 |
| Vehicles | 150,933 | 148,570 | 299,503 |
| Machinery & Equipment | - | 410,644 | 410,644 |
| Infrastructure | 1,700,472 | 787,072 | 2,487,544 |
| Accumulated depreciation | (6,540,156) | (732,072) | (7,272,228) |
| **Total Noncurrent Assets** | **$ 5,400,009** | **$ 626,099** | **$ 6,026,108** |
| **TOTAL ASSETS** | **$ 7,215,227** | **$ 1,023,685** | **$ 8,238,912** |
| **LIABILITIES AND NET POSITION** | | | |
| **LIABILITIES** | | | |
| **Current Liabilities:** | | | |
| Accounts payable | $ 22,752 | $ 374 | $ 23,126 |
| Due to other funds | 68,825 | - | 68,825 |
| **Total Current Liabilities** | **$ 91,577** | **$ 374** | **$ 91,951** |
| **TOTAL LIABILITIES** | **$ 91,577** | **$ 374** | **$ 91,951** |
| **NET POSITION** | | | |
| Net Investment in Capital Assets | $ 5,400,009 | $ 626,099 | $ 6,026,108 |
| Unrestricted | 1,723,641 | 397,212 | 2,120,853 |
| **TOTAL NET POSITION** | **$ 7,123,650** | **$ 1,023,311** | **$ 8,146,961** |
| **TOTAL LIABILITIES AND NET POSITION** | **$ 7,215,227** | **$ 1,023,685** | **$ 8,238,912** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **OPERATING REVENUES:** | | | |
| Sewage charges | $ 1,516,345 | $ 1,506,821 | $ 3,023,166 |
| Tap-In Fees | 3,510 | - | 3,510 |
| Miscellaneous | 1,455 | 794 | 2,249 |
| **TOTAL OPERATING REVENUES** | **$ 1,521,310** | **$ 1,507,615** | **$ 3,028,925** |
| **OPERATING EXPENSES:** | | | |
| Contractual services | $ - | $ 676,100 | $ 676,100 |
| Wages and Benefits | 726,870 | 200,000 | 926,870 |
| Administrative | 30,210 | 240,000 | 270,210 |
| Office | 5,315 | - | 5,315 |
| Repair and maintenance | 171,933 | 21,734 | 193,667 |
| Billing expense | - | 20,015 | 20,015 |
| Depreciation | 203,920 | 35,546 | 239,466 |
| Engineering | 4,005 | 3,569 | 7,574 |
| Utilities | 137,700 | - | 137,700 |
| Chemicals/Chlorine | 24,286 | - | 24,286 |
| Sludge/grit removal | 61,270 | - | 61,270 |
| Janitorial Supplies | 2,995 | - | 2,995 |
| Gas and Oil | 1,721 | - | 1,721 |
| Equipment | 8,195 | - | 8,195 |
| Small Tools | - | 4,745 | 4,745 |
| Uniforms | 2,317 | - | 2,317 |
| Permits and testing | 16,150 | 500 | 16,650 |
| Certification & Training | 440 | - | 440 |
| Insurance | 30,273 | - | 30,273 |
| Miscellaneous | - | 351 | 351 |
| Line Rental Expense | 40,000 | - | 40,000 |
| Sewer-Line Reimbursement | - | 200,000 | 200,000 |
| **TOTAL OPERATING EXPENSES** | **$ 1,467,600** | **$ 1,402,560** | **$ 2,870,160** |
| **OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES)** | **$ 53,710** | **$ 105,055** | **$ 158,765** |
| **NONOPERATING REVENUES (EXPENSES):** | | | |
| Interest income | $ 7,431 | $ 2,079 | $ 9,510 |
| **TOTAL NONOPERATING REVENUES (EXPENSES)** | **$ 7,431** | **$ 2,079** | **$ 9,510** |
| **CHANGE IN NET POSITION** | **$ 61,141** | **$ 107,134** | **$ 168,275** |
| NET POSITION - January 1, 2020 | 7,062,509 | 916,177 | 7,978,686 |
| **NET POSITION - December 31, 2020** | **$ 7,123,650** | **$ 1,023,311** | **$ 8,146,961** |

The accompanying notes are an integral part of these financial statements

**CITY OF BEAVER FALLS**
**STATEMENT OF CASH FLOWS**
**PROPRIETARY FUNDS**
**FOR THE YEAR ENDED DECEMBER 31, 2020**

| | JOINT SEWER USERS FUND | CITY SEWER USERS FUND | TOTAL |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Cash Received from User Charges | $ 1,541,705 | $ 1,506,900 | $ 3,048,605 |
| Miscellaneous Revenue | 1,455 | 794 | 2,249 |
| Cash Paid to Vendors for Goods and Services | (1,008,059) | (1,545,637) | (2,553,696) |
| **Net cash provided (used) by operating activities** | **$ 535,101** | **$ (37,943)** | **$ 497,158** |
| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:** | | | |
| Fixed asset purchases & additions | $ (87,357) | $ - | $ (87,357) |
| **Net cash provided (used) by capital and related financing activities** | **$ (87,357)** | **$ -** | **$ (87,357)** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Interest income | $ 7,431 | $ 2,079 | $ 9,510 |
| **Net cash provided by investing activities** | **$ 7,431** | **$ 2,079** | **$ 9,510** |
| **Net increase (decrease) in cash and cash equivalents** | **$ 455,175** | **$ (35,864)** | **$ 419,311** |
| **CASH AND CASH EQUIVALENTS - January 1, 2020** | 1,270,734 | 214,063 | 1,484,797 |
| **CASH AND CASH EQUIVALENTS - December 31, 2020** | **$ 1,725,909** | **$ 178,199** | **$ 1,904,108** |
| **RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:** | | | |
| Operating Income (Loss) | $ 53,710 | $ 105,055 | $ 158,765 |
| **Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:** | | | |
| Depreciation | 203,920 | 35,546 | 239,466 |
| **Changes in assets and liabilities:** | | | |
| (Increase) decrease in sewer/refuse receivables | - | 79 | 79 |
| (Increase) decrease in other accounts receivable | 21,850 | - | 21,850 |
| (Increase) decrease in due from other funds | 176,039 | (2,934) | 173,105 |
| Increase (decrease) in accounts payable | 10,874 | 350 | 11,224 |
| Increase (decrease) in due to other funds | 68,708 | (176,039) | (107,331) |
| **Net cash provided (used) by operating activities** | **$ 535,101** | **$ (37,943)** | **$ 497,158** |

The accompanying notes are an integral part of these financial statements

**Beaver Falls - Anticipated Sewer Rates at Closing**
***(Shown with anticipated 3% Increase on 1/1/2022)***

| | Inside City | Outside City |
|---|---|---|
| Quarterly Service Charge (Includes 3,000 gallons/quarter) | $42.37 | N/A |
| Usage Charge per 1,000 Gal | $8.51 | $4.41 |

City of Beaver Falls
WATER POLLUTION CONTROL PLANT
715 Fifteenth Street
BEAVER FALLS, PA 15010

Phone: 724-843-7184
Fax: 724-843-6787

## 2020 Income, Expense, Flow Total Year End Report

### Income

| | Gallons | Income |
|---|---|---|
| City of BF | 162,524,000 | $676,099.84 |
| Patt. Twp. | 61,329,000 | $255,128.64 |
| N. Sewickley | 39,563,000 | $164,582.08 |
| White Twp. | 23,406,000 | $97,368.96 |
| W. Mayfield | 23,588,000 | $98,126.08 |
| Big Beaver | 18,268,000 | $75,994.88 |
| Patt. Hgts | 11,081,000 | $46,096.96 |
| Eastvale | 3,329,000 | $13,848.64 |
| Dalton | 21,418,074 | $89,099.20 |
| Valley Waste | 144,269 | $1,454.90 |
| Tap-Ins | | $3,510.00 |
| Permits | | $0.00 |
| Total | 364,650,343 | $1,521,310.18 |

### Expenses

| | |
|---|---|
| Operating Expenses | $1,331,440.02 |
| Line Rental | $40,000.00 |
| Total | $1,371,440.02 |

### Flow Totals

| | |
|---|---|
| Total Billable Gallons | 364,634,390 |
| Total Gallons Treated | 768,030,000 |
| Total Rainfall | 47.44 |



Eastvale Pump Station




Eastvale Pump Station




Eastvale Pump Station



Eastvale Pump Station



WWTP - Site



WWTP - Oxidation Tower



WWTP - Primary Settling Tanks



WWTP - Anareobic Digester Tank & Digester Building



WWTP - Sludge Dewatering Building & Sludge Cake Rolloff Box



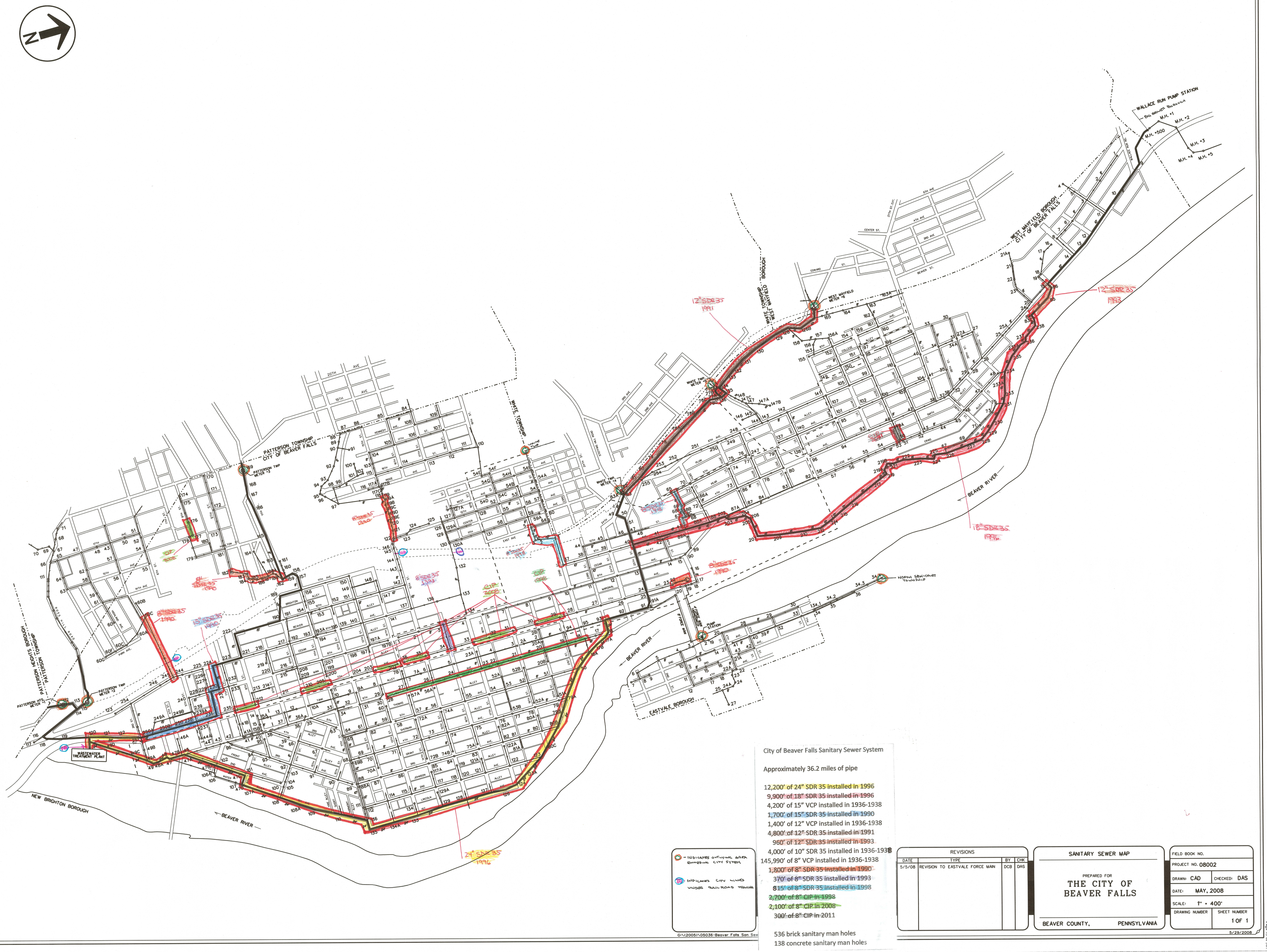
WWTP



WWTP - Digester Cover



WWTP - Generator




City of Beaver Falls Sanitary Sewer System

Approximately 36.2 miles of pipe

12,200' of 24" SDR 35 installed in 1996
9,900' of 18" SDR 35 installed in 1996
4,200' of 15" VCP installed in 1936-1938
1,700' of 15" SDR 35 installed in 1990
1,400' of 12" VCP installed in 1936-1938
4,800' of 12" SDR 35 installed in 1991
960' of 12" SDR 35 installed in 1993
4,000' of 10" SDR 35 installed in 1936-1938
145,990' of 8" VCP installed in 1936-1938
1,800' of 8" SDR 35 installed in 1990
370' of 8" SDR 35 installed in 1993
815' of 8" SDR 35 installed in 1998
2,700' of 8" CIP in 1998
2,100' of 8" CIP in 2008
300' of 8" CIP in 2011

536 brick sanitary man holes
138 concrete sanitary man holes

G:\(2005)\05036-Beaver Falls San Sew

| REVISIONS | | | |
|---|---|---|---|
| DATE | TYPE | BY | CHK |
| 5/5/08 | REVISION TO EASTVALE FORCE MAIN | DCB | DAS |

SANITARY SEWER MAP

PREPARED FOR
THE CITY OF
BEAVER FALLS

BEAVER COUNTY, PENNSYLVANIA

| | |
|---|---|
| FIELD BOOK NO. | |
| PROJECT NO. | 08002 |
| DRAWN: CAD | CHECKED: DAS |
| DATE: | MAY, 2008 |
| SCALE: | 1" = 400' |
| DRAWING NUMBER | SHEET NUMBER 1 OF 1 |

5/29/2008

EXHIBIT 22
Page 1 of 1

**PART I**

**Item 1. Business**

This annual report on Form 10-K is a combined report being filed by two separate Registrants, American States Water Company ("AWR") and Golden State Water Company ("GSWC"). References in this report to "Registrant" are to AWR and GSWC, collectively, unless otherwise specified. GSWC makes no representations as to the information contained in this report relating to AWR and its subsidiaries, other than GSWC.

AWR makes its periodic reports, Form 10-Q and Form 10-K, and current reports, Form 8-K, available free of charge through its website, www.aswater.com, as soon as material is electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). Such reports are also available on the SEC's website at www.sec.gov. AWR also makes available free of charge its code of business conduct and ethics, its corporate governance guidelines and the charters of its Nominating and Governance Committee, Compensation Committee and Audit and Finance Committee through its website or by calling (877) 463-6297. AWR and GSWC have filed the certification of officers required by Section 302 of the Sarbanes-Oxley Act as Exhibits 31.1 and 31.2 to its Form 10-K for the year ended December 31, 2020.

**Overview**

AWR is the parent company of GSWC, Bear Valley Electric Service, Inc. ("BVESI") and American States Utility Services, Inc. ("ASUS") (and its wholly owned subsidiaries: Fort Bliss Water Services Company ("FBWS"), Terrapin Utility Services, Inc. ("TUS"), Old Dominion Utility Services, Inc. ("ODUS"), Palmetto State Utility Services, Inc. ("PSUS"), Old North Utility Services, Inc. ("ONUS"), Emerald Coast Utility Services, Inc. ("ECUS") and Fort Riley Utility Services, Inc. ("FRUS")). On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, in exchange for common shares of BVESI. GSWC then immediately distributed all of BVESI's common shares to AWR, whereupon BVESI became wholly owned directly by AWR. This reorganization did not result in any substantive changes to AWR's operations and business segments.

AWR has three reportable segments: water, electric and contracted services. Within the segments, AWR has three principal business units, water and electric service utility operations conducted through its regulated utilities GSWC and BVESI, respectively, and contracted services conducted through ASUS and its subsidiaries. FBWS, TUS, ODUS, PSUS, ONUS, ECUS and FRUS may be referred to herein collectively as the "Military Utility Privatization Subsidiaries."

GSWC is a public water utility engaged in the purchase, production, distribution and sale of water in 10 counties in the State of California. GSWC is regulated by the California Public Utilities Commission ("CPUC"). BVESI is a public electric utility that distributes electricity in several San Bernardino County mountain communities in California, and is also regulated by the CPUC. Additional information regarding public utility regulation is discussed in Item 7. "*Management's Discussion and Analysis of Financial Condition" and Results of Operation*" under the section titled "*Regulatory Matters*."

AWR's regulated utilities served 261,796 water customers and 24,545 electric customers at December 31, 2020, or a total of 286,341 customers, compared with 260,708 water customers and 24,420 electric customers at December 31, 2019, or a total of 285,128 customers. Both GSWC's and BVESI's operations exhibit seasonal trends. Although both have diversified customer bases, residential and commercial customers account for the majority of water and electric sales and revenues. Revenues derived from commercial and residential customers accounted for approximately 90% of total water and electric revenues for the years ended December 31, 2020, 2019 and 2018.

ASUS, itself or through the Military Utility Privatization Subsidiaries, has contracted with the U.S. government to provide water and/or wastewater services at various military installations. ASUS operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm, fixed-price contracts. Each of the contracts with the U.S. government is subject to termination, in whole or in part, prior to the end of its 50-year term for convenience of the U.S. government or as a result of default or nonperformance by the ASUS subsidiary performing the contract. The price for each of these contracts is subject to annual economic price adjustments. Contracts are also subject to modifications for changes in circumstances, changes in laws and regulations, and additions to the contract value for new construction of facilities at the military bases. AWR guarantees performance of ASUS's military privatization contracts.

**AMERICAN STATES WATER COMPANY AND SUBSIDIARIES**
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

## Note 1 — Summary of Significant Accounting Policies

Nature of Operations: American States Water Company ("AWR") is the parent company of Golden State Water Company ("GSWC"), Bear Valley Electric Service Inc. ("BVESI"), and American States Utility Services, Inc. ("ASUS") (and its wholly owned subsidiaries, Fort Bliss Water Services Company ("FBWS"), Terrapin Utility Services, Inc. ("TUS"), Old Dominion Utility Services, Inc. ("ODUS"), Palmetto State Utility Services, Inc. ("PSUS"), Old North Utility Services, Inc. ("ONUS"), Emerald Coast Utility Services, Inc. ("ECUS"), and Fort Riley Utility Services, Inc. ("FRUS")). AWR and its subsidiaries may be collectively referred to as "Registrant" or "the Company." The subsidiaries of ASUS are collectively referred to as the "Military Utility Privatization Subsidiaries." On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, a separate legal entity and wholly owned subsidiary of AWR (Note 20). This reorganization did not result in any substantive changes to AWR's operations and business segments. AWR, through its wholly owned subsidiaries, serves over one million people in nine states.

GSWC and BVESI are both California public utilities, with GSWC engaged in the purchase, production, distribution and sale of water throughout California serving approximately 261,800 customers, while BVESI distributes electricity in several San Bernardino County mountain communities in California serving approximately 24,500 customers. The California Public Utilities Commission ("CPUC") regulates GSWC's and BVESI's businesses in matters including properties, rates, services, facilities, and transactions between GSWC, BVESI, and their affiliates.

ASUS, through its Military Utility Privatization Subsidiaries, operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm fixed-price contracts. These contracts are subject to annual economic price adjustments and modifications for changes in circumstances, changes in laws and regulations and additions to the contract value for new construction of facilities at the military bases.

There is no direct regulatory oversight by the CPUC over AWR or the operations, rates or services provided by ASUS or the Military Utility Privatization Subsidiaries.

Basis of Presentation: The consolidated financial statements and notes thereto are presented in a combined report filed by two separate Registrants: AWR and GSWC. References in this report to "Registrant" are to AWR and GSWC, collectively, unless otherwise specified.

AWR owns all of the outstanding Common Shares of GSWC, BVESI and ASUS. ASUS owns all of the outstanding common shares of the Military Utility Privatization Subsidiaries. The consolidated financial statements of AWR include the accounts of AWR and its subsidiaries. These financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. Intercompany transactions and balances have been eliminated in the AWR consolidated financial statements.

Related-Party Transactions: GSWC, BVESI and ASUS provide and/or receive various support services to and from their parent, AWR, and among themselves. GSWC also allocates certain corporate office administrative and general costs to its affiliates using allocation factors approved by the CPUC. During the years ended December 31, 2020, 2019 and 2018, GSWC allocated to ASUS approximately $4.9 million, $4.7 million and $4.2 million, respectively, of corporate office administrative and general costs. During the year ended December 31, 2020, GSWC allocated corporate office administrative and general costs to BVESI of approximately $1.3 million.

Furthermore, AWR borrows under a credit facility, which expires in May 2023, and provides funds to GSWC and ASUS in support of their operations. The interest rate charged to GSWC and ASUS is sufficient to cover AWR's interest expense under the credit facility. The CPUC requires GSWC to pay down all intercompany borrowings from AWR within a 24-month period, which was required by November 2020. In October 2020, the Board of Directors authorized AWR to invest equity in GSWC to enable the subsidiary to pay down all its intercompany borrowings. During the fourth quarter of 2020, AWR invested $60 million of equity in GSWC and received five shares of GSWC common stock. The majority of the proceeds from this stock issuance were used by GSWC to pay down its intercompany borrowings from AWR, satisfying the CPUC's requirement. As a result, GSWC had no intercompany borrowings from AWR as of December 31, 2020.

In October 2020, AWR issued an interest bearing promissory note to GSWC, which expires in May 2023. Under the terms of the note, AWR may borrow from GSWC amounts up to $30 million for working capital purposes. AWR agrees to pay any unpaid principal amounts outstanding under this note, plus accrued interest. In November 2020, AWR borrowed $6 million from GSWC under the terms of the note, which was subsequently repaid in December. As of December 31, 2020, there were no amounts outstanding under this note.

Table of Contents

**PART I**

## Item 1. Business

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AWR makes its periodic reports, Form 10-Q and Form 10-K, and current reports, Form 8-K, available free of charge through its website, www.aswater.com, as soon as material is electronically filed with or furnished to the Securities and Exchange Commission (“SEC”). Such reports are also available on the SEC’s website at www.sec.gov. AWR also makes available free of charge its code of business conduct and ethics, its corporate governance guidelines and the charters of its Nominating and Governance Committee, Compensation Committee and Audit and Finance Committee through its website or by calling (877) 463-6297. AWR and GSWC have filed the certification of officers required by Section 302 of the Sarbanes-Oxley Act as Exhibits 31.1 and 31.2 to its Form 10-K for the year ended December 31, 2020.

## Overview

AWR is the parent company of GSWC, Bear Valley Electric Service, Inc. ("BVESI") and American States Utility Services, Inc. (“ASUS”) (and its wholly owned subsidiaries: Fort Bliss Water Services Company (“FBWS”), Terrapin Utility Services, Inc. (“TUS”), Old Dominion Utility Services, Inc. (“ODUS”), Palmetto State Utility Services, Inc. (“PSUS”), Old North Utility Services, Inc. (“ONUS”), Emerald Coast Utility Services, Inc. (“ECUS”) and Fort Riley Utility Services, Inc. (“FRUS”)). On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, in exchange for common shares of BVESI. GSWC then immediately distributed all of BVESI's common shares to AWR, whereupon BVESI became wholly owned directly by AWR. This reorganization did not result in any substantive changes to AWR's operations and business segments.

AWR has three reportable segments: water, electric and contracted services. Within the segments, AWR has three principal business units, water and electric service utility operations conducted through its regulated utilities GSWC and BVESI, respectively, and contracted services conducted through ASUS and its subsidiaries. FBWS, TUS, ODUS, PSUS, ONUS, ECUS and FRUS may be referred to herein collectively as the “Military Utility Privatization Subsidiaries.”

GSWC is a public water utility engaged in the purchase, production, distribution and sale of water in 10 counties in the State of California. GSWC is regulated by the California Public Utilities Commission (“CPUC”). BVESI is a public electric utility that distributes electricity in several San Bernardino County mountain communities in California, and is also regulated by the CPUC. Additional information regarding public utility regulation is discussed in Item 7. "*Management's Discussion and Analysis of Financial Condition" and Results of Operation*" under the section titled "*Regulatory Matters*."

AWR's regulated utilities served 261,796 water customers and 24,545 electric customers at December 31, 2020, or a total of 286,341 customers, compared with 260,708 water customers and 24,420 electric customers at December 31, 2019, or a total of 285,128 customers. Both GSWC’s and BVESI's operations exhibit seasonal trends. Although both have diversified customer bases, residential and commercial customers account for the majority of water and electric sales and revenues. Revenues derived from commercial and residential customers accounted for approximately 90% of total water and electric revenues for the years ended December 31, 2020, 2019 and 2018.

ASUS, itself or through the Military Utility Privatization Subsidiaries, has contracted with the U.S. government to provide water and/or wastewater services at various military installations. ASUS operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm, fixed-price contracts. Each of the contracts with the U.S. government is subject to termination, in whole or in part, prior to the end of its 50-year term for convenience of the U.S. government or as a result of default or nonperformance by the ASUS subsidiary performing the contract. The price for each of these contracts is subject to annual economic price adjustments. Contracts are also subject to modifications for changes in circumstances, changes in laws and regulations, and additions to the contract value for new construction of facilities at the military bases. AWR guarantees performance of ASUS’s military privatization contracts.

**PART I**

## ITEM 1. BUSINESS

### The Company

With a history dating back to 1886, American Water is the largest and most geographically diverse, publicly-traded water and wastewater utility company in the United States, as measured by both operating revenues and population served. A holding company originally incorporated in Delaware in 1936, the Company employs approximately 7,000 professionals who provide drinking water, wastewater and other related services to over 15 million people in 46 states. The Company conducts the majority of its business through regulated utilities that provide water and wastewater services, collectively presented as the "Regulated Businesses." The Company also operates market-based businesses that provide complementary services. Individually, these businesses do not meet the criteria of a reportable segment in accordance with generally accepted accounting principles in the United States ("GAAP"), and are collectively presented as the "Market-Based Businesses," which is consistent with how management assesses the results of these businesses.

Throughout this Form 10-K, unless the context otherwise requires, references to "we," "us," "our," the "Company," and "American Water" mean American Water Works Company, Inc. and its subsidiaries, taken together as a whole. References to "parent company" mean American Water Works Company, Inc., without its subsidiaries.

### Regulated Businesses

The Company's primary business involves the ownership of utilities that provide water and wastewater services to residential, commercial, industrial, public authority, fire service and sale for resale customers. The Company's utilities operate in over 1,700 communities in 16 states in the United States, with 3.5 million active customers in its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by multiple state utility commissions or other entities engaged in utility regulation, collectively referred to as public utility commissions ("PUCs"). Federal, state and local governments also regulate environmental, health and safety, and water quality and water accountability matters. The Company reports the results of the services provided by its utilities in the Regulated Businesses segment. Operating revenues for the Regulated Businesses were $3,255 million for 2020, $3,094 million for 2019 and $2,984 million for 2018, accounting for 86%, 86% and 87%, respectively, of the Company's total operating revenues for the same periods.

Presented in the table below is a geographic summary of the Regulated Businesses' operating revenues and the number of customers the Company serves, by type of service, for and as of the year ended December 31, 2020:

| | Operating Revenues (in millions) | | | | Number of Customers (in thousands) | | | |
|---|---|---|---|---|---|---|---|---|
| | Water (a) | Wastewater | Total | % of Total | Water | Wastewater | Total | % of Total |
| New Jersey | $ 753 | $ 43 | $ 796 | 24.5 % | 657 | 55 | 712 | 20.4 % |
| Pennsylvania | 663 | 70 | 733 | 22.5 % | 673 | 77 | 750 | 21.6 % |
| Missouri | 335 | 11 | 346 | 10.6 % | 472 | 15 | 487 | 13.9 % |
| Illinois | 293 | 32 | 325 | 10.0 % | 292 | 68 | 360 | 10.3 % |
| California | 247 | 3 | 250 | 7.7 % | 183 | 3 | 186 | 5.3 % |
| Indiana | 234 | 2 | 236 | 7.3 % | 318 | 2 | 320 | 9.2 % |
| West Virginia | 164 | 1 | 165 | 5.1 % | 168 | 1 | 169 | 4.8 % |
| Total—Top Seven States (b) | 2,689 | 162 | 2,851 | 87.7 % | 2,763 | 221 | 2,984 | 85.5 % |
| Other (c) | 381 | 23 | 404 | 12.3 % | 481 | 31 | 512 | 14.5 % |
| Total Regulated Businesses | $ 3,070 | $ 185 | $ 3,255 | 100.0 % | 3,244 | 252 | 3,496 | 100.0 % |

(a) Includes other operating revenues consisting primarily of miscellaneous utility charges, fees and rents.

(b) The Company's "Top Seven States" are determined based upon operating revenues.

(c) Includes the Company's utility operations in the following states: Georgia, Hawaii, Iowa, Kentucky, Maryland, Michigan, New York, Tennessee and Virginia and other revenue attributable collectively to the Regulated Businesses.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*The following discussion should be read together with the Consolidated Financial Statements and the Notes thereto included elsewhere in this Form 10-K. This discussion contains forward-looking statements that are based on management's current expectations, estimates and projections about the Company's business, operations and financial performance. The cautionary statements made in this Form 10-K should be read as applying to all related forward-looking statements whenever they appear in this Form 10-K. The Company's actual results may differ materially from those currently anticipated and expressed in such forward-looking statements as a result of a number of factors, including those that are discussed under "Forward-Looking Statements," Item 1A—Risk Factors and elsewhere in this Form 10-K. The Company has a disclosure committee consisting of members of senior management and other key employees involved in the preparation of the Company's SEC reports. The committee is actively involved in the review and discussion of the Company's SEC filings. For a discussion and analysis of the Company's financial statements for fiscal 2019 compared to fiscal 2018, please refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 18, 2020.*

### Overview

American Water is the largest and most geographically diverse, publicly-traded water and wastewater utility company in the United States, as measured by both operating revenues and population served. The Company employs approximately 7,000 professionals who provide drinking water, wastewater and other related services to over 15 million people in 46 states. The Company's primary business involves the ownership of utilities that provide water and wastewater services to residential, commercial, industrial, public authority, fire service and sale for resale customers, collectively presented as the "Regulated Businesses." The Company's utilities operate in over 1,700 communities in 16 states in the United States, with 3.5 million active customers with services provided by its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by PUCs. The Company also operates market-based businesses that provide water, wastewater and other services to residential and smaller commercial customers, the U.S. government on military installations, as well as municipalities and utility customers, collectively presented as the "Market-Based Businesses." These Market-Based Businesses are not subject to economic regulation by state PUCs. See Item 1—Business for additional information.

### Novel Coronavirus (COVID-19) Pandemic Update

American Water has been monitoring the global impact of COVID-19 pandemic and has taken steps to mitigate adverse impacts to the Company. The Company has three main areas of focus as part of its response to COVID-19: the care and safety of its employees; the safety of its customers and the communities it serves; and the execution of its business continuity plan. American Water continues to work with its vendors to prevent disruptions in its supply chain, and, at this time, has not experienced, and does not anticipate, any material negative impacts. The Company has also been monitoring the impacts of the pandemic on its access to the capital markets, and to the extent such access is adversely affected, American Water may need to consider alternative sources of funding for its operations and for working capital, any of which could increase its cost of capital.

This pandemic continues to evolve, and American Water continues to monitor developments affecting its employees, customers, contractors and vendors and will take additional actions as warranted. To date, the Company has experienced COVID-19 financial impacts, including an increase in uncollectible accounts expense, additional debt costs, and certain incremental operation and maintenance ("O&M") expenses. The Company has also experienced decreased revenues as a result of the suspension of late fees and foregone reconnect fees. These impacts are collectively referred to as "financial impacts." See Note 3—Impact of Novel Coronavirus (COVID-19) Pandemic in the Notes to Consolidated Financial Statements for additional information. The extent to which COVID-19 may further impact American Water, including without limitation, its liquidity, financial condition, and results of operations, will depend on future developments, which presently cannot be predicted.

agreement, the expenditure in 2020 was $0.1 million. Tank painting expense for 2020, 2019 and 2018 was $155,000, $447,000, and $658,000, respectively.



Budgeted mandatory utility plant expenditures, due to planned governmental highway projects, which require the relocation of Artesian Water's water service mains, expected to be incurred in 2021 through 2023 are as follows:

| *In thousands* | |
|---|---|
| 2021 | $ 3,020 |
| 2022 | 3,020 |
| 2023 | 3,020 |
| | $ 9,060 |

The exact timing and extent of these relocation projects is controlled primarily by the Delaware Department of Transportation.

***NOTE 12***

***GEOGRAPHIC CONCENTRATION OF CUSTOMERS***

Artesian Water, Artesian Water Maryland and Artesian Water Pennsylvania provide water utility service to customers within their established service territory in all three counties of Delaware and in portions of Maryland and Pennsylvania, pursuant to rates filed with and approved by the DEPSC, the MDPSC and the PAPUC. As of December 31, 2020, Artesian Water was serving approximately 90,300 customers, Artesian Water Maryland was serving approximately 2,500 customers and Artesian Water Pennsylvania was serving approximately 40 customers.

Artesian Wastewater provides wastewater utility service to customers within its established service territory in Sussex County, Delaware pursuant to rates filed with and approved by the DEPSC. As of December 31, 2020, Artesian Wastewater was serving approximately 2,800 customers, including one large industrial customer that comprises approximately 24% of the outstanding accounts receivable balance at year end. All wastewater customers are located in Sussex County, Delaware.

***NOTE 13***

***REGULATORY PROCEEDINGS***

Overview

Our water and wastewater utilities generate operating revenue from customers based on rates that are established by state Public Service Commissions through a rate setting process that may include public hearings, evidentiary hearings and the submission of evidence and testimony in support of the requested level of rates by the Company.

We are subject to regulation by the following state regulatory commissions:

- The DEPSC, regulates both Artesian Water and Artesian Wastewater.
- The MDPSC, regulates both Artesian Water Maryland and Artesian Wastewater Maryland.
- The PAPUC, regulates Artesian Water Pennsylvania.

Our water and wastewater utility operations are also subject to regulation under the federal Safe Drinking Water Act of 1974, or Safe Drinking Water Act, the Clean Water Act of 1972, or the Clean Water Act, and related state laws, and under federal and state regulations issued under these laws. These laws and regulations establish criteria and standards for drinking water and for wastewater discharges. Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state regulatory commissions as appropriate for inclusion in establishing rates.

Water and Wastewater Rates

Our regulated utilities periodically seek rate increases to cover the cost of increased operating expenses, increased financing expenses due to additional investments in utility plant and other costs of doing business. In Delaware, utilities are permitted by law to place rates into effect, under bond, on a temporary basis pending completion of a rate increase proceeding. The first temporary increase may be up to the lesser of $2.5 million on an annual basis or 15% of gross water sales. Should the rate case not be completed within seven months, by law, the utility may put the entire requested rate relief, up to 15% of gross water sales, in effect under bond until a final resolution is ordered and placed into effect. If any such rates are found to be in excess of rates the DEPSC finds to be appropriate, the utility must refund customers the portion found to be in excess with interest. The timing of our rate increase requests is therefore dependent upon the estimated cost of the administrative process in relation to the investments and expenses that we hope to recover through the rate increase. We can provide no assurances that rate increase requests will be approved by applicable regulatory agencies and, if approved, we cannot guarantee that these rate increases will be granted in a timely or sufficient manner to cover the investments and expenses for which we initially sought the rate increase.



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# Artesian Resources Corporation 2020 Annual Report Available Electronically to Shareholders

April 08, 2021 17:28 ET | Source: Artesian Resources Corporation

NEWARK, Del., April 08, 2021 (GLOBE NEWSWIRE) -- Artesian Resources Corporation (NASDAQ: ARTNA), a leading provider of water, wastewater services and related services on the Delmarva Peninsula today announced that its 2020 Annual Report is available electronically to shareholders through its website at https://www.artesianwater.com/investor-relations/annual-report/. If any shareholder would like to receive a print copy of the 2020 Annual Report, they can request one free of charge by writing or calling Artesian Resources Corporation, 664 Churchmans Road, Newark, Delaware 19702, Attention Laura Slayman (Phone Number: 302-453-6900).

**About Artesian Resources**

Artesian Resources Corporation operates as a holding company of wholly-owned subsidiaries offering water and wastewater services, and related services, on the Delmarva Peninsula. Artesian Water Company, the principal subsidiary, is the oldest and largest regulated water utility on the Delmarva Peninsula and has been providing water service since 1905. Artesian supplies 8.3 billion gallons of water per year through 1,311 miles of main to over 300,000 people.

Contact:
Nicholle Taylor

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ACCEPT

Effective June 30, 2011, the CPUC adopted new rules related to the provision of non-regulated services using utility assets and employees. As a result, nearly all California non-regulated activities are now considered NTPS. The prescribed accounting for these NTPS is incremental cost allocation plus revenue sharing with regulated customers. Non-regulated services determined to be "active activities" require a 10% revenue sharing, and "passive activities" require a 30% revenue sharing. The amount of non-regulated revenues subject to revenue sharing is the total billed revenues less any authorized pass-through costs. Some examples of CPUC authorized pass-through costs are purchased water, purchased power, and pump taxes. All of our non-regulated services, except for leasing communication antenna sites on our properties, are "active activities" subject to a 10% revenue sharing. Leasing communication antenna sites on our properties are "passive activities" subject to a 30% revenue sharing. Cal Water's annual revenue sharing with regulated customers was $2.5 million, $2.7 million, and $2.6 million in 2020, 2019, and 2018, respectively.

**Operating Segment**

We operate in one reportable segment, the supply and distribution of water and providing water-related utility services. For information about revenue from external customers, net income and total assets, see "Item 8. Financial Statements and Supplementary Data."

**Growth**

We intend to continue exploring opportunities to expand our regulated and non-regulated water and wastewater activities, particularly in the western United States. The opportunities could include system acquisitions, lease arrangements similar to the City of Hawthorne and City of Commerce contracts, full service system operation and maintenance agreements, meter reading, billing contracts and other utility-related services.

**Geographical Service Areas and Number of Customer Connections at Year-end**

Our principal markets are users of water within our service areas. The approximate number of customer connections served in each regulated district, the City of Hawthorne and the City of Commerce, at December 31 is as follows:

| (rounded to the nearest hundred) | 2020 | 2019 |
|---|---|---|
| SAN FRANCISCO BAY AREA/NORTH COAST | | |
| Bay Area Region (serving South San Francisco, Colma, Broadmoor, San Mateo, San Carlos, Lucerne, Duncans Mills, Guerneville, Dillon Beach, Noel Heights and portions of Santa Rosa) | 56,000 | 55,900 |
| Bear Gulch (serving portions of Menlo Park, Atherton, Woodside and Portola Valley) | 19,000 | 18,900 |
| Los Altos (including portions of Cupertino, Los Altos Hills, Mountain View and Sunnyvale) | 19,000 | 19,000 |
| Livermore | 18,900 | 18,900 |
| | 112,900 | 112,700 |
| SACRAMENTO VALLEY | | |
| Chico (including Hamilton City) | 30,800 | 30,500 |
| Oroville | 3,700 | 3,600 |
| Marysville | 3,800 | 3,800 |
| Dixon | 3,100 | 3,000 |
| Willows | 2,400 | 2,400 |
| | 43,800 | 43,300 |
| SALINAS VALLEY | | |
| Salinas Valley Region (including Salinas and King City) | 31,600 | 31,500 |
| | 31,600 | 31,500 |
| SAN JOAQUIN VALLEY | | |
| Bakersfield | 73,500 | 72,700 |
| Stockton | 44,800 | 44,400 |
| Visalia | 46,700 | 46,000 |

Inline XBRL Viewer



| | | |
|---|---|---|
| Selma | 6,500 | 6,500 |
| Kern River Valley | 4,000 | 4,000 |





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| (rounded to the nearest hundred) | 2020 | 2019 |
|---|---|---|
| | 175,500 | 173,600 |
| LOS ANGELES AREA | | |
| East Los Angeles | 26,900 | 26,800 |
| Hermosa Redondo (serving Hermosa Beach, Redondo Beach and a portion of Torrance) | 27,100 | 27,100 |
| Dominguez (Carson and portions of Compton, Harbor City, Long Beach, Los Angeles and Torrance) | 34,300 | 34,200 |
| Los Angeles County Region (including Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, Rolling Hills, Fremont Valley, Lake Hughes, Lancaster and Leona Valley) | 25,700 | 25,700 |
| Westlake (a portion of Thousand Oaks) | 7,100 | 7,100 |
| Hawthorne and Commerce (leased municipal systems) | 7,700 | 7,600 |
| | 128,800 | 128,500 |
| CALIFORNIA TOTAL | 492,600 | 489,600 |
| HAWAII | 5,300 | 5,000 |
| NEW MEXICO | 8,500 | 8,300 |
| WASHINGTON | 36,600 | 17,700 |
| COMPANY TOTAL | 543,000 | 520,600 |

**Rates and Regulation**

The Commissions have plenary powers setting both rates and operating standards. As such, the Commissions' decisions significantly impact the Company's revenues, earnings, and cash flows. The amounts discussed herein are generally annual amounts, unless otherwise stated, and the financial impact to recorded revenue is expected to occur over a 12-month period from the effective date of the decision. In California, water utilities are required to make several different types of filings. Certain filings, such as General Rate Case (GRC) filings, escalation rate increase filings, and offset filings, may result in rate changes that generally remain in place until the next GRC. As explained below, surcharges and surcredits to recover balancing and memorandum accounts as well as GRC interim rate relief are temporary rate changes which have specific time frames for recovery.

The CPUC follows a rate case plan which requires Cal Water to file a GRC for each of its regulated operating districts every three years. In a GRC proceeding the CPUC not only considers the utility's rate setting requests, but may also consider other issues that affect the utility's rates and operations. The CPUC is generally required to issue its GRC decision prior to the first day of the test year or authorize interim rates. In accordance with the rate case plan, Cal Water will file its next GRC application in July of 2021.

Between GRC filings, Cal Water may file escalation rate increases, which allow Cal Water to recover cost increases, primarily from inflation and incremental investments, during the second and third years of the rate case cycle. However, escalation rate increases are district specific and subject to an earnings test. The CPUC may reduce a district’s escalation rate increase if, in the most recent 13-month period, the earnings test reflects earnings in excess of what was authorized for that district.

In addition, California water utilities are entitled to make offset requests via advice letter. Offsets may be requested to adjust revenues for construction projects authorized in GRCs when those capital projects go into service (these filings are referred to as "rate base offsets"), or for rate changes charged to Cal Water for purchased water, purchased power, and pump taxes (which are referred to as "expense offsets"). Rate changes approved in offset requests remain in effect until the next GRC is approved.

- restrictive covenants in or changes to the credit ratings on our current or future debt that could increase our financing costs or affect our ability to borrow, make payments on debt or pay dividends; and
- the risks set forth in "Risk Factors" included elsewhere in this annual report.

In light of these risks, uncertainties and assumptions, investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this annual report or as of the date of any document incorporated by reference in this annual report, as applicable. When considering forward-looking statements, investors should keep in mind the cautionary statements in this annual report and the documents incorporated by reference. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

**Overview**

California Water Service Group is a holding company with six operating subsidiaries: California Water Service Company (Cal Water), New Mexico Water Service Company (New Mexico Water), Washington Water Service Company (Washington Water), Hawaii Water Service Company, Inc. (Hawaii Water), and CWS Utility Services and HWS Utility Services LLC (CWS Utility Services and HWS Utility Services LLC being referred to collectively in this annual report as Utility Services). Cal Water, New Mexico Water, Washington Water, and Hawaii Water are regulated public utilities. The regulated utility entities also provide some non-regulated services. Utility Services holds non-utility property and provides non-regulated services to private companies and municipalities outside of California. Cal Water was the original operating company and began operations in 1926.

Our business is conducted through our operating subsidiaries and we provide utility services to approximately two million people. The bulk of the business consists of the production, purchase, storage, treatment, testing, distribution and sale of water for domestic, industrial, public and irrigation uses, and for fire protection. In some areas, we provide wastewater collection and treatment services, including treatment which allows water recycling. We also provide non-regulated water-related services under agreements with municipalities and other private companies. The non-regulated services include full water system operation, billing and meter reading services. Non-regulated operations also include the lease of communication antenna sites, lab services and promotion of other non-regulated services.

During the year ended December 31, 2020, there were no significant changes in the kind of products produced or services rendered by our operating subsidiaries, or in the markets or methods of distribution.

Our mailing address and contact information is:

California Water Service Group
1720 North First Street
San Jose, California 95112-4598
Telephone number: 408-367-8200
www.calwatergroup.com

Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports are available free of charge through our website at www.calwatergroup.com. The reports are available on our website as soon as reasonably practicable after such reports are filed with the SEC.

The content on any website referred to in this annual report is not incorporated by reference in this annual report unless expressly noted.

**Regulated Business**

California water operations are conducted by Cal Water, which provides service to approximately 492,600 customer connections in approximately 100 California communities through 21 separate districts, which are subject to regulation by the California Public Utilities Commission (CPUC). California water operations accounted for approximately 90.7% of our total customer connections and 93.8% of our total consolidated operating revenue.

We operate the City of Hawthorne and the City of Commerce water systems under lease agreements. In accordance with the lease agreements, we receive all revenues from operating the systems and are responsible for paying the operating costs. The City of Hawthorne and the City of Commerce lease revenues are governed through their respective city councils and are considered non-regulated because they are

patterns by our customers, resulting from such causes as increased water conservation and the installation of water saving devices and appliances that can result in decreased water usage. It is estimated that in the event we experience a 0.50% decrease in residential water consumption it would result in a decrease in annual residential water revenue of approximately $2,800,000 and would likely be partially offset by a reduction in incremental water production expenses such as chemicals and power.

Our natural gas utility customer base is diversified among residential gas, commercial gas, industrial gas, gas transportation, and other utility (consisting of miscellaneous service revenue from gas distribution operations; gas processing and handling revenue; sales of natural gas at market-based rates and contracted fixed prices; sales of gas purchased from third parties; and other gas marketing activities). The Regulated Natural Gas segment operating revenues are reported for the period since closing on the Peoples Gas Acquisition on March 16, 2020. Substantially all of our natural gas utility customers are metered, which allows to measure and bill for our customers' natural gas usage. Natural gas usage per customer is affected by local weather conditions during the year, especially during the fall, winter, and early spring. These patterns reflect the higher demand for natural gas for heating purposes during the colder months.

Our growth in revenues over the past five years is primarily a result of the 2020 Peoples Gas Acquisition, increases in water and wastewater rates and customer growth. See *Economic Regulation* for a discussion of water, wastewater and natural gas rates. The increase in our utility customer base has been due to customers added through acquisitions, partnerships with developers, and organic growth (excluding dispositions) as shown below:

| Year | Utility Customer Growth Rate |
|---|---|
| 2020 | 42.9% |
| 2019 | 2.1% |
| 2018 | 2.3% |
| 2017 | 1.1% |
| 2016 | 1.6% |

In 2020, 2019, and 2018, our customer count increased by 772,099, 21,108, and 22,741 customers, respectively, primarily due to the addition of approximately 750,000 natural gas utility customers from the Peoples Gas Acquisition, water and wastewater utility systems that we acquired, and organic growth. Overall, for the five year period of 2016 through 2020, our utility customer base, adjusted to exclude customers associated with utility system dispositions, increased at an annual compound rate of 13.4%. During the five year period ended December 31, 2020, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 957,866 at January 1, 2016 to 1,798,803 at December 31, 2020.

*Acquisitions and Other Growth Ventures*

We believe that acquisitions will continue to be an important source of customer growth for us. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater systems that provide services in areas near our existing service territories or in new service areas. We engage in continuing activities with respect to potential acquisitions, including calling on prospective sellers, performing analyses of and due diligence on acquisition candidates, making preliminary acquisition proposals, and negotiating the terms of potential acquisitions. Further, we are also seeking other potential business opportunities, including but not limited to, partnering with public and regulated utilities to invest in infrastructure projects, growing our market-based activities by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

Based on the 2019 U.S. Census American Housing Survey, approximately 89% of the U.S. population obtains its water from public or private water utility systems, and 11% of the U.S. population obtains its water from individual wells. With approximately 50,000 public or private water systems in the U.S. (81% of which serve less than 3,300 customers), the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water and wastewater). The majority of these community water systems are government-owned. The nation's water systems range in size from large government-owned systems, such as the New York City water system, which serves approximately 8.3 million people, to small systems, where a few customers share a common well. In the states where we operate regulated water utilities, we believe there are approximately 14,000 public or private water utility systems of widely-varying size, with the majority of the population being served by government-owned water systems.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K, or this Annual Report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that are made based upon, among other things, our current assumptions, expectations, plans, and beliefs concerning future events and their potential effect on us. These forward-looking statements involve risks, uncertainties and other factors, many of which are outside our control that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In some cases you can identify forward-looking statements where statements are preceded by, followed by or include the words "believes," "expects," "estimates", "anticipates," "plans," "future," "potential," "probably," "predictions," "intends," "will," "continue," "in the event" or the negative of such terms or similar expressions. Please refer to the Summary in Item 1A – Risk Factors in this Annual Report for a description of the types of Forward-looking statements in this Annual Report.

Given these risks and uncertainties, you should not place undue reliance on any forward-looking statements. You should read this Annual Report completely and with the understanding that our actual future results, performance and achievements may be materially different from what we expect. These forward-looking statements represent assumptions, expectations, plans, and beliefs only as of the date of this Annual Report. Except for our ongoing obligations to disclose certain information under the federal securities laws, we are not obligated, and assume no obligation, to update these forward-looking statements, even though our situation may change in the future. For further information or other factors which could affect our financial results and such forward-looking statements, see *Item 1A – Risk Factors*. We qualify all of our forward-looking statements by these cautionary statements.

## PART I

### Item 1. *Business*

*The Company*

Essential Utilities, Inc. (referred to as "Essential Utilities", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water, wastewater, or natural gas services to an estimated five million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky under the Aqua and Peoples brands. One of our largest operating subsidiaries, is Aqua Pennsylvania, Inc., ("Aqua Pennsylvania") accounted for approximately 55% of operating revenues and approximately 67% of income for our Regulated Water segment in 2020. As of December 31, 2020, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of water and wastewater customers we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated water utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company' growth strategy, commencing on March 16, 2020 with the completion of the Peoples Gas Acquisition, the Company began to provide natural gas distribution services to customers in western Pennsylvania, Kentucky, and West Virginia. Approximately 93% of the total number of natural gas utility customers we serve are in western Pennsylvania. Lastly, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources Inc., and certain other non-regulated subsidiaries of Peoples. Prior to our October 30, 2020 sale of our investment in a joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Following the October 30, 2020 closing, Aqua Infrastructure does not provide any services to the natural gas drilling industry. Aqua Resources offers, through a third-party, water and sewer line protection solutions and repair services to households.

Essential Utilities, which prior to its name change on February 3, 2020 was known as Aqua America, Inc., was formed in 1968 as a holding company for its primary subsidiary, Aqua Pennsylvania, formerly known as Philadelphia Suburban Water Company. In the early 1990s, we embarked on a growth through acquisition strategy. Our most significant transactions to date have been the merger with Consumers Water Company in 1999, the acquisition of the regulated water and wastewater operations of AquaSource, Inc. in 2003, the acquisition of Heater Utilities, Inc. in 2004, the acquisition of American Water Works Company, Inc.'s regulated water and wastewater operations in Ohio in 2012, and the Peoples Gas

**PART I**

**Item 1. Business.**

**Overview**

Middlesex Water Company (Middlesex) was incorporated as a water utility company in 1897 and owns and operates regulated water utility and wastewater systems primarily in New Jersey and Delaware. Middlesex also operates water and wastewater systems under contract on behalf of municipal and private clients primarily in New Jersey and Delaware.

The terms "the Company," "we," "our," and "us" refer to Middlesex Water Company and its subsidiaries, including Tidewater Utilities, Inc. (Tidewater) and Tidewater's wholly-owned subsidiaries, Southern Shores Water Company, LLC (Southern Shores) and White Marsh Environmental Systems, Inc. (White Marsh). The Company's other subsidiaries are Pinelands Water Company (Pinelands Water) and Pinelands Wastewater Company (Pinelands Wastewater) (collectively, Pinelands), Utility Service Affiliates, Inc. (USA), Utility Service Affiliates (Perth Amboy) Inc., (USA-PA), Tidewater Environmental Services, Inc. (TESI) and Twin Lakes Utilities, Inc. (Twin Lakes).

The Company's principal executive offices are located at 485C Route 1 South, Suite 400, Iselin, New Jersey 08830. Our telephone number is (732) 634-1500. Our website address is http://www.middlesexwater.com. Information contained on our website is not part of this Annual Report on Form 10-K. We make available, free of charge through our website, reports and amendments filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, after such material is electronically filed with or furnished to the United States Securities and Exchange Commission (the SEC).

***Middlesex System***

The Middlesex System in New Jersey provides water services to approximately 61,000 retail customers, primarily in eastern Middlesex County, New Jersey and provides water under wholesale contracts to the City of Rahway, Townships of Edison and Marlboro, the Borough of Highland Park and the Old Bridge Municipal Utilities Authority. The Middlesex System treats, stores and distributes water for residential, commercial, industrial and fire protection purposes. The Middlesex System also provides water treatment and pumping services to the Township of East Brunswick under contract. The amount of water supply allocated to the Township of East Brunswick is granted directly to the Township by the New Jersey Water Supply Authority. The Middlesex System produced approximately 59% of our 2020 consolidated operating revenues.

The Middlesex System's retail customers are located in an area of approximately 55 square miles in Woodbridge Township, the City of South Amboy, the Boroughs of Metuchen and Carteret, portions of the Township of Edison and the Borough of South Plainfield, all in Middlesex County, and a portion of the Township of Clark in Union County. Retail customers include a mix of residential customers, large industrial concerns and commercial and light industrial facilities. These customers are located in generally well-developed areas of central New Jersey.

The contract customers of the Middlesex System comprise an area of approximately 110 square miles with a population of over 200,000. Contract sales to the Townships of Edison and Marlboro, the City of Rahway and the Old Bridge Municipal Utilities Authority are supplemental to the water systems owned and operated by these customers. Middlesex is the sole source of water for the Borough of Highland Park and the Township of East Brunswick.

Middlesex provides water service to approximately 300 customers in Cumberland County, New Jersey. This system is referred to as Bayview, and is not physically interconnected with the Middlesex System. Bayview produced less than 1% of our 2020 consolidated operating revenues.



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***Tidewater System***

Tidewater, together with its wholly-owned subsidiary, Southern Shores, provides water services to approximately 52,000 retail customers for residential, commercial and fire protection purposes in over 430 separate communities in New Castle, Kent and Sussex Counties, Delaware. The Tidewater System produced approximately 28% of our 2020 consolidated operating revenues.

***USA-PA***

USA-PA operates the City of Perth Amboy, New Jersey's (Perth Amboy) water and wastewater systems under a 10-year agreement, which expires in December 2028. There are approximately 12,000 customers comprised of residential, commercial and industrial connections, most of which are served by both the water and wastewater systems. In addition to performing day-to day operations, USA-PA is also responsible for emergency responses and management of capital projects funded by Perth Amboy. USA-PA produced approximately 5% of our 2020 consolidated operating revenues.

***Pinelands Systems***

Pinelands Water provides water services to approximately 2,500 residential customers in Burlington County, New Jersey. Pinelands Water is not physically interconnected with the Middlesex System. Pinelands Water produced approximately 1% of our 2020 consolidated operating revenues.

Pinelands Wastewater provides wastewater collection and treatment services to approximately 2,500 residential customers. Under contract, it also services one municipal wastewater system in Burlington County, New Jersey with approximately 200 residential customers. Pinelands Wastewater produced approximately 1% of our 2020 consolidated operating revenues.

***USA***

***Tidewater System***

Tidewater, together with its wholly-owned subsidiary, Southern Shores, provides water services to approximately 52,000 retail customers for residential, commercial and fire protection purposes in over 430 separate communities in New Castle, Kent and Sussex Counties, Delaware. The Tidewater System produced approximately 28% of our 2020 consolidated operating revenues.

***USA-PA***

USA-PA operates the City of Perth Amboy, New Jersey's (Perth Amboy) water and wastewater systems under a 10-year agreement, which expires in December 2028. There are approximately 12,000 customers comprised of residential, commercial and industrial connections, most of which are served by both the water and wastewater systems. In addition to performing day-to day operations, USA-PA is also responsible for emergency responses and management of capital projects funded by Perth Amboy. USA-PA produced approximately 5% of our 2020 consolidated operating revenues.

***Pinelands Systems***

Pinelands Water provides water services to approximately 2,500 residential customers in Burlington County, New Jersey. Pinelands Water is not physically interconnected with the Middlesex System. Pinelands Water produced approximately 1% of our 2020 consolidated operating revenues.

Pinelands Wastewater provides wastewater collection and treatment services to approximately 2,500 residential customers. Under contract, it also services one municipal wastewater system in Burlington County, New Jersey with approximately 200 residential customers. Pinelands Wastewater produced approximately 1% of our 2020 consolidated operating revenues.

***USA***

USA operates the Borough of Avalon, New Jersey's (Avalon) water utility, sewer utility and storm water system under a ten-year operations and maintenance contract expiring in 2022. USA serves approximately 6,400 retail customers in Avalon, most of which are served by both the water system and wastewater collection system. In addition to performing day-to-day operations, USA is responsible for billing, collections, customer service, emergency responses and management of capital projects funded by Avalon.

USA operates the Borough of Highland Park, New Jersey's (Highland Park) water utility and sewer utility under a ten-year operations and maintenance contract expiring in 2030. USA serves approximately 3,300 mostly retail customers in Highland Park. The contract commenced July 1, 2020.

USA also provides unregulated water and wastewater services under contract with several other smaller New Jersey municipalities.

Under a marketing agreement with HomeServe, USA offers residential customers in New Jersey and Delaware various water and wastewater related home maintenance programs. HomeServe is a leading national provider of such home maintenance service programs. USA receives a service fee for the billing, cash collection and other administrative matters associated with HomeServe's service contracts. The agreement expires in July 2021 and renewal discussions are underway.

USA produced approximately 2% of our 2020 consolidated operating revenues.

***TESI System***

TESI provides wastewater collection and treatment services to approximately 3,900 retail customers in Sussex County, Delaware. TESI produced approximately 2% of our 2020 consolidated operating revenues.



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***White Marsh***

White Marsh operates or maintains water and/or wastewater systems that serve approximately 1,900 retail customers under more than 36 separate contracts. White Marsh also owns two commercial properties that are leased to Tidewater for its administrative office campus and its field operations center. White Marsh produced approximately 1% of our 2020 consolidated operating revenues.

**Financial Information**

Consolidated operating revenues, operating income and net income are as follows:

| | (Thousands of Dollars) Years Ended December 31, 2020 | 2019 | 2018 |
|---|---|---|---|
| Operating Revenues | $ 141,592 | $ 134,598 | $ 138,077 |
| Operating Income | $ 37,420 | $ 35,520 | $ 37,142 |
| Net Income | $ 38,425 | $ 33,888 | $ 32,452 |

Operating revenues were earned from the following sources:

EX-99.1 2 ex99-1.htm EX-99.1

**EXHIBIT 99.1**

**FOR IMMEDIATE RELEASE**

# Middlesex Water Company Declares Quarterly Cash Dividend

ISELIN, N.J., Jan. 28, 2021 -- Middlesex Water Company (NASDAQ:MSEX) announced today that its Board of Directors has declared a cash dividend of $0.2725 per share on its common stock payable on March 1, 2021 to holders of record as of February 12, 2021. Middlesex Water has paid cash dividends in varying amounts continually since 1912 and has increased its annual dividend rate for 48 consecutive years.

Organized in 1897, Middlesex Water provides regulated and unregulated water and wastewater utility services primarily in New Jersey and Delaware through various subsidiary companies. To learn more about Middlesex Water, including information about its Investment Plan, visit the Investor Relations section at www.middlesexwater.com.

**ABOUT MIDDLESEX WATER COMPANY**

Middlesex Water Company serves as a trusted provider offering life-sustaining high quality water service for residential, commercial, industrial and fire protection purposes. The Company offers a full range of water, wastewater utility and related services. An investor-owned public utility, Middlesex Water is a professional services provider specializing in municipal and industrial contract operations and water and wastewater system technical operations and maintenance. The company and its subsidiaries form the Middlesex Water family of companies, which collectively serve a population of nearly half a million people in New Jersey and Delaware. Named a 2020 Top Workplace in New Jersey, Middlesex is focused on meeting the needs of our employees, customers, and shareholders. We invest in our people, our infrastructure and the communities we serve to support reliable and resilient utility services, economic growth and quality of life. To learn more about Middlesex Water, visit https://www.middlesexwater.com Please follow us on Facebook, Twitter and LinkedIn.

*This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, our long-term strategy and expectations, the status of our acquisition program, the impact of our acquisitions, the impact of current and projected rate requests and the impact of our capital program on our environmental compliance. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, unfavorable weather conditions, the success of certain cost containment initiatives, changes in regulations or regulatory treatment, availability and the cost of capital, the success of growth initiatives and other factors discussed in our filings with the Securities and Exchange Commission.*

**Contact:**
Bernadette Sohler, Vice President – Corporate Affairs
Middlesex Water Company
(732) 638-7549
www.middlesexwater.com



https://www.sec.gov/Archives/edgar/data/0000066004/000117494721000056/ex99-1.htm[5/22/2021 4:37:43 PM]

**Item 6.** ***Selected Financial Data***

**FIVE YEAR FINANCIAL AND STATISTICAL REVIEW**
**SJW Group and Subsidiaries**

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| **CONSOLIDATED RESULTS OF OPERATIONS** (in thousands) | | | | | |
| Operating revenue | $ 564,526 | 420,482 | 397,699 | 389,225 | 339,706 |
| Operating expense: | | | | | |
| Purchased water | 100,723 | 99,118 | 97,378 | 86,456 | 72,971 |
| Power | 13,330 | 7,443 | 6,180 | 7,295 | 6,102 |
| Groundwater extraction charges | 71,359 | 43,917 | 46,770 | 47,817 | 32,088 |
| Other production expenses | 40,380 | 25,291 | 18,398 | 16,571 | 14,470 |
| Administrative and general | 79,741 | 66,301 | 48,933 | 48,940 | 41,529 |
| Maintenance | 22,158 | 20,505 | 18,414 | 18,361 | 18,361 |
| Property taxes and other non-income taxes | 29,886 | 19,068 | 14,975 | 13,642 | 12,123 |
| Depreciation and amortization | 89,279 | 65,592 | 54,601 | 48,292 | 44,625 |
| Merger related expenses | — | 15,768 | 18,610 | — | — |
| Total operating expense | 446,856 | 363,003 | 324,259 | 287,374 | 242,269 |
| Operating income | 117,670 | 57,479 | 73,440 | 101,851 | 97,437 |
| Interest expense, other income and expense | (47,775) | (25,398) | (24,608) | (5,358) | (11,056) |
| Income before income taxes | 69,895 | 32,081 | 48,832 | 96,493 | 86,381 |
| Provision for income taxes | 8,380 | 8,454 | 10,065 | 35,393 | 33,542 |
| Net income before noncontrolling interest | 61,515 | 23,627 | 38,767 | 61,100 | 52,839 |
| Less net income attributable to the noncontrolling interest | — | 224 | — | 1,896 | — |
| SJW Group net income | $ 61,515 | 23,403 | 38,767 | 59,204 | 52,839 |
| Dividends paid | $ 36,509 | 34,134 | 23,074 | 21,332 | 16,559 |
| **CONSOLIDATED PER SHARE DATA** | | | | | |
| Earnings per share - diluted | 2.14 | 0.82 | 1.82 | 2.86 | 2.57 |
| Dividends paid | 1.28 | 1.20 | 1.12 | 1.04 | 0.81 |
| Book value per common share | 32.12 | 31.28 | 31.31 | 22.57 | 20.61 |
| **CONSOLIDATED BALANCE SHEET** (in thousands) | | | | | |
| Utility plant and intangible assets | $ 3,380,048 | 3,168,505 | 1,935,911 | 1,792,323 | 1,666,381 |
| Less accumulated depreciation and amortization | 1,045,136 | 962,019 | 607,090 | 553,059 | 520,018 |
| Net utility plant | 2,334,912 | 2,206,486 | 1,328,821 | 1,239,264 | 1,146,363 |
| Total assets | 3,311,465 | 3,132,470 | 1,956,389 | 1,458,001 | 1,443,376 |
| Capitalization: | | | | | |
| Stockholders' equity | 917,160 | 889,984 | 889,312 | 463,209 | 421,646 |
| Long-term debt, less current portion | 1,287,580 | 1,283,597 | 431,424 | 431,092 | 433,335 |
| Total capitalization | $ 2,204,740 | 2,173,581 | 1,320,736 | 894,301 | 854,981 |
| **OTHER STATISTICS—WATER UTILITY SERVICES** | | | | | |
| Average revenue per connection (in thousands) | $ 1,450 | 1,087 | 1,609 | 1,594 | 1,402 |

| | | | | | |
|---|---|---|---|---|---|
| Investment in gross utility plant per connection (in thousands) | $ 8,683 | 8,195 | 7,832 | 7,340 | 6,874 |
| Connections at year-end | 389,293 | 386,607 | 247,267 | 244,133 | 242,421 |
| Miles of main at year-end | 5,462 | 5,465 | 3,091 | 3,082 | 3,069 |
| Water production (million gallons) | 53,604 | 42,216 | 40,053 | 38,584 | 35,847 |
| Maximum daily production (million gallons) | 218 | 206 | 149 | 148 | 136 |
| Population served (estimate) | 1,614,866 | 1,604,442 | 1,114,200 | 1,100,200 | 1,092,600 |

**Note:** Information in this table, including Other Statistics, include SJWNE, LLC from the date of October 9, 2019.





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**Item 6.** ***Selected Financial Data***

**FIVE YEAR FINANCIAL AND STATISTICAL REVIEW**
**SJW Group and Subsidiaries**

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| **CONSOLIDATED RESULTS OF OPERATIONS** (in thousands) | | | | | |
| Operating revenue | $ 564,526 | 420,482 | 397,699 | 389,225 | 339,706 |
| Operating expense: | | | | | |
| Purchased water | 100,723 | 99,118 | 97,378 | 86,456 | 72,971 |
| Power | 13,330 | 7,443 | 6,180 | 7,295 | 6,102 |
| Groundwater extraction charges | 71,359 | 43,917 | 46,770 | 47,817 | 32,088 |
| Other production expenses | 40,380 | 25,291 | 18,398 | 16,571 | 14,470 |
| Administrative and general | 79,741 | 66,301 | 48,933 | 48,940 | 41,529 |
| Maintenance | 22,158 | 20,505 | 18,414 | 18,361 | 18,361 |
| Property taxes and other non-income taxes | 29,886 | 19,068 | 14,975 | 13,642 | 12,123 |
| Depreciation and amortization | 89,279 | 65,592 | 54,601 | 48,292 | 44,625 |
| Merger related expenses | — | 15,768 | 18,610 | — | — |
| Total operating expense | 446,856 | 363,003 | 324,259 | 287,374 | 242,269 |
| Operating income | 117,670 | 57,479 | 73,440 | 101,851 | 97,437 |
| Interest expense, other income and expense | (47,775) | (25,398) | (24,608) | (5,358) | (11,056) |
| Income before income taxes | 69,895 | 32,081 | 48,832 | 96,493 | 86,381 |
| Provision for income taxes | 8,380 | 8,454 | 10,065 | 35,393 | 33,542 |
| Net income before noncontrolling interest | 61,515 | 23,627 | 38,767 | 61,100 | 52,839 |
| Less net income attributable to the noncontrolling interest | — | 224 | — | 1,896 | — |
| SJW Group net income | $ 61,515 | 23,403 | 38,767 | 59,204 | 52,839 |
| Dividends paid | $ 36,509 | 34,134 | 23,074 | 21,332 | 16,559 |
| **CONSOLIDATED PER SHARE DATA** | | | | | |
| Earnings per share - diluted | 2.14 | 0.82 | 1.82 | 2.86 | 2.57 |
| Dividends paid | 1.28 | 1.20 | 1.12 | 1.04 | 0.81 |
| Book value per common share | 32.12 | 31.28 | 31.31 | 22.57 | 20.61 |
| **CONSOLIDATED BALANCE SHEET** (in thousands) | | | | | |
| Utility plant and intangible assets | $ 3,380,048 | 3,168,505 | 1,935,911 | 1,792,323 | 1,666,381 |
| Less accumulated depreciation and amortization | 1,045,136 | 962,019 | 607,090 | 553,059 | 520,018 |
| Net utility plant | 2,334,912 | 2,206,486 | 1,328,821 | 1,239,264 | 1,146,363 |
| Total assets | 3,311,465 | 3,132,470 | 1,956,389 | 1,458,001 | 1,443,376 |
| Capitalization: | | | | | |
| Stockholders' equity | 917,160 | 889,984 | 889,312 | 463,209 | 421,646 |
| Long-term debt, less current portion | 1,287,580 | 1,283,597 | 431,424 | 431,092 | 433,335 |
| Total capitalization | $ 2,204,740 | 2,173,581 | 1,320,736 | 894,301 | 854,981 |
| **OTHER STATISTICS—WATER UTILITY SERVICES** | | | | | |
| Average revenue per connection (in thousands) | $ 1,450 | 1,087 | 1,609 | 1,594 | 1,402 |

| | | | | | |
|---|---|---|---|---|---|
| Investment in gross utility plant per connection (in thousands) | $ 8,683 | 8,195 | 7,832 | 7,340 | 6,874 |
| Connections at year-end | 389,293 | 386,607 | 247,267 | 244,133 | 242,421 |
| Miles of main at year-end | 5,462 | 5,465 | 3,091 | 3,082 | 3,069 |
| Water production (million gallons) | 53,604 | 42,216 | 40,053 | 38,584 | 35,847 |
| Maximum daily production (million gallons) | 218 | 206 | 149 | 148 | 136 |
| Population served (estimate) | 1,614,866 | 1,604,442 | 1,114,200 | 1,100,200 | 1,092,600 |

**Note:** Information in this table, including Other Statistics, include SJWNE, LLC from the date of October 9, 2019.





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Lead and copper may enter drinking water primarily through plumbing materials. The Company is required to comply with the Lead and Copper Rule established by the EPA and administered by the DEP. The Company must monitor drinking water at customer taps for compliance with this rule. If lead concentrations exceed an action level, the Company must undertake a number of additional actions to control corrosion, inform the public about steps they should take to protect their health and may be required to replace lead service lines under its control. See "Management's Discussion and Analysis – Environmental Matters" for a discussion of the Company's compliance with the Lead and Copper rule.

The DEP and the Susquehanna River Basin Commission, or SRBC, regulate the amount of water withdrawn from streams in the watershed to assure that sufficient quantities are available to meet the needs of the Company and other regulated users. Through its Division of Dam Safety, the DEP regulates the operation and maintenance of the Company's impounding dams. The Company routinely inspects its dams and prepares annual reports of their condition as required by DEP regulations. The DEP reviews these reports and inspects the Company's dams. The DEP most recently inspected the Company's dams in 2019.

Since 1980, the DEP has required any new dam to have a spillway that is capable of passing the design flood without overtopping the dam. The design flood is either the Probable Maximum Flood, or PMF, or some fraction of it, depending on the size and location of the dam. PMF is very conservative and is calculated using the most severe combination of meteorological and hydrologic conditions reasonably possible in the watershed area of a dam.

The Company engaged a professional engineer to analyze the spillway capacities at the Lake Williams and Lake Redman dams and validate the DEP's recommended flood design for the dams. Management presented the results of the study to the DEP in December 2004, and DEP then requested that the Company submit a proposed schedule for the actions to address the spillway capacities. Thereafter, the Company retained an engineering firm to prepare preliminary designs for increasing the spillway capacities to pass the PMF through armoring the dams with roller compacted concrete. Management has met with the DEP on a regular basis to review the preliminary design and discuss scheduling, permitting, and construction requirements. Recently, DEP expressed concern regarding the stability of the Lake Williams spillway in light of current design standards. The Company is currently completing the final design and the permitting process to armor and replace the spillway of the Lake Williams dam. The Company expects to finalize its plans in 2021 and begin construction in 2022 at a total cost of approximately $27 million. The Lake Redman dam will be reviewed following the completion of the work on the Lake Williams dam.

Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state public utility commissions as appropriate for inclusion in establishing rates. The capital expenditures currently required as a result of water quality standards and environmental requirements have been budgeted in the Company's capital program and represent less than 15% of its expected total capital expenditures over the next five years. The Company is currently in compliance with wastewater environmental standards and does not anticipate any major capital expenditures for its current wastewater business.

**Growth**

(All dollar amounts are stated in thousands of dollars)

The Company continues to grow its number of customers and distribution facilities.

The growth in the number of customers of the Company is due primarily to the acquisition of water and wastewater systems and organic growth. During the year ended December 31, 2020, the Company increased its number of customers from 71,411 to 72,681. See "Management's Discussion and Analysis – Acquisitions and Growth" for a discussion of the Company's recent acquisitions.

The Company continues to grow its water distribution and wastewater collection systems to provide reliable service to its expanding franchised service territory and the increasing population within that territory. During the year ended December 31, 2020, the Company installed an additional 14,950 feet of water distribution mains and acquired an additional 32,593 feet of wastewater collection mains resulting in 987 miles of water mains and 36 miles of wastewater mains as of December 31, 2020.



The Company's growth in revenues is primarily a result of customer growth and increases in water and wastewater rates. During the year ended December 31, 2020, the Company recognized revenue of $53,852, an increase of $2,274, or 4.4%, as compared to $51,578 during the year ended December 31, 2019. In 2020, operating revenue was derived from the following sources and in the following percentages: residential, 66%; commercial and industrial, 26%; and other, 8%, which is primarily from the provision for fire service but includes other water and wastewater service-related income. See "Management's Discussion and Analysis – Rate Matters" for a discussion of the Company's rate case management.

**THE YORK WATER COMPANY**

**PART I**

**Item 1. Business.**

The York Water Company (the "Company") is the oldest investor-owned water utility in the United States and is duly organized under the laws of the Commonwealth of Pennsylvania. The Company has operated continuously since 1816. The primary business of the Company is to impound, purify to meet or exceed safe drinking water standards and distribute water. The Company also owns and operates two wastewater collection systems and five wastewater collection and treatment systems. The Company operates within its franchised water and wastewater territory, which covers portions of 51 municipalities within three counties in south-central Pennsylvania. The Company is regulated by the Pennsylvania Public Utility Commission, or PPUC, for both water and wastewater in the areas of billing, payment procedures, dispute processing, terminations, service territory, debt and equity financing and rate setting. The Company must obtain PPUC approval before changing any practices associated with the aforementioned areas.

Water service is supplied through the Company's own distribution system. The Company obtains the bulk of its water supply from both the South Branch and East Branch of the Codorus Creek, which together have an average daily flow of 73.0 million gallons. This combined watershed area is approximately 117 square miles. The Company has two reservoirs, Lake Williams and Lake Redman, which together hold up to approximately 2.2 billion gallons of water. The Company supplements its reservoirs with a 15-mile pipeline from the Susquehanna River to Lake Redman which provides access to an additional supply of 12.0 million gallons of untreated water per day. The Company also owns nine wells which are capable of providing a safe yield of approximately 597,000 gallons per day to supply water to the customers of its satellite systems in Adams County. As of December 31, 2020, the Company's average daily availability was 35.6 million gallons, and average daily consumption was approximately 19.9 million gallons. The Company's service territory had an estimated population of 202,000 as of December 31, 2020. Industry within the Company's service territory is diversified, manufacturing such items as fixtures and furniture, electrical machinery, food products, paper, ordnance units, textile products, air conditioning systems, laundry detergent, barbells, and motorcycles.

The Company's water business is somewhat dependent on weather conditions, particularly the amount and timing of rainfall. Revenues are particularly vulnerable to weather conditions in the summer months. Prolonged periods of hot and dry weather generally cause increased water usage for watering lawns, washing cars, and keeping golf courses and sports fields irrigated. Conversely, prolonged periods of dry weather could lead to drought restrictions from governmental authorities. Despite the Company's adequate water supply, customers may be required to cut back water usage under such drought restrictions which would negatively impact revenues. The Company has addressed some of this vulnerability by instituting minimum customer charges which are intended to cover fixed costs of operations under all likely weather conditions.

The Company's business does not require large amounts of working capital and is not dependent on any single customer or a very few customers for a material portion of its business. Increases in revenues are generally dependent on the Company's ability to obtain rate increases from the PPUC in a timely manner and in adequate amounts and to increase volumes of water sold through increased consumption and increases in the number of customers served. The Company continuously looks for water and wastewater acquisition and expansion opportunities both within and outside its current service territory as well as additional opportunities to enter into bulk water contracts with municipalities and other entities to supply water.

The Company has agreements with several municipalities to provide sewer billing and collection services. The Company also has a service line protection program on a targeted basis in order to further diversify its business. Under this optional program, customers pay a fixed monthly fee, and the Company will repair or replace damaged customer service lines, as needed, subject to an annual maximum dollar amount. The Company continues to review and consider opportunities to expand both initiatives.

Table of Contents



**Competition**

As a regulated utility, the Company operates within an exclusive franchised territory that is substantially free from direct competition with other public utilities, municipalities, and other entities. Although the Company has been granted an exclusive franchise for each of its existing community water and wastewater systems, the ability of the Company to expand or acquire new service territories may be affected by currently unknown competitors obtaining franchises to surrounding systems by application or acquisition. These competitors may include other investor-owned utilities, nearby municipally-owned utilities and sometimes competition from strategic or financial purchasers seeking to enter or expand in the water and wastewater industry. The addition of new service territory and the acquisition of other utilities are generally subject to review and approval by the PPUC.

**Water and Wastewater Quality and Environmental Regulations**



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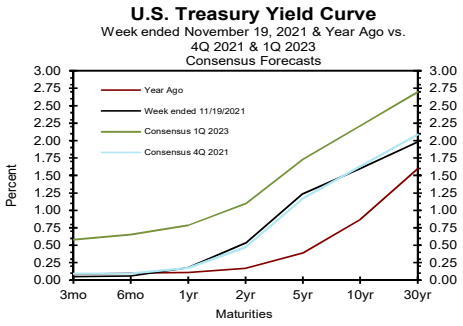
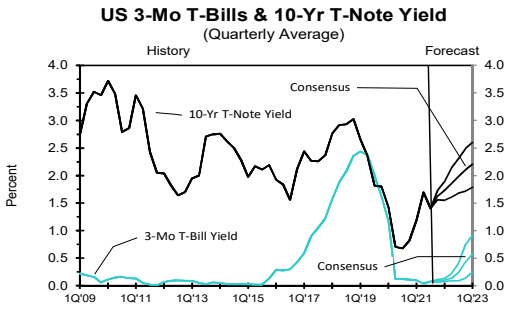
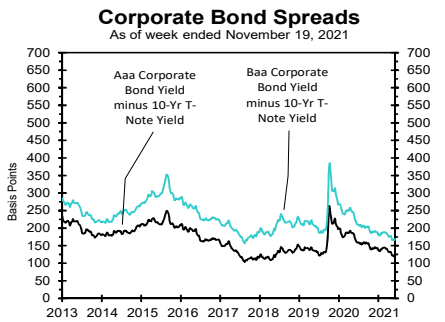
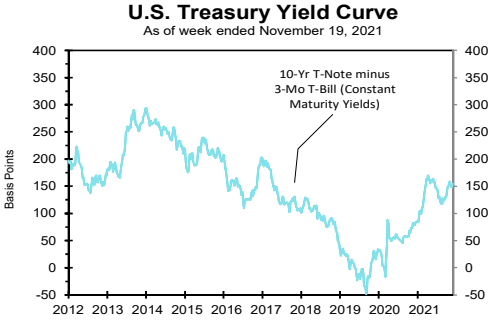
# Consensus Forecast of U.S. Interest Rates and Key Assumptions

| | History | | | | History | | | | Consensus Forecasts-Quarterly Avg. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Average For Week Ending | | | | Average For Month | | | Latest Qtr | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| | Nov 19 | Nov 12 | Nov 5 | Oct 29 | Oct | Sep | Aug | 3Q 2021 | 2021 | 2022 | 2022 | 2022 | 2022 | 2023 |
| Federal Funds Rate | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.6 |
| Prime Rate | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.3 | 3.3 | 3.3 | 3.4 | 3.5 | 3.7 |
| LIBOR, 3-mo. | 0.16 | 0.15 | 0.14 | 0.13 | 0.13 | 0.12 | 0.12 | 0.13 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 |
| Commercial Paper, 1-mo. | 0.06 | 0.05 | 0.07 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.6 |
| Treasury bill, 3-mo. | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.04 | 0.05 | 0.05 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 |
| Treasury bill, 6-mo. | 0.06 | 0.07 | 0.07 | 0.06 | 0.06 | 0.05 | 0.06 | 0.05 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.7 |
| Treasury bill, 1 yr. | 0.18 | 0.16 | 0.15 | 0.14 | 0.11 | 0.08 | 0.07 | 0.08 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 |
| Treasury note, 2 yr. | 0.53 | 0.48 | 0.45 | 0.48 | 0.39 | 0.24 | 0.22 | 0.23 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 |
| Treasury note, 5 yr. | 1.24 | 1.17 | 1.14 | 1.18 | 1.11 | 0.86 | 0.77 | 0.80 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 |
| Treasury note, 10 yr. | 1.60 | 1.53 | 1.54 | 1.59 | 1.58 | 1.37 | 1.28 | 1.32 | 1.6 | 1.7 | 1.9 | 2.0 | 2.1 | 2.2 |
| Treasury bond, 30 yr. | 1.98 | 1.90 | 1.95 | 2.00 | 2.06 | 1.94 | 1.92 | 1.93 | 2.1 | 2.2 | 2.3 | 2.5 | 2.6 | 2.7 |
| Corporate Aaa bond | 2.82 | 2.72 | 2.77 | 2.80 | 2.85 | 2.72 | 2.72 | 2.72 | 2.7 | 2.9 | 3.1 | 3.2 | 3.4 | 3.6 |
| Corporate Baa bond | 3.29 | 3.18 | 3.22 | 3.25 | 3.31 | 3.16 | 3.16 | 3.16 | 3.4 | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 |
| State & Local bonds | 2.56 | 2.56 | 2.60 | 2.61 | 2.59 | 2.67 | 2.64 | 2.64 | 2.4 | 2.6 | 2.7 | 2.9 | 3.0 | 3.1 |
| Home mortgage rate | 3.10 | 2.98 | 3.09 | 3.14 | 3.07 | 2.90 | 2.84 | 2.87 | 3.1 | 3.2 | 3.4 | 3.5 | 3.7 | 3.8 |
| | History | | | | | | | | Consensus Forecasts-Quarterly | | | | | |
| | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| **Key Assumptions** | 2019 | 2020 | 2020 | 2020 | 2020 | 2021 | 2021 | 2021 | 2021 | 2022 | 2022 | 2022 | 2022 | 2023 |
| Fed's AFE Index | 110.5 | 111.4 | 112.4 | 107.3 | 105.2 | 103.4 | 102.9 | 105.0 | 106.5 | 106.9 | 106.8 | 106.6 | 106.3 | 106.1 |
| Real GDP | 1.9 | -5.1 | -31.2 | 33.8 | 4.5 | 6.3 | 6.7 | 2.1 | 5.1 | 4.4 | 3.8 | 3.3 | 2.6 | 2.4 |
| GDP Price Index | 1.5 | 1.6 | -1.5 | 3.6 | 2.2 | 4.3 | 6.1 | 5.9 | 4.6 | 3.4 | 2.8 | 2.7 | 2.5 | 2.5 |
| Consumer Price Index | 2.6 | 1.0 | -3.1 | 4.7 | 2.4 | 3.7 | 8.4 | 6.6 | 5.6 | 3.3 | 2.9 | 2.6 | 2.5 | 2.4 |
| PCE Price Index | 1.7 | 1.3 | -1.6 | 3.7 | 1.5 | 3.8 | 6.5 | 5.3 | 4.5 | 2.9 | 2.5 | 2.5 | 2.3 | 2.3 |

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12/31/2021

INDEX
Month

| Company Name | Enterprise value to Net PPE | Month End 12/31/2021 0 | Month End 11/30/2021 -1 | Month End 10/31/2021 -2 | Month End 9/30/2021 -3 | Month End 8/31/2021 -4 | Month End 7/31/2021 -5 | Month End 6/30/2021 -6 | Month End 5/31/2021 -7 | Month End 4/30/2021 -8 | Month End 3/31/2021 -9 | Month End 2/28/2021 -10 | Month End 1/31/2021 -11 | Month End 12/31/2020 -12 | Month End 11/30/2020 -13 | Month End 10/31/2020 -14 | Month End 9/30/2020 -15 | Month End 8/31/2020 -16 | Month End 7/31/2020 -17 | Month End 6/30/2020 -18 | Month End 5/31/2020 -19 | Month End 4/30/2020 -20 | Month End 3/31/2020 -21 | Month End 2/29/2020 -22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE |
| AMERICAN STATES WATER COMP | 2.742 | 2.569 | 2.489 | 2.366 | 2.567 | 2.454 | 2.247 | 2.249 | 2.229 | 2.144 | 2.165 | 2.259 | 2.314 | 2.207 | 2.228 | 2.235 | 2.299 | 2.313 | 2.357 | 2.434 | 2.349 | 2.407 | 2.372 |
| AMERICAN WATER WORKS COMP | 2.194 | 2.053 | 2.099 | 2.053 | 2.204 | 2.081 | 1.936 | 1.964 | 1.958 | 1.903 | 1.871 | 2.016 | 1.964 | 1.996 | 1.962 | 1.909 | 1.910 | 1.954 | 1.773 | 1.791 | 1.719 | 1.698 | 1.744 |
| ESSENTIAL UTILITIES, INC. | 1.932 | 1.814 | 1.784 | 1.760 | 1.875 | 1.850 | 1.762 | 1.826 | 1.812 | 1.751 | 1.715 | 1.806 | 1.832 | 1.820 | 1.725 | 1.699 | 1.793 | 1.828 | 1.743 | 2.513 | 1.804 | 1.762 | 1.741 |
| ARTESIAN RESOURCES CORPORA | 1.037 | 0.991 | 0.946 | 0.911 | 0.945 | 0.933 | 0.899 | 0.981 | 0.972 | 0.960 | 0.925 | 0.982 | 0.923 | 0.936 | 0.890 | 0.878 | 0.902 | 0.888 | 0.905 | 0.897 | 0.889 | 0.932 | 0.893 |
| CALIFORNIA WATER SERVICE GR | 1.727 | 1.589 | 1.548 | 1.524 | 1.648 | 1.631 | 1.475 | 1.517 | 1.554 | 1.494 | 1.500 | 1.461 | 1.449 | 1.393 | 1.288 | 1.267 | 1.352 | 1.383 | 1.360 | 1.366 | 1.324 | 1.410 | 1.393 |
| MIDDLESEX WATER COMPANY | 2.807 | 2.499 | 2.643 | 2.478 | 2.678 | 2.515 | 2.075 | 2.213 | 2.115 | 2.050 | 1.899 | 2.137 | 1.978 | 1.938 | 1.838 | 1.788 | 1.882 | 1.878 | 1.939 | 2.011 | 1.822 | 1.818 | 1.874 |
| SJW GROUP | 1.503 | 1.461 | 1.443 | 1.427 | 1.492 | 1.487 | 1.407 | 1.446 | 1.460 | 1.443 | 1.429 | 1.451 | 1.491 | 1.471 | 1.399 | 1.401 | 1.431 | 1.420 | 1.416 | 1.450 | 1.393 | 1.370 | 2.195 |
| THE YORK WATER COMPANY | 2.136 | 2.080 | 2.103 | 1.949 | 2.290 | 2.150 | 2.040 | 2.271 | 2.326 | 2.224 | 1.968 | 2.040 | 2.165 | 2.160 | 2.036 | 2.037 | 2.205 | 2.227 | 2.294 | 2.174 | 2.000 | 2.131 | 2.091 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMP | 3.424 | 3.202 | 3.103 | 2.949 | 3.260 | 3.116 | 2.854 | 2.853 | 2.828 | 2.719 | 2.754 | 2.874 | 2.944 | 2.805 | 2.832 | 2.841 | 2.955 | 2.972 | 3.030 | 3.224 | 3.110 | 3.188 | 3.061 |
| AMERICAN WATER WORKS COMP | 2.515 | 2.345 | 2.397 | 2.344 | 2.529 | 2.388 | 2.222 | 2.225 | 2.219 | 2.156 | 2.094 | 2.256 | 2.198 | 2.234 | 2.196 | 2.136 | 2.143 | 2.191 | 1.989 | 2.096 | 2.012 | 1.987 | 2.062 |
| ESSENTIAL UTILITIES, INC. | 1.773 | 1.655 | 1.628 | 1.605 | 1.708 | 1.685 | 1.606 | 1.671 | 1.658 | 1.602 | 1.578 | 1.663 | 1.687 | 1.660 | 1.574 | 1.550 | 1.622 | 1.653 | 1.576 | 2.289 | 1.643 | 1.605 | 1.552 |
| ARTESIAN RESOURCES CORPORA | 1.746 | 1.677 | 1.602 | 1.543 | 1.596 | 1.575 | 1.517 | 1.623 | 1.608 | 1.588 | 1.542 | 1.636 | 1.539 | 1.589 | 1.511 | 1.490 | 1.542 | 1.517 | 1.547 | 1.528 | 1.514 | 1.587 | 1.529 |
| CALIFORNIA WATER SERVICE GR | 2.095 | 1.973 | 1.922 | 1.892 | 2.057 | 2.036 | 1.841 | 1.923 | 1.970 | 1.894 | 1.879 | 1.830 | 1.815 | 1.800 | 1.665 | 1.636 | 1.742 | 1.782 | 1.752 | 1.852 | 1.795 | 1.911 | 1.887 |
| MIDDLESEX WATER COMPANY | 3.507 | 3.159 | 3.342 | 3.132 | 3.429 | 3.220 | 2.657 | 2.829 | 2.704 | 2.621 | 2.364 | 2.660 | 2.462 | 2.366 | 2.244 | 2.183 | 2.287 | 2.282 | 2.356 | 2.463 | 2.232 | 2.226 | 2.249 |
| SJW GROUP | 1.455 | 1.410 | 1.393 | 1.377 | 1.443 | 1.438 | 1.361 | 1.388 | 1.401 | 1.384 | 1.374 | 1.395 | 1.433 | 1.411 | 1.342 | 1.344 | 1.379 | 1.369 | 1.365 | 1.398 | 1.343 | 1.321 | 2.144 |
| THE YORK WATER COMPANY | 2.760 | 2.702 | 2.732 | 2.531 | 2.987 | 2.804 | 2.660 | 2.902 | 2.971 | 2.842 | 2.496 | 2.587 | 2.745 | 2.847 | 2.685 | 2.686 | 2.912 | 2.941 | 3.030 | 2.875 | 2.645 | 2.817 | 2.777 |

12/31/2021

INDEX
Month

| Company Name | Enterprise value to Net PPE | Month End 12/31/2021 0 | Month End 11/30/2021 -1 | Month End 10/31/2021 -2 | Month End 9/30/2021 -3 | Month End 8/31/2021 -4 | Month End 7/31/2021 -5 | Month End 6/30/2021 -6 | Month End 5/31/2021 -7 | Month End 4/30/2021 -8 | Month End 3/31/2021 -9 | Month End 2/28/2021 -10 | Month End 1/31/2021 -11 | Month End 12/31/2020 -12 | Month End 11/30/2020 -13 | Month End 10/31/2020 -14 | Month End 9/30/2020 -15 | Month End 8/31/2020 -16 | Month End 7/31/2020 -17 | Month End 6/30/2020 -18 | Month End 5/31/2020 -19 | Month End 4/30/2020 -20 | Month End 3/31/2020 -21 | Month End 2/29/2020 -22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE | Enterprise value to Net PPE |
| AMERICAN STATES WATER COMP | 1.000 | 0.937 | 0.908 | 0.863 | 0.936 | 0.895 | 0.819 | 0.820 | 0.813 | 0.782 | 0.789 | 0.824 | 0.844 | 0.805 | 0.813 | 0.815 | 0.839 | 0.843 | 0.860 | 0.888 | 0.857 | 0.878 | 0.865 |
| AMERICAN WATER WORKS COMP | 1.000 | 0.936 | 0.956 | 0.935 | 1.004 | 0.949 | 0.883 | 0.895 | 0.893 | 0.867 | 0.853 | 0.919 | 0.895 | 0.910 | 0.894 | 0.870 | 0.871 | 0.890 | 0.808 | 0.816 | 0.783 | 0.774 | 0.795 |
| ESSENTIAL UTILITIES, INC. | 1.000 | 0.939 | 0.924 | 0.911 | 0.971 | 0.958 | 0.912 | 0.945 | 0.938 | 0.907 | 0.888 | 0.935 | 0.949 | 0.942 | 0.893 | 0.880 | 0.928 | 0.946 | 0.902 | 1.301 | 0.934 | 0.912 | 0.901 |
| ARTESIAN RESOURCES CORPORA | 1.000 | 0.955 | 0.912 | 0.879 | 0.911 | 0.900 | 0.866 | 0.946 | 0.937 | 0.926 | 0.892 | 0.946 | 0.890 | 0.902 | 0.858 | 0.846 | 0.870 | 0.856 | 0.873 | 0.865 | 0.857 | 0.898 | 0.861 |
| CALIFORNIA WATER SERVICE GR | 1.000 | 0.920 | 0.896 | 0.882 | 0.954 | 0.944 | 0.854 | 0.878 | 0.900 | 0.865 | 0.868 | 0.846 | 0.839 | 0.806 | 0.746 | 0.733 | 0.783 | 0.801 | 0.787 | 0.791 | 0.767 | 0.816 | 0.806 |
| MIDDLESEX WATER COMPANY | 1.000 | 0.890 | 0.942 | 0.883 | 0.954 | 0.896 | 0.739 | 0.788 | 0.754 | 0.730 | 0.677 | 0.761 | 0.705 | 0.691 | 0.655 | 0.637 | 0.671 | 0.669 | 0.691 | 0.716 | 0.649 | 0.648 | 0.668 |
| SJW GROUP | 1.000 | 0.972 | 0.960 | 0.949 | 0.993 | 0.989 | 0.936 | 0.962 | 0.972 | 0.960 | 0.951 | 0.966 | 0.992 | 0.979 | 0.931 | 0.932 | 0.952 | 0.945 | 0.942 | 0.965 | 0.927 | 0.912 | 1.460 |
| THE YORK WATER COMPANY | 1.000 | 0.974 | 0.984 | 0.912 | 1.072 | 1.006 | 0.955 | 1.063 | 1.089 | 1.041 | 0.921 | 0.955 | 1.013 | 1.011 | 0.953 | 0.954 | 1.032 | 1.042 | 1.074 | 1.018 | 0.936 | 0.997 | 0.979 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMP | 1.000 | 0.935 | 0.906 | 0.861 | 0.952 | 0.910 | 0.833 | 0.833 | 0.826 | 0.794 | 0.804 | 0.839 | 0.860 | 0.819 | 0.827 | 0.830 | 0.863 | 0.868 | 0.885 | 0.941 | 0.908 | 0.931 | 0.894 |
| AMERICAN WATER WORKS COMP | 1.000 | 0.932 | 0.953 | 0.932 | 1.005 | 0.950 | 0.883 | 0.885 | 0.882 | 0.857 | 0.832 | 0.897 | 0.874 | 0.888 | 0.873 | 0.849 | 0.852 | 0.871 | 0.791 | 0.833 | 0.800 | 0.790 | 0.820 |
| ESSENTIAL UTILITIES, INC. | 1.000 | 0.934 | 0.918 | 0.905 | 0.964 | 0.951 | 0.906 | 0.942 | 0.935 | 0.904 | 0.890 | 0.938 | 0.951 | 0.936 | 0.888 | 0.874 | 0.915 | 0.932 | 0.889 | 1.291 | 0.927 | 0.905 | 0.875 |
| ARTESIAN RESOURCES CORPORA | 1.000 | 0.961 | 0.917 | 0.884 | 0.914 | 0.902 | 0.869 | 0.930 | 0.921 | 0.910 | 0.883 | 0.937 | 0.881 | 0.910 | 0.865 | 0.853 | 0.883 | 0.869 | 0.886 | 0.875 | 0.867 | 0.909 | 0.876 |
| CALIFORNIA WATER SERVICE GR | 1.000 | 0.942 | 0.917 | 0.903 | 0.982 | 0.972 | 0.879 | 0.918 | 0.940 | 0.904 | 0.897 | 0.874 | 0.867 | 0.859 | 0.795 | 0.781 | 0.832 | 0.851 | 0.836 | 0.884 | 0.857 | 0.912 | 0.901 |
| MIDDLESEX WATER COMPANY | 1.000 | 0.901 | 0.953 | 0.893 | 0.978 | 0.918 | 0.758 | 0.807 | 0.771 | 0.747 | 0.674 | 0.759 | 0.702 | 0.675 | 0.640 | 0.623 | 0.652 | 0.651 | 0.672 | 0.702 | 0.636 | 0.635 | 0.641 |
| SJW GROUP | 1.000 | 0.969 | 0.958 | 0.947 | 0.992 | 0.989 | 0.936 | 0.954 | 0.963 | 0.952 | 0.945 | 0.959 | 0.985 | 0.970 | 0.922 | 0.924 | 0.948 | 0.941 | 0.938 | 0.961 | 0.923 | 0.908 | 1.474 |
| THE YORK WATER COMPANY | 1.000 | 0.979 | 0.990 | 0.917 | 1.082 | 1.016 | 0.964 | 1.051 | 1.077 | 1.030 | 0.904 | 0.937 | 0.995 | 1.032 | 0.973 | 0.973 | 1.055 | 1.066 | 1.098 | 1.042 | 0.958 | 1.021 | 1.006 |

| 12/31/2021 | Month End 12/31/2021 | Month End 11/30/2021 | Month End 10/31/2021 | Month End 9/30/2021 | Month End 8/31/2021 | Month End 7/31/2021 | Month End 6/30/2021 | Month End 5/31/2021 | Month End 4/30/2021 | Month End 3/31/2021 | Month End 2/28/2021 | Month End 1/31/2021 | Month End 12/31/2020 | Month End 11/30/2020 | Month End 10/31/2020 | Month End 9/30/2020 | Month End 8/31/2020 | Month End 7/31/2020 | Month End 6/30/2020 | Month End 5/31/2020 | Month End 4/30/2020 | Month End 3/31/2020 | Month End 2/29/2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enterprise value to Net PPE | 100% | 94% | 93% | 90% | 96% | 95% | 87% | 92% | 92% | 89% | 88% | 93% | 89% | 91% | 88% | 86% | 87% | 87% | 87% | 88% | 86% | 89% | 86% |
| Enterprise value to Inv Cap | 100% | 94% | 94% | 90% | 98% | 95% | 88% | 92% | 93% | 90% | 89% | 92% | 88% | 90% | 87% | 85% | 87% | 87% | 89% | 91% | 89% | 91% | 88% |

12/31/2021

| Company Name | Month End 1/31/2020 -23 Enterprise value to Net PPE | Month End 12/31/2019 -24 Enterprise value to Net PPE | Month End 11/30/2019 -25 Enterprise value to Net PPE | Month End 10/31/2019 -26 Enterprise value to Net PPE | Month End 9/30/2019 -27 Enterprise value to Net PPE | Month End 8/31/2019 -28 Enterprise value to Net PPE | Month End 7/31/2019 -29 Enterprise value to Net PPE | Month End 6/30/2019 -30 Enterprise value to Net PPE | Month End 5/31/2019 -31 Enterprise value to Net PPE | Month End 4/30/2019 -32 Enterprise value to Net PPE | Month End 3/31/2019 -33 Enterprise value to Net PPE | Month End 2/28/2019 -34 Enterprise value to Net PPE | Month End 1/31/2019 -35 Enterprise value to Net PPE | Month End 12/31/2018 -36 Enterprise value to Net PPE | Month End 11/30/2018 -37 Enterprise value to Net PPE | Month End 10/31/2018 -38 Enterprise value to Net PPE | Month End 9/30/2018 -39 Enterprise value to Net PPE | Month End 8/31/2018 -40 Enterprise value to Net PPE | Month End 7/31/2018 -41 Enterprise value to Net PPE | Month End 6/30/2018 -42 Enterprise value to Net PPE | Month End 5/31/2018 -43 Enterprise value to Net PPE | Month End 4/30/2018 -44 Enterprise value to Net PPE | Month End 3/31/2018 -45 Enterprise value to Net PPE | Month End 2/28/2018 -46 Enterprise value to Net PPE | Month End 1/31/2018 -47 Enterprise value to Net PPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 2.672 | 2.622 | 2.632 | 2.894 | 2.753 | 2.898 | 2.453 | 2.391 | 2.392 | 2.321 | 2.324 | 2.379 | 2.263 | 2.244 | 2.288 | 2.117 | 2.115 | 2.128 | 2.112 | 2.024 | 2.021 | 2.000 | 1.919 | 1.958 | 2.005 |
| AMERICAN WATER WORKS COMP | 1.849 | 1.717 | 1.732 | 1.755 | 1.762 | 1.810 | 1.682 | 1.683 | 1.684 | 1.610 | 1.569 | 1.574 | 1.500 | 1.448 | 1.522 | 1.448 | 1.441 | 1.462 | 1.436 | 1.405 | 1.400 | 1.433 | 1.372 | 1.393 | 1.416 |
| ESSENTIAL UTILITIES, INC. | 1.978 | 1.804 | 1.735 | 1.766 | 1.748 | 1.756 | 1.958 | 1.937 | 1.904 | 1.863 | 1.538 | 1.572 | 1.505 | 1.479 | 1.535 | 1.453 | 1.593 | 1.626 | 1.606 | 1.549 | 1.550 | 1.555 | 1.519 | 1.558 | 1.609 |
| ARTESIAN RESOURCES CORPORA | 0.954 | 0.943 | 0.953 | 0.941 | 0.941 | 0.944 | 0.921 | 0.939 | 0.928 | 0.931 | 0.954 | 0.999 | 0.927 | 0.919 | 0.963 | 0.961 | 0.966 | 0.972 | 0.980 | 1.014 | 1.035 | 1.009 | 0.973 | 0.926 | 1.009 |
| CALIFORNIA WATER SERVICE GR | 1.468 | 1.448 | 1.470 | 1.565 | 1.505 | 1.607 | 1.524 | 1.465 | 1.470 | 1.495 | 1.550 | 1.525 | 1.468 | 1.427 | 1.420 | 1.328 | 1.349 | 1.339 | 1.338 | 1.265 | 1.324 | 1.289 | 1.228 | 1.284 | 1.351 |
| MIDDLESEX WATER COMPANY | 2.070 | 2.028 | 2.078 | 2.013 | 1.957 | 1.934 | 1.975 | 1.852 | 1.900 | 1.848 | 1.794 | 1.907 | 1.835 | 1.759 | 1.772 | 1.569 | 1.664 | 1.636 | 1.567 | 1.507 | 1.592 | 1.505 | 1.361 | 1.345 | 1.410 |
| SJW GROUP | 1.557 | 1.512 | 1.531 | 1.561 | 1.476 | 1.506 | 1.435 | 1.335 | 1.373 | 1.382 | 1.366 | 1.373 | 1.630 | 1.539 | 1.534 | 1.321 | 1.318 | 1.290 | 1.396 | 1.406 | 1.380 | 1.336 | 1.200 | 1.208 | 1.309 |
| THE YORK WATER COMPANY | 2.302 | 2.250 | 2.221 | 2.191 | 2.175 | 1.931 | 1.862 | 1.852 | 1.810 | 1.790 | 1.802 | 1.900 | 1.745 | 1.709 | 1.773 | 1.687 | 1.655 | 1.657 | 1.688 | 1.724 | 1.776 | 1.755 | 1.702 | 1.573 | 1.731 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 3.448 | 3.382 | 3.426 | 3.766 | 3.582 | 3.881 | 3.285 | 3.203 | 3.201 | 3.106 | 3.109 | 3.200 | 3.044 | 3.017 | 3.044 | 2.818 | 2.814 | 2.834 | 2.812 | 2.695 | 2.693 | 2.666 | 2.558 | 2.609 | 2.672 |
| AMERICAN WATER WORKS COMP | 2.187 | 2.030 | 2.041 | 2.067 | 2.075 | 2.153 | 2.000 | 2.002 | 2.024 | 1.934 | 1.885 | 1.883 | 1.794 | 1.732 | 1.811 | 1.722 | 1.714 | 1.790 | 1.758 | 1.720 | 1.735 | 1.776 | 1.700 | 1.681 | 1.710 |
| ESSENTIAL UTILITIES, INC. | 1.763 | 1.608 | 1.555 | 1.582 | 1.567 | 2.227 | 2.483 | 2.456 | 2.435 | 2.383 | 1.968 | 2.026 | 1.940 | 1.905 | 1.969 | 1.864 | 2.043 | 2.128 | 2.102 | 2.027 | 2.039 | 2.045 | 1.998 | 2.057 | 2.124 |
| ARTESIAN RESOURCES CORPORA | 1.633 | 1.615 | 1.651 | 1.629 | 1.630 | 1.648 | 1.608 | 1.639 | 1.626 | 1.631 | 1.671 | 1.757 | 1.630 | 1.615 | 1.691 | 1.688 | 1.696 | 1.696 | 1.711 | 1.770 | 1.824 | 1.778 | 1.714 | 1.613 | 1.757 |
| CALIFORNIA WATER SERVICE GR | 1.989 | 1.962 | 1.985 | 2.113 | 2.032 | 2.190 | 2.076 | 1.996 | 2.027 | 2.062 | 2.138 | 2.075 | 1.997 | 1.942 | 1.977 | 1.849 | 1.877 | 1.887 | 1.885 | 1.782 | 1.791 | 1.743 | 1.660 | 1.769 | 1.861 |
| MIDDLESEX WATER COMPANY | 2.484 | 2.433 | 2.773 | 2.686 | 2.611 | 2.607 | 2.662 | 2.497 | 2.596 | 2.525 | 2.451 | 2.612 | 2.514 | 2.409 | 2.450 | 2.169 | 2.300 | 2.305 | 2.208 | 2.123 | 2.224 | 2.103 | 1.903 | 1.882 | 1.974 |
| SJW GROUP | 1.521 | 1.477 | 1.482 | 1.511 | 1.429 | 1.459 | 1.390 | 1.293 | 1.320 | 1.329 | 1.313 | 1.883 | 2.236 | 2.111 | 2.123 | 1.828 | 1.824 | 1.806 | 1.956 | 1.969 | 1.918 | 1.857 | 1.668 | 1.714 | 1.857 |
| THE YORK WATER COMPANY | 3.057 | 2.988 | 2.986 | 2.945 | 2.923 | 2.610 | 2.518 | 2.503 | 2.441 | 2.414 | 2.431 | 2.598 | 2.387 | 2.337 | 2.413 | 2.296 | 2.252 | 2.272 | 2.315 | 2.364 | 2.417 | 2.388 | 2.316 | 2.162 | 2.380 |



12/31/2021

| Company Name | Month End 1/31/2020 -23 Enterprise value to Net PPE | Month End 12/31/2019 -24 Enterprise value to Net PPE | Month End 11/30/2019 -25 Enterprise value to Net PPE | Month End 10/31/2019 -26 Enterprise value to Net PPE | Month End 9/30/2019 -27 Enterprise value to Net PPE | Month End 8/31/2019 -28 Enterprise value to Net PPE | Month End 7/31/2019 -29 Enterprise value to Net PPE | Month End 6/30/2019 -30 Enterprise value to Net PPE | Month End 5/31/2019 -31 Enterprise value to Net PPE | Month End 4/30/2019 -32 Enterprise value to Net PPE | Month End 3/31/2019 -33 Enterprise value to Net PPE | Month End 2/28/2019 -34 Enterprise value to Net PPE | Month End 1/31/2019 -35 Enterprise value to Net PPE | Month End 12/31/2018 -36 Enterprise value to Net PPE | Month End 11/30/2018 -37 Enterprise value to Net PPE | Month End 10/31/2018 -38 Enterprise value to Net PPE | Month End 9/30/2018 -39 Enterprise value to Net PPE | Month End 8/31/2018 -40 Enterprise value to Net PPE | Month End 7/31/2018 -41 Enterprise value to Net PPE | Month End 6/30/2018 -42 Enterprise value to Net PPE | Month End 5/31/2018 -43 Enterprise value to Net PPE | Month End 4/30/2018 -44 Enterprise value to Net PPE | Month End 3/31/2018 -45 Enterprise value to Net PPE | Month End 2/28/2018 -46 Enterprise value to Net PPE | Month End 1/31/2018 -47 Enterprise value to Net PPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 0.974 | 0.956 | 0.960 | 1.055 | 1.004 | 1.057 | 0.894 | 0.872 | 0.873 | 0.847 | 0.847 | 0.868 | 0.825 | 0.818 | 0.834 | 0.772 | 0.771 | 0.776 | 0.770 | 0.738 | 0.737 | 0.730 | 0.700 | 0.714 | 0.731 |
| AMERICAN WATER WORKS COMP | 0.843 | 0.783 | 0.790 | 0.800 | 0.803 | 0.825 | 0.766 | 0.767 | 0.768 | 0.734 | 0.715 | 0.717 | 0.684 | 0.660 | 0.694 | 0.660 | 0.657 | 0.666 | 0.654 | 0.640 | 0.638 | 0.653 | 0.625 | 0.635 | 0.646 |
| ESSENTIAL UTILITIES, INC. | 1.024 | 0.934 | 0.898 | 0.914 | 0.905 | 0.909 | 1.013 | 1.003 | 0.986 | 0.965 | 0.796 | 0.814 | 0.779 | 0.766 | 0.795 | 0.752 | 0.825 | 0.842 | 0.831 | 0.802 | 0.802 | 0.805 | 0.786 | 0.806 | 0.833 |
| ARTESIAN RESOURCES CORPORA | 0.919 | 0.909 | 0.919 | 0.907 | 0.908 | 0.910 | 0.888 | 0.905 | 0.895 | 0.898 | 0.920 | 0.963 | 0.894 | 0.886 | 0.929 | 0.927 | 0.931 | 0.937 | 0.945 | 0.978 | 0.998 | 0.972 | 0.938 | 0.893 | 0.973 |
| CALIFORNIA WATER SERVICE GR | 0.850 | 0.838 | 0.851 | 0.906 | 0.871 | 0.931 | 0.882 | 0.848 | 0.851 | 0.866 | 0.897 | 0.883 | 0.850 | 0.826 | 0.822 | 0.769 | 0.781 | 0.775 | 0.775 | 0.732 | 0.767 | 0.746 | 0.711 | 0.743 | 0.782 |
| MIDDLESEX WATER COMPANY | 0.738 | 0.722 | 0.741 | 0.717 | 0.697 | 0.689 | 0.704 | 0.660 | 0.677 | 0.658 | 0.639 | 0.680 | 0.654 | 0.627 | 0.632 | 0.559 | 0.593 | 0.583 | 0.558 | 0.537 | 0.567 | 0.536 | 0.485 | 0.479 | 0.502 |
| SJW GROUP | 1.036 | 1.006 | 1.019 | 1.039 | 0.982 | 1.002 | 0.955 | 0.888 | 0.914 | 0.920 | 0.909 | 0.913 | 1.084 | 1.024 | 1.020 | 0.879 | 0.877 | 0.858 | 0.929 | 0.935 | 0.918 | 0.889 | 0.798 | 0.804 | 0.871 |
| THE YORK WATER COMPANY | 1.078 | 1.053 | 1.040 | 1.025 | 1.018 | 0.904 | 0.872 | 0.867 | 0.847 | 0.838 | 0.844 | 0.889 | 0.817 | 0.800 | 0.830 | 0.790 | 0.775 | 0.776 | 0.790 | 0.807 | 0.831 | 0.822 | 0.797 | 0.736 | 0.810 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 1.007 | 0.988 | 1.000 | 1.100 | 1.046 | 1.133 | 0.959 | 0.935 | 0.935 | 0.907 | 0.908 | 0.934 | 0.889 | 0.881 | 0.889 | 0.823 | 0.822 | 0.828 | 0.821 | 0.787 | 0.786 | 0.779 | 0.747 | 0.762 | 0.780 |
| AMERICAN WATER WORKS COMP | 0.869 | 0.807 | 0.811 | 0.822 | 0.825 | 0.856 | 0.795 | 0.796 | 0.805 | 0.769 | 0.749 | 0.749 | 0.713 | 0.689 | 0.720 | 0.685 | 0.681 | 0.712 | 0.699 | 0.684 | 0.690 | 0.706 | 0.676 | 0.668 | 0.680 |
| ESSENTIAL UTILITIES, INC. | 0.994 | 0.907 | 0.877 | 0.893 | 0.884 | 1.256 | 1.400 | 1.385 | 1.373 | 1.344 | 1.110 | 1.143 | 1.094 | 1.075 | 1.111 | 1.051 | 1.153 | 1.200 | 1.185 | 1.143 | 1.150 | 1.154 | 1.127 | 1.160 | 1.198 |
| ARTESIAN RESOURCES CORPORA | 0.935 | 0.925 | 0.945 | 0.933 | 0.934 | 0.944 | 0.921 | 0.939 | 0.931 | 0.934 | 0.957 | 1.006 | 0.933 | 0.925 | 0.969 | 0.966 | 0.971 | 0.971 | 0.980 | 1.014 | 1.045 | 1.018 | 0.982 | 0.924 | 1.006 |
| CALIFORNIA WATER SERVICE GR | 0.950 | 0.936 | 0.948 | 1.009 | 0.970 | 1.045 | 0.991 | 0.953 | 0.968 | 0.984 | 1.020 | 0.991 | 0.953 | 0.927 | 0.944 | 0.883 | 0.896 | 0.901 | 0.900 | 0.851 | 0.855 | 0.832 | 0.793 | 0.844 | 0.888 |
| MIDDLESEX WATER COMPANY | 0.708 | 0.694 | 0.791 | 0.766 | 0.745 | 0.743 | 0.759 | 0.712 | 0.740 | 0.720 | 0.699 | 0.745 | 0.717 | 0.687 | 0.699 | 0.618 | 0.656 | 0.657 | 0.630 | 0.605 | 0.634 | 0.600 | 0.543 | 0.537 | 0.563 |
| SJW GROUP | 1.046 | 1.015 | 1.019 | 1.039 | 0.982 | 1.003 | 0.956 | 0.889 | 0.907 | 0.913 | 0.903 | 1.294 | 1.537 | 1.451 | 1.459 | 1.257 | 1.254 | 1.241 | 1.344 | 1.353 | 1.318 | 1.277 | 1.146 | 1.178 | 1.276 |
| THE YORK WATER COMPANY | 1.108 | 1.083 | 1.082 | 1.067 | 1.059 | 0.946 | 0.912 | 0.907 | 0.885 | 0.875 | 0.881 | 0.941 | 0.865 | 0.847 | 0.874 | 0.832 | 0.816 | 0.823 | 0.839 | 0.856 | 0.876 | 0.865 | 0.839 | 0.783 | 0.862 |



| 12/31/2021 | Month End 1/31/2020 | Month End 12/31/2019 | Month End 11/30/2019 | Month End 10/31/2019 | Month End 9/30/2019 | Month End 8/31/2019 | Month End 7/31/2019 | Month End 6/30/2019 | Month End 5/31/2019 | Month End 4/30/2019 | Month End 3/31/2019 | Month End 2/28/2019 | Month End 1/31/2019 | Month End 12/31/2018 | Month End 11/30/2018 | Month End 10/31/2018 | Month End 9/30/2018 | Month End 8/31/2018 | Month End 7/31/2018 | Month End 6/30/2018 | Month End 5/31/2018 | Month End 4/30/2018 | Month End 3/31/2018 | Month End 2/28/2018 | Month End 1/31/2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enterprise value to Net PPE | 95% | 92% | 91% | 91% | 91% | 91% | 89% | 87% | 86% | 86% | 85% | 88% | 82% | 81% | 83% | 77% | 78% | 78% | 78% | 77% | 78% | 78% | 75% | 74% | 80% |
| Enterprise value to Inv Cap | 97% | 93% | 95% | 97% | 95% | 97% | 94% | 92% | 92% | 91% | 91% | 97% | 91% | 90% | 92% | 86% | 86% | 86% | 87% | 85% | 87% | 85% | 82% | 81% | 88% |

**12/31/2021**

| Company Name | Month End 12/31/2017 -48 Enterprise value to Net PPE | Month End 11/30/2017 -49 Enterprise value to Net PPE | Month End 10/31/2017 -50 Enterprise value to Net PPE | Month End 9/30/2017 -51 Enterprise value to Net PPE | Month End 8/31/2017 -52 Enterprise value to Net PPE | Month End 7/31/2017 -53 Enterprise value to Net PPE | Month End 6/30/2017 -54 Enterprise value to Net PPE | Month End 5/31/2017 -55 Enterprise value to Net PPE | Month End 4/30/2017 -56 Enterprise value to Net PPE | Month End 3/31/2017 -57 Enterprise value to Net PPE | Month End 2/28/2017 -58 Enterprise value to Net PPE | Month End 1/31/2017 -59 Enterprise value to Net PPE | Month End 12/31/2016 -60 Enterprise value to Net PPE | Month End 11/30/2016 -61 Enterprise value to Net PPE | Month End 10/31/2016 -62 Enterprise value to Net PPE | Month End 9/30/2016 -63 Enterprise value to Net PPE | Month End 8/31/2016 -64 Enterprise value to Net PPE | Month End 7/31/2016 -65 Enterprise value to Net PPE | Month End 6/30/2016 -66 Enterprise value to Net PPE | Month End 5/31/2016 -67 Enterprise value to Net PPE | Month End 4/30/2016 -68 Enterprise value to Net PPE | Month End 3/31/2016 -69 Enterprise value to Net PPE | Month End 2/29/2016 -70 Enterprise value to Net PPE | Month End 1/31/2016 -71 Enterprise value to Net PPE | Month End 12/31/2015 -72 Enterprise value to Net PPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 2.088 | 2.128 | 2.004 | 1.863 | 1.894 | 1.944 | 1.879 | 1.805 | 1.760 | 1.752 | 1.800 | 1.756 | 1.813 | 1.744 | 1.651 | 1.653 | 1.659 | 1.778 | 1.799 | 1.667 | 1.751 | 1.671 | 1.824 | 1.904 | 1.782 |
| AMERICAN WATER WORKS COMP | 1.511 | 1.540 | 1.497 | 1.418 | 1.442 | 1.433 | 1.396 | 1.411 | 1.419 | 1.396 | 1.443 | 1.367 | 1.354 | 1.378 | 1.397 | 1.407 | 1.418 | 1.516 | 1.540 | 1.425 | 1.397 | 1.348 | 1.327 | 1.318 | 1.250 |
| ESSENTIAL UTILITIES, INC. | 1.710 | 1.707 | 1.621 | 1.536 | 1.574 | 1.556 | 1.553 | 1.549 | 1.553 | 1.519 | 1.535 | 1.479 | 1.465 | 1.478 | 1.509 | 1.501 | 1.521 | 1.670 | 1.708 | 1.605 | 1.579 | 1.585 | 1.564 | 1.588 | 1.522 |
| ARTESIAN RESOURCES CORPORA | 1.036 | 1.138 | 1.102 | 1.040 | 1.044 | 1.072 | 1.053 | 1.009 | 1.070 | 0.943 | 0.957 | 0.919 | 0.941 | 0.942 | 0.879 | 0.885 | 0.877 | 1.017 | 1.016 | 0.898 | 0.882 | 0.901 | 0.916 | 0.957 | 0.894 |
| CALIFORNIA WATER SERVICE GR | 1.463 | 1.510 | 1.420 | 1.322 | 1.332 | 1.369 | 1.294 | 1.267 | 1.294 | 1.271 | 1.316 | 1.239 | 1.223 | 1.263 | 1.168 | 1.202 | 1.189 | 1.279 | 1.289 | 1.164 | 1.129 | 1.079 | 1.038 | 1.028 | 0.976 |
| MIDDLESEX WATER COMPANY | 1.476 | 1.697 | 1.601 | 1.474 | 1.459 | 1.486 | 1.497 | 1.384 | 1.467 | 1.430 | 1.481 | 1.486 | 1.648 | 1.610 | 1.454 | 1.426 | 1.396 | 1.632 | 1.700 | 1.503 | 1.503 | 1.313 | 1.254 | 1.287 | 1.205 |
| SJW GROUP | 1.373 | 1.480 | 1.334 | 1.276 | 1.288 | 1.243 | 1.184 | 1.195 | 1.209 | 1.211 | 1.221 | 1.230 | 1.332 | 1.329 | 1.276 | 1.147 | 1.146 | 1.139 | 1.078 | 1.031 | 1.029 | 1.068 | 1.073 | 0.989 | 0.933 |
| THE YORK WATER COMPANY | 1.832 | 2.006 | 1.910 | 1.852 | 1.859 | 1.932 | 1.934 | 1.883 | 2.079 | 1.963 | 2.043 | 2.034 | 2.149 | 2.076 | 1.850 | 1.757 | 1.702 | 1.859 | 1.888 | 1.645 | 1.782 | 1.825 | 1.703 | 1.649 | 1.564 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 2.782 | 2.820 | 2.656 | 2.468 | 2.371 | 2.434 | 2.352 | 2.312 | 2.254 | 2.243 | 2.303 | 2.246 | 2.319 | 2.259 | 2.138 | 2.141 | 2.171 | 2.327 | 2.354 | 2.188 | 2.298 | 2.192 | 2.341 | 2.443 | 2.287 |
| AMERICAN WATER WORKS COMP | 1.824 | 1.846 | 1.794 | 1.699 | 1.732 | 1.721 | 1.677 | 1.706 | 1.716 | 1.688 | 1.733 | 1.642 | 1.626 | 1.639 | 1.662 | 1.674 | 1.689 | 1.805 | 1.834 | 1.711 | 1.677 | 1.618 | 1.566 | 1.556 | 1.476 |
| ESSENTIAL UTILITIES, INC. | 2.258 | 2.240 | 2.127 | 2.016 | 2.088 | 2.064 | 2.061 | 2.061 | 2.067 | 2.023 | 2.039 | 1.964 | 1.946 | 1.963 | 2.005 | 1.994 | 2.029 | 2.229 | 2.279 | 2.151 | 2.116 | 2.124 | 2.067 | 2.099 | 2.011 |
| ARTESIAN RESOURCES CORPORA | 1.805 | 1.961 | 1.899 | 1.792 | 1.794 | 1.842 | 1.809 | 1.734 | 1.838 | 1.620 | 1.657 | 1.592 | 1.630 | 1.603 | 1.496 | 1.507 | 1.468 | 1.703 | 1.700 | 1.482 | 1.455 | 1.487 | 1.506 | 1.574 | 1.470 |
| CALIFORNIA WATER SERVICE GR | 2.016 | 2.068 | 1.946 | 1.810 | 1.878 | 1.930 | 1.824 | 1.780 | 1.818 | 1.787 | 1.882 | 1.772 | 1.750 | 1.770 | 1.636 | 1.684 | 1.680 | 1.806 | 1.822 | 1.652 | 1.603 | 1.532 | 1.439 | 1.424 | 1.352 |
| MIDDLESEX WATER COMPANY | 2.066 | 2.395 | 2.260 | 2.081 | 2.054 | 2.093 | 2.108 | 1.953 | 2.069 | 2.017 | 2.060 | 2.067 | 2.292 | 2.252 | 2.034 | 1.996 | 1.975 | 2.309 | 2.405 | 2.104 | 2.104 | 1.838 | 1.668 | 1.711 | 1.603 |
| SJW GROUP | 1.948 | 2.116 | 1.907 | 1.825 | 1.825 | 1.761 | 1.678 | 1.623 | 1.642 | 1.645 | 1.686 | 1.700 | 1.841 | 1.836 | 1.764 | 1.585 | 1.606 | 1.597 | 1.512 | 1.397 | 1.394 | 1.447 | 1.486 | 1.370 | 1.292 |
| THE YORK WATER COMPANY | 2.518 | 2.771 | 2.638 | 2.557 | 2.551 | 2.652 | 2.655 | 2.545 | 2.810 | 2.654 | 2.701 | 2.688 | 2.841 | 2.748 | 2.449 | 2.325 | 2.260 | 2.468 | 2.507 | 2.198 | 2.382 | 2.439 | 2.254 | 2.182 | 2.070 |

**12/31/2021**

| Company Name | Month End 12/31/2017 -48 Enterprise value to Net PPE | Month End 11/30/2017 -49 Enterprise value to Net PPE | Month End 10/31/2017 -50 Enterprise value to Net PPE | Month End 9/30/2017 -51 Enterprise value to Net PPE | Month End 8/31/2017 -52 Enterprise value to Net PPE | Month End 7/31/2017 -53 Enterprise value to Net PPE | Month End 6/30/2017 -54 Enterprise value to Net PPE | Month End 5/31/2017 -55 Enterprise value to Net PPE | Month End 4/30/2017 -56 Enterprise value to Net PPE | Month End 3/31/2017 -57 Enterprise value to Net PPE | Month End 2/28/2017 -58 Enterprise value to Net PPE | Month End 1/31/2017 -59 Enterprise value to Net PPE | Month End 12/31/2016 -60 Enterprise value to Net PPE | Month End 11/30/2016 -61 Enterprise value to Net PPE | Month End 10/31/2016 -62 Enterprise value to Net PPE | Month End 9/30/2016 -63 Enterprise value to Net PPE | Month End 8/31/2016 -64 Enterprise value to Net PPE | Month End 7/31/2016 -65 Enterprise value to Net PPE | Month End 6/30/2016 -66 Enterprise value to Net PPE | Month End 5/31/2016 -67 Enterprise value to Net PPE | Month End 4/30/2016 -68 Enterprise value to Net PPE | Month End 3/31/2016 -69 Enterprise value to Net PPE | Month End 2/29/2016 -70 Enterprise value to Net PPE | Month End 1/31/2016 -71 Enterprise value to Net PPE | Month End 12/31/2015 -72 Enterprise value to Net PPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 0.761 | 0.776 | 0.731 | 0.679 | 0.691 | 0.709 | 0.685 | 0.658 | 0.642 | 0.639 | 0.657 | 0.640 | 0.661 | 0.636 | 0.602 | 0.603 | 0.605 | 0.649 | 0.656 | 0.608 | 0.639 | 0.609 | 0.665 | 0.694 | 0.650 |
| AMERICAN WATER WORKS COMP | 0.689 | 0.702 | 0.682 | 0.646 | 0.657 | 0.653 | 0.636 | 0.643 | 0.647 | 0.636 | 0.658 | 0.623 | 0.617 | 0.628 | 0.637 | 0.641 | 0.646 | 0.691 | 0.702 | 0.650 | 0.636 | 0.614 | 0.605 | 0.601 | 0.570 |
| ESSENTIAL UTILITIES, INC. | 0.885 | 0.884 | 0.839 | 0.795 | 0.815 | 0.805 | 0.804 | 0.802 | 0.804 | 0.787 | 0.795 | 0.766 | 0.759 | 0.765 | 0.781 | 0.777 | 0.787 | 0.865 | 0.884 | 0.831 | 0.817 | 0.821 | 0.810 | 0.822 | 0.788 |
| ARTESIAN RESOURCES CORPORA | 0.999 | 1.097 | 1.062 | 1.002 | 1.007 | 1.034 | 1.015 | 0.973 | 1.031 | 0.909 | 0.922 | 0.886 | 0.907 | 0.908 | 0.847 | 0.853 | 0.845 | 0.980 | 0.979 | 0.866 | 0.850 | 0.869 | 0.883 | 0.922 | 0.862 |
| CALIFORNIA WATER SERVICE GR | 0.847 | 0.874 | 0.822 | 0.765 | 0.771 | 0.793 | 0.749 | 0.733 | 0.749 | 0.736 | 0.762 | 0.717 | 0.708 | 0.731 | 0.676 | 0.696 | 0.689 | 0.740 | 0.747 | 0.674 | 0.654 | 0.625 | 0.601 | 0.595 | 0.565 |
| MIDDLESEX WATER COMPANY | 0.526 | 0.605 | 0.571 | 0.525 | 0.520 | 0.530 | 0.534 | 0.493 | 0.523 | 0.510 | 0.528 | 0.530 | 0.587 | 0.573 | 0.518 | 0.508 | 0.497 | 0.581 | 0.606 | 0.536 | 0.535 | 0.468 | 0.447 | 0.459 | 0.429 |
| SJW GROUP | 0.913 | 0.985 | 0.887 | 0.849 | 0.857 | 0.827 | 0.788 | 0.795 | 0.805 | 0.806 | 0.812 | 0.819 | 0.887 | 0.884 | 0.849 | 0.763 | 0.762 | 0.758 | 0.717 | 0.686 | 0.685 | 0.710 | 0.714 | 0.658 | 0.621 |
| THE YORK WATER COMPANY | 0.857 | 0.939 | 0.894 | 0.867 | 0.870 | 0.904 | 0.905 | 0.882 | 0.973 | 0.919 | 0.956 | 0.952 | 1.006 | 0.972 | 0.866 | 0.822 | 0.797 | 0.870 | 0.884 | 0.770 | 0.834 | 0.854 | 0.797 | 0.772 | 0.732 |

| Company Name | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap | Enterprise value to Inv Cap |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMF | 0.812 | 0.823 | 0.776 | 0.721 | 0.692 | 0.711 | 0.687 | 0.675 | 0.658 | 0.655 | 0.672 | 0.656 | 0.677 | 0.660 | 0.624 | 0.625 | 0.634 | 0.679 | 0.687 | 0.639 | 0.671 | 0.640 | 0.684 | 0.713 | 0.668 |
| AMERICAN WATER WORKS COMP | 0.725 | 0.734 | 0.713 | 0.675 | 0.689 | 0.684 | 0.667 | 0.678 | 0.682 | 0.671 | 0.689 | 0.653 | 0.647 | 0.652 | 0.661 | 0.665 | 0.671 | 0.718 | 0.729 | 0.680 | 0.667 | 0.643 | 0.623 | 0.619 | 0.587 |
| ESSENTIAL UTILITIES, INC. | 1.274 | 1.263 | 1.200 | 1.137 | 1.178 | 1.164 | 1.162 | 1.163 | 1.166 | 1.141 | 1.150 | 1.108 | 1.098 | 1.107 | 1.131 | 1.124 | 1.144 | 1.257 | 1.286 | 1.213 | 1.193 | 1.198 | 1.166 | 1.184 | 1.134 |
| ARTESIAN RESOURCES CORPORA | 1.034 | 1.123 | 1.088 | 1.026 | 1.027 | 1.055 | 1.036 | 0.993 | 1.053 | 0.928 | 0.949 | 0.912 | 0.934 | 0.918 | 0.857 | 0.863 | 0.841 | 0.975 | 0.974 | 0.849 | 0.833 | 0.851 | 0.863 | 0.901 | 0.842 |
| CALIFORNIA WATER SERVICE GR | 0.962 | 0.987 | 0.929 | 0.864 | 0.897 | 0.921 | 0.871 | 0.850 | 0.868 | 0.853 | 0.899 | 0.846 | 0.835 | 0.845 | 0.781 | 0.804 | 0.802 | 0.862 | 0.870 | 0.789 | 0.765 | 0.731 | 0.687 | 0.680 | 0.645 |
| MIDDLESEX WATER COMPANY | 0.589 | 0.683 | 0.645 | 0.593 | 0.586 | 0.597 | 0.601 | 0.557 | 0.590 | 0.575 | 0.588 | 0.590 | 0.654 | 0.642 | 0.580 | 0.569 | 0.563 | 0.658 | 0.686 | 0.600 | 0.600 | 0.524 | 0.476 | 0.488 | 0.457 |
| SJW GROUP | 1.339 | 1.454 | 1.311 | 1.254 | 1.254 | 1.211 | 1.153 | 1.116 | 1.129 | 1.131 | 1.159 | 1.168 | 1.265 | 1.262 | 1.212 | 1.090 | 1.104 | 1.098 | 1.039 | 0.960 | 0.958 | 0.994 | 1.021 | 0.941 | 0.888 |
| THE YORK WATER COMPANY | 0.912 | 1.004 | 0.956 | 0.926 | 0.924 | 0.961 | 0.962 | 0.922 | 1.018 | 0.961 | 0.979 | 0.974 | 1.029 | 0.996 | 0.887 | 0.842 | 0.819 | 0.894 | 0.908 | 0.797 | 0.863 | 0.884 | 0.817 | 0.791 | 0.750 |

| 12/31/2021 | Month End 12/31/2017 -48 | Month End 11/30/2017 -49 | Month End 10/31/2017 -50 | Month End 9/30/2017 -51 | Month End 8/31/2017 -52 | Month End 7/31/2017 -53 | Month End 6/30/2017 -54 | Month End 5/31/2017 -55 | Month End 4/30/2017 -56 | Month End 3/31/2017 -57 | Month End 2/28/2017 -58 | Month End 1/31/2017 -59 | Month End 12/31/2016 -60 | Month End 11/30/2016 -61 | Month End 10/31/2016 -62 | Month End 9/30/2016 -63 | Month End 8/31/2016 -64 | Month End 7/31/2016 -65 | Month End 6/30/2016 -66 | Month End 5/31/2016 -67 | Month End 4/30/2016 -68 | Month End 3/31/2016 -69 | Month End 2/29/2016 -70 | Month End 1/31/2016 -71 | Month End 12/31/2015 -72 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enterprise value to Net PPE | 85% | 88% | 83% | 78% | 79% | 80% | 77% | 76% | 78% | 76% | 78% | 74% | 73% | 75% | 73% | 73% | 73% | 75% | 73% | 68% | 67% | 67% | 69% | 68% | 64% |
| Enterprise value to Inv Cap | 94% | 100% | 94% | 90% | 91% | 94% | 92% | 89% | 94% | 89% | 92% | 88% | 88% | 88% | 82% | 82% | 81% | 88% | 89% | 79% | 80% | 79% | 75% | 75% | 71% |

NetPlant Advances CIAC DefTax ITC

| | | **2020** Net Property, Plant & Equipment | Advances for construction | Contributions in aid of construction | Deferred income taxes, net | Deferred investment tax credits | 2020 Known "Cost Free" Capital | 2020 Percentage of Known "Cost Free" Capital |
|---|---|---|---|---|---|---|---|---|
| | | (Millions of $) | | | | | | |
| | Comparable Group | | | | | | | |
| 1 | American States Water Co | $1,512.043 | $63.354 | $138.691 | $124.581 | $1.224 | $327.850 | 22% |
| 2 | American Water Works Co Inc | $19,710.000 | $270.000 | $1,393.000 | $2,113.000 | $0.000 | $3,776.000 | 19% |
| 3 | Artesian Resources -CL A | $559.561 | $4.578 | $160.258 | $50.313 | $0.473 | $215.622 | 39% |
| 4 | California Water Service Gp | $2,650.558 | $195.625 | $268.050 | $276.032 | $0.000 | $739.707 | 28% |
| 5 | Essential Utilities, Inc. | $9,512.877 | $99.014 | $573.774 | $1,258.098 | $0.000 | $1,930.886 | 20% |
| 6 | Middlesex Water Co | $796.598 | $23.404 | $111.990 | $61.297 | $0.000 | $196.691 | 25% |
| 7 | SJW Corp | $2,334.912 | $125.027 | $296.105 | $191.415 | $0.000 | $612.547 | 26% |
| 8 | York Water Co | $344.365 | $10.326 | $41.307 | $43.538 | $0.000 | $95.171 | 28% |
| | Median | | | | | | | 25% |

| CONSOLIDATED BALANCE SHEETS - USD ($) | Dec. 31, 2020 | Dec. 31, 2019 |
|---|---|---|
| $ in Thousands | | |
| Regulated utility plant, at cost | | |
| Water | $1,784,402 | $1,700,442 |
| Electric | 112,507 | 108,425 |
| Total | 1,896,909 | 1,808,867 |
| Non-regulated utility property, at cost | 33,315 | 30,554 |
| Total utility plant, at cost | 1,930,224 | 1,839,421 |
| Less — accumulated depreciation | -568,326 | -543,263 |
| Utility plant before construction work in progress | 1,361,898 | 1,296,158 |
| Construction work in progress | 150,145 | 119,547 |
| Net utility plant | 1,512,043 | 1,415,705 |
| Other Property and Investments | | |
| Goodwill | 1,116 | 1,116 |
| Other property and investments | 35,318 | 30,293 |
| Total other property and investments | 36,434 | 31,409 |
| Current Assets | | |
| Cash and cash equivalents | 36,737 | 1,334 |
| Accounts receivable — customers, less allowance for doubtful accounts | 29,162 | 20,907 |
| Unbilled revenue — receivable (Note 2) | 25,836 | 20,482 |
| Receivable from U.S. government, less allowance for doubtful accounts (Note 2) | 25,182 | 22,613 |
| Other accounts receivable, less allowance for doubtful accounts | 3,960 | 3,096 |
| Income taxes receivable | 103 | 5,685 |
| Materials and supplies | 8,619 | 6,429 |
| Regulatory assets — current | 13,088 | 20,930 |
| Prepayments and other current assets | 5,555 | 5,413 |
| Contract assets (Note 2) | 8,873 | 15,567 |
| Total current assets | 157,115 | 122,456 |
| Regulatory and Other Assets | | |
| Unbilled revenue, receivable from U.S government | 9,945 | 8,621 |
| Receivable from U.S. government (Note 2) | 49,488 | 42,206 |
| Contract assets (Note 2) | 1,384 | 64 |
| Operating lease right-of-use assets | 11,146 | 13,168 |
| Regulatory Assets, Noncurrent | 3,451 | 0 |
| Other | 10,597 | 7,702 |
| Total other assets | 86,011 | 71,761 |
| Total Assets | 1,791,603 | 1,641,331 |
| Capitalization | | |
| Common shareholders' equity | 641,673 | 601,530 |
| Long-term debt | 440,348 | 280,996 |
| Total capitalization | 1,082,021 | 882,526 |
| Current Liabilities | | |
| Notes payable to banks | 0 | 5,000 |
| Long-term debt -current | 358 | 344 |
| Accounts payable | 63,788 | 55,616 |
| Income taxes payable | 6,783 | 95 |
| Accrued other taxes | 11,902 | 11,110 |
| Accrued employee expenses | 15,122 | 14,255 |
| Accrued interest | 4,832 | 3,050 |
| Unrealized loss on purchased power contracts | 1,537 | 3,171 |
| Contract liabilities (Note 2) | 1,800 | 11,167 |
| Operating lease liabilities | 2,013 | 1,849 |
| Other | 10,437 | 10,341 |
| Total current liabilities | 118,572 | 115,998 |
| Other Credits | | |
| Notes payable to banks | 134,200 | 200,000 |
| Advances for Construction | 63,374 | 63,989 |
| Contributions in aid of construction — net | 140,332 | 134,706 |
| Deferred income taxes | 131,172 | 125,304 |
| Regulatory liabilities | 0 | 23,380 |
| Unamortized investment tax credits | 1,224 | 1,295 |
| Accrued pension and other post-retirement benefits | 95,639 | 68,469 |
| Operating lease liabilities | 9,636 | 11,739 |
| Other | 15,433 | 13,925 |
| Total other credits | 591,010 | 642,807 |
| Commitments and Contingencies | | |
| Liabilities and Equity, Total | 1,791,603 | 1,641,331 |
| GSWC | | |
| Regulated utility plant, at cost | | |
| Water | 1,784,402 | 1,700,442 |
| Electric | 0 | 108,425 |
| Total utility plant, at cost | 1,784,402 | 1,808,867 |
| Less — accumulated depreciation | -502,283 | -531,801 |
| Utility plant before construction work in progress | 1,282,119 | 1,277,066 |
| Construction work in progress | 118,370 | 117,676 |
| Net utility plant | 1,400,489 | 1,394,742 |
| Other Property and Investments | | |
| Other property and investments | 33,240 | 28,212 |
| Total other property and investments | 33,240 | 28,212 |
| Current Assets | | |
| Cash and cash equivalents | 35,578 | 401 |
| Accounts receivable — customers, less allowance for doubtful accounts | 26,920 | 20,907 |
| Unbilled revenue — receivable (Note 2) | 19,330 | 18,636 |
| Other accounts receivable, less allowance for doubtful accounts | 3,255 | 1,857 |
| Intercompany receivable | 1,107 | 0 |
| Income taxes receivable | 0 | 7,727 |
| Materials and supplies | 3,659 | 4,920 |
| Regulatory assets — current | 11,325 | 20,930 |
| Prepayments and other current assets | 4,114 | 4,497 |
| Total current assets | 105,288 | 79,875 |
| Regulatory and Other Assets | | |
| Operating lease right-of-use assets | 11,103 | 12,745 |
| Regulatory Assets, Noncurrent | 1,048 | 0 |
| Other | 9,614 | 6,880 |
| Total other assets | 21,765 | 19,625 |
| Total Assets | 1,560,782 | 1,522,454 |
| Capitalization | | |
| Common shareholders' equity | 583,298 | 551,188 |
| Long-term debt | 440,348 | 280,996 |
| Total capitalization | 1,023,646 | 832,184 |
| Current Liabilities | | |
| Long-term debt -current | 358 | 344 |
| Intercompany payable to Parent | 0 | 158,845 |
| Accounts payable | 45,613 | 45,756 |
| Income taxes payable | 4,612 | 0 |
| Accrued other taxes | 10,382 | 10,640 |
| Accrued employee expenses | 12,351 | 12,386 |
| Accrued interest | 4,545 | 2,736 |
| Unrealized loss on purchased power contracts | 0 | 3,171 |
| Operating lease liabilities | 1,956 | 1,612 |
| Other | 9,403 | 9,745 |
| Total current liabilities | 89,220 | 245,235 |
| Other Credits | | |
| Advances for Construction | 63,354 | 63,989 |
| Contributions in aid of construction — net | 138,691 | 134,706 |
| Deferred income taxes | 124,581 | 127,806 |
| Regulatory liabilities | 0 | 23,380 |
| Unamortized investment tax credits | 1,224 | 1,295 |
| Accrued pension and other post-retirement benefits | 95,570 | 68,469 |
| Operating lease liabilities | 9,636 | 11,588 |
| Other | 14,860 | 13,802 |
| Total other credits | 447,916 | 445,035 |
| Liabilities and Equity, Total | | |
| **NetPlant** | 1,512,043 | 1,415,705 |
| **Advances** | 63,354 | 63,989 |
| **CIAC** | 138,691 | 134,706 |
| **DefTax** | 124,581 | 127,806 |
| **ITC** | 1,224 | 1,295 |

| olidated Balance Sheets - USD ($) | Dec. 31, 2020 | Dec. 31, 201 |
|---|---|---|
| Millions | | |
| ETS | | |
| perty, plant and equipment | $25,614 | $23,9 |
| umulated depreciation | -5,904 | -5, |
| perty, plant and equipment, net | 19,710 | 18, |
| rent assets: | | |
| n and cash equivalents | 547 | |
| tricted funds | 29 | |
| ounts receivable, net of allowance for uncollectible accounts of $60 and $41, respectively | 321 | |
| illed revenues | 206 | |
| erials and supplies | 47 | |
| ts held for sale | 629 | |
| er | 127 | |
| l current assets | 1,906 | 1, |
| ulatory and other long-term assets: | | |
| ulatory assets | 1,127 | 1, |
| rating lease right-of-use assets | 95 | |
| dwill | 1,504 | 1, |
| tretirement benefit assets | 173 | |
| ngible assets | 55 | |
| er | 196 | |
| l regulatory and other long-term assets | 3,150 | 3, |
| l assets | 24,766 | 22, |
| italization: | | |
| mon stock ($0.01 par value; 500,000,000 shares authorized; 186,466,707 and 185,903,727 shares issued, respectively) | 2 | |
| l-in-capital | 6,747 | 6, |
| ained earnings (accumulated deficit) | 102 | - |
| umulated other comprehensive loss | -49 | |
| sury stock, at cost (5,168,215 and 5,090,855 shares, respectively) | -348 | - |
| l common shareholders' equity | 6,454 | 6, |
| g-term debt | 9,329 | 8, |
| eemable preferred stock at redemption value | 4 | |
| l long-term debt | 9,333 | 8, |
| l capitalization | 15,787 | 14, |
| rent liabilities: | | |
| rt-term debt | 1,282 | |
| rent portion of long-term debt | 329 | |
| ounts payable | 189 | |
| rued liabilities | 591 | |
| rued taxes | 50 | |
| rued interest | 88 | |
| ilities related to assets held for sale | 137 | |
| er | 215 | |
| l current liabilities | 2,881 | 2, |
| ulatory and other long-term liabilities: | | |
| ances for construction | 270 | |
| erred income taxes and investment tax credits | 2,113 | 1, |
| ulatory liabilities | 1,770 | 1, |
| rating lease liabilities | 81 | |
| rued pension expense | 388 | |
| er | 83 | |
| l regulatory and other long-term liabilities | 4,705 | 4, |
| tributions in aid of construction | 1,393 | 1, |
| mitments and contingencies | | |
| l capitalization and liabilities | $24,766 | $22,6 |

| | | |
|---|---|---|
| **NetPlant** | 19,710 | 18, |
| **Advances** | 270 | |
| **CIAC** | 1,393 | 1, |
| **DefTax** | 2,113 | 1, |
| **ITC** | 0 | |

| CONSOLIDATED BALANCE SHEETS - USD ($) | Dec. 31, 2020 | Dec. 31, 2019 |
|---|---|---|
| $ in Thousands | | |
| ASSETS | | |
| Utility plant, at original cost (less accumulated depreciation - 2020 - $147,469,; 2019 - $136,588) | $559,561 | $530,721 |
| Current assets | | |
| Cash and cash equivalents | 28 | 596 |
| Accounts receivable (less allowance for doubtful accounts 2020 - $862; 2019-$264) | 10,162 | 6,913 |
| Income tax receivable | 629 | 19 |
| Unbilled operating revenues | 1,166 | 1,211 |
| Materials and supplies | 1,535 | 1,264 |
| Prepaid property taxes | 1,891 | 1,954 |
| Prepaid expenses and other | 2,208 | 2,250 |
| Total current assets | 17,619 | 14,207 |
| Other assets | | |
| Non-utility property (less accumulated depreciation - 2020- $865; 2019 - $790) | 3,796 | 3,812 |
| Other deferred assets | 5,309 | 4,257 |
| Operating lease right of use assets | 460 | 480 |
| Total other assets | 9,565 | 8,549 |
| Regulatory assets, net | 6,473 | 6,891 |
| Total assets | 593,218 | 560,368 |
| Stockholders' equity | | |
| Common stock | 9,357 | 9,292 |
| Preferred stock | 0 | 0 |
| Additional paid-in capital | 103,463 | 101,811 |
| Retained earnings | 56,606 | 49,165 |
| Total stockholders' equity | 169,426 | 160,268 |
| Long-term debt, net of current portion | 142,333 | 144,156 |
| Total stockholders' equity and long-term debt | 311,759 | 304,424 |
| Current liabilities | | |
| Lines of credit | 26,813 | 7,500 |
| Current portion of long-term debt | 1,757 | 1,706 |
| Accounts payable | 6,341 | 8,176 |
| Accrued expenses | 3,414 | 3,113 |
| Overdraft payable | 105 | 15 |
| Accrued interest | 930 | 830 |
| Income taxes payable | 237 | 343 |
| Customer and other deposits | 2,060 | 1,970 |
| OtherLiabilitiesCurrent | 2,067 | 1,946 |
| Total current liabilities | 43,724 | 25,599 |
| Commitments and contingencies (Note 11) | | |
| Deferred credits and other liabilities | | |
| Net advances for construction | 4,578 | 5,421 |
| OperatingLeaseLiabilityNoncurrent | 432 | 450 |
| Regulatory liabilities | 21,681 | 22,246 |
| Deferred investment tax credits | 473 | 490 |
| Deferred income taxes | 50,313 | 52,259 |
| Total deferred credits and other liabilities | 77,477 | 80,866 |
| Net contributions in aid of construction | 160,258 | 149,479 |
| Total Liabilities and Stockholders' Equity | | |

| | | |
|---|---|---|
| **NetPlant** | $559,561 | $530,721 |
| **Advances** | 4,578 | 5,421 |
| **CIAC** | 160,258 | 149,479 |
| **DefTax** | 50,313 | 52,259 |
| **ITC** | 473 | 490 |

| solidated Balance Sheets - USD ($) | Dec. 31, 2020 | Dec. 31, 2 |
|---|---|---|
| Thousands | | |
| ty plant: | | |
| l | $45,672 | $45,( |
| reciable plant and equipment | 3,645,770 | 3,235, |
| struction work in progress | 171,414 | 245, |
| ngible assets | 27,567 | 24, |
| l utility plant | 3,890,423 | 3,550, |
| accumulated depreciation and amortization | -1,239,865 | -1,144, |
| utility plant | 2,650,558 | 2,406, |
| ent assets: | | |
| and cash equivalents | 44,555 | 42, |
| ivables: | | |
| omers, net | 44,025 | 32, |
| ulatory balancing accounts | 96,241 | 38, |
| r, net | 20,331 | 14, |
| illed revenue, net | 34,069 | 34, |
| erials and supplies at weighted average cost | 8,831 | 7, |
| s, prepaid expenses, and other assets | 17,964 | 14, |
| l current assets | 266,016 | 184, |
| r assets: | | |
| ulatory assets | 325,376 | 433, |
| dwill | 31,842 | 2, |
| r | 120,456 | 84, |
| l other assets | 477,674 | 520, |
| AL ASSETS | 3,394,248 | 3,111, |
| talization: | | |
| mon stock, $0.01 par value; 68,000 shares authorized, 50,334 and 48,532 outstanding in 2020 and 2019, respectively | 503 | |
| tional paid-in capital | 448,632 | 362, |
| ined earnings | 472,209 | 417, |
| l common stockholders' equity | 921,344 | 779, |
| g-term debt, net | 781,100 | 786, |
| l capitalization | 1,702,444 | 1,566, |
| ent liabilities: | | |
| ent maturities of long-term debt, net | 5,127 | 21, |
| t-term borrowings | 370,000 | 175, |
| unts payable | 131,725 | 108, |
| ulatory balancing accounts | 34,636 | 4, |
| ued other taxes | 4,477 | 4, |
| ued interest | 6,178 | 5, |
| r accrued liabilities | 36,563 | 38, |
| l current liabilities | 588,706 | 358, |
| rred income taxes | 276,032 | 222, |
| ulatory liabilities | 180,718 | 211, |
| sion and postretirement benefits other than pensions | 115,581 | 258, |
| ances for construction | 195,625 | 191, |
| ributions in aid of construction | 268,050 | 241, |
| r long-term liabilities | 67,092 | 60, |
| mitments and contingencies | | |
| AL CAPITALIZATION AND LIABILITIES | $3,394,248 | $3,111,3 |

| | | |
|---|---|---|
| **NetPlant** | 2,650,558 | 2,406, |
| **Advances** | 195,625 | 191, |
| **CIAC** | 268,050 | 241, |
| **DefTax** | 276,032 | 222, |
| **ITC** | 0 | |

| :ed Balance Sheets - USD ($) | Dec. 31, |
|---|---|
| ısands | |
| , plant and equipment, at cost | $11,6 |
| umulated depreciation | 2, |
| erty, plant and equipment | 9, |
| ıssets: | |
| cash equivalents | |
| receivable, net | |
| revenues | |
| / - materials and supplies | |
| / - gas stored | |
| ents and other current assets | |
| ry assets | |
| ld for sale | |
| rent assets | |
| ry assets | 1, |
| charges and other assets, net | |
| nt in joint venture | |
| stricted for construction activity | |
| | 2, |
| g lease right-of-use assets | |
| e assets | |
| ets | 13, |
| Utilities stockholders' equity: | |
| stock at $0.50 par value, authorized 600,000,000 shares, issued 248,571,355 and 223,871,284 as of December 31, 2020 and December 31, 2019 | |
| excess of par value | 3, |
| earnings | 1, |
| stock, at cost, 3,180,887 and 3,112,565 shares as of December 31, 2020 and December 31, 2019 | |
| ckholders' equity | 4, |
| n debt, excluding current portion | 5, |
| t issuance costs | |
| n debt, excluding current portion, net of debt issuance costs | 5, |
| nents and contingencies (See Note 9) | |
| iabilities: | |
| portion of long-term debt | |
| yable | |
| payable | |
| rdraft | |
| interest | |
| taxes | |
| ry liabilities | |
| crued liabilities | |
| rent liabilities | |
| credits and other liabilities: | |
| income taxes and investment tax credits | 1, |
| rs' advances for construction | |
| ry liabilities | |
| irement obligations | |
| g lease liabilities | |
| and other postretirement benefit liabilities | |
| erred credits and other liabilities | 2, |
| tions in aid of construction | |
| ilities and equity | $13,7 |

| | |
|---|---|
| **NetPlant** | 9, |
| **Advances** | |
| **CIAC** | |
| **DefTax** | 1, |
| **ITC** | |

| CONSOLIDATED BALANCE SHEETS - USD ($) | Dec. 31, 2020 | Dec. 31, 2019 |
|---|---|---|
| $ in Thousands | | |
| UTILITY PLANT: | | |
| Water Production | $168,080 | $160,870 |
| Transmission and Distribution | 648,763 | 556,517 |
| General | 85,056 | 83,043 |
| Construction Work in Progress | 80,055 | 75,520 |
| TOTAL | 981,954 | 875,950 |
| Less Accumulated Depreciation | 185,356 | 170,220 |
| UTILITY PLANT - NET | 796,598 | 705,730 |
| CURRENT ASSETS: | | |
| Cash and Cash Equivalents | 4,491 | 2,230 |
| Accounts Receivable, net | 14,569 | 11,908 |
| Unbilled Revenues | 7,065 | 7,183 |
| Materials and Supplies (at average cost) | 5,112 | 5,445 |
| Prepayments | 2,886 | 2,367 |
| TOTAL CURRENT ASSETS | 34,123 | 29,133 |
| Operating Lease Right of Use Asset | 5,209 | 5,944 |
| Preliminary Survey and Investigation Charges | 5,192 | 2,054 |
| Regulatory Assets | 118,144 | 110,479 |
| Restricted Cash | 5,913 | 44,269 |
| Non-utility Assets - Net | 11,207 | 10,370 |
| Other | 84 | 1,899 |
| TOTAL OTHER ASSETS | 145,749 | 175,015 |
| TOTAL ASSETS | 976,470 | 909,878 |
| CAPITALIZATION: | | |
| Common Stock, No Par Value | 217,451 | 215,125 |
| Retained Earnings | 128,757 | 108,667 |
| TOTAL COMMON EQUITY | 346,208 | 323,792 |
| Preferred Stock | 2,084 | 2,084 |
| Long-term Debt | 273,244 | 230,777 |
| TOTAL CAPITALIZATION | 621,536 | 556,653 |
| CURRENT LIABILITIES: | | |
| Current Portion of Long-term Debt | 7,255 | 7,178 |
| Notes Payable | 2,000 | 20,000 |
| Accounts Payable | 30,443 | 23,306 |
| Accrued Taxes | 10,138 | 7,635 |
| Accrued Interest | 2,137 | 2,031 |
| Unearned Revenues and Advanced Service Fees | 1,255 | 1,211 |
| Other | 3,620 | 3,620 |
| TOTAL CURRENT LIABILITIES | 56,848 | 64,981 |
| COMMITMENTS AND CONTINGENT LIABILITIES (Note 4) | | |
| OTHER LIABILITIES: | | |
| Customer Advances for Construction | 23,404 | 23,905 |
| Lease Obligations | 5,042 | 5,732 |
| Accumulated Deferred Income Taxes | 61,297 | 54,408 |
| Employee Benefit Plans | 34,426 | 34,671 |
| Regulatory Liabilities | 60,792 | 69,152 |
| Other | 1,135 | 2,546 |
| TOTAL OTHER LIABILITIES | 186,096 | 190,414 |
| CONTRIBUTIONS IN AID OF CONSTRUCTION | 111,990 | 97,830 |
| TOTAL CAPITALIZATION AND LIABILITIES | $976,470 | $909,878 |

| | | |
|---|---|---|
| **NetPlant** | 796,598 | 705,730 |
| **Advances** | 23,404 | 23,905 |
| **CIAC** | 111,990 | 97,830 |
| **DefTax** | 61,297 | 54,408 |
| **ITC** | 0 | 0 |

| ated Balance Sheets - USD ($) | Dec. 31, 2 |
|---|---|
| sands | |
| ant: | |
| | $ |
| ble plant and equipment | 3,1 |
| tion in progress | 1 |
| e assets | |
| plant and equipment, gross | 3,3 |
| mulated depreciation and amortization | 1,0 |
| lities, property, plant and equipment, net | 2,3 |
| te investments | |
| mulated depreciation and amortization | |
| te investments, net | |
| ssets: | |
| | |
| d cash | |
| receivable: | |
| rs, net of allowances for uncollectible accounts of $3,891 and $1,512 in 2020 and 2019, respectively | |
| ax | |
| | |
| unbilled utility revenue | |
| egulatory assets, net | |
| xpenses | |
| rrent assets | |
| rent assets | 1 |
| sets: | |
| latory assets, less current portion | 1 |
| nts | |
| | 6 |
| | |
| er assets | 8 |
| ets | 3,3 |
| ders' equity: | |
| stock, $0.001 par value; authorized 70,000,000 shares in 2020 and 2019; issued and outstanding 28,556,605 shares in 2020 and 28,456,508 shares in 201 | |
| l paid-in capital | 5 |
| earnings | 4 |
| ated other comprehensive (loss) income | |
| ckholders' equity | 9 |
| n debt, less current portion | 1,2 |
| ation, long-term debt and equity | 2,2 |
| iabilities: | |
| redit | 1 |
| portion of long-term debt | |
| groundwater extraction charges, purchased water and power | |
| payable | |
| interest | |
| payroll | |
| rrent liabilities | |
| rent liabilities | 3 |
| income taxes | 1 |
| s for construction | 1 |
| tions in aid of construction | 2 |
| ement benefit plans | 1 |
| ncurrent liabilities | |
| nents and contingencies | |
| ity and liabilities | $3,3 |

| | |
|---|---|
| **NetPlant** | 2,3 |
| **Advances** | 1 |
| **CIAC** | 2 |
| **DefTax** | 1 |
| **ITC** | |

| Sheets - USD ($) | Dec. 31, 2 |
|---|---|
| usands | |
| | |
| PLANT, at original cost | $43 |
| quisition adjustments | |
| ated depreciation | - |
| y plant | 3 |
| HYSICAL PROPERTY, net of accumulated depreciation of $458 in 2020 and $435 in 2019 | |
| T ASSETS: | |
| l cash equivalents | |
| d cash | |
| s receivable, net of reserves of $655 in 2020 and $305 in 2019 | |
| revenues | |
| able income taxes | |
| s and supplies inventories, at cost | |
| expenses | |
| rent assets | |
| ONG-TERM ASSETS: | |
| pension cost | |
| eivable | |
| l regulatory assets | |
| sets | |
| ner long-term assets | |
| ets | 4 |
| N STOCKHOLDERS' EQUITY: | |
| n stock, no par value, authorized 46,500,000 shares, issued and outstanding 13,060,817 shares in 2020 and 13,014,898 shares in 2019 | |
| l earnings | |
| nmon stockholders' equity | 1 |
| ED STOCK, authorized 500,000 shares, no shares issued | |
| RM DEBT, excluding current portion | 1 |
| MENTS | |
| T LIABILITIES: | |
| portion of long-term debt | |
| s payable | |
| s payable | |
| compensation and benefits | |
| interest | |
| l regulatory liabilities | |
| crued expenses | |
| rent liabilities | |
| D CREDITS: | |
| rs' advances for construction | |
| l income taxes | |
| l employee benefits | |
| l regulatory liabilities | |
| ferred credits | |
| erred credits | |
| tions in aid of construction | |
| ckholders' Equity and Liabilities | |

| | |
|---|---|
| **NetPlant** | 3 |
| **Advances** | |
| **CIAC** | |
| **DefTax** | |
| **ITC** | |

**Series Id:** CUUR0000SA0,CUUS0000SA0
Not Seasonally Adjusted
**Series Title:** All items in U.S. city average, all urban consumers, not seasonally adjusted
**Area:** U.S. city average
**Item:** All items
**Base Period:** 1982-84=100

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | HALF1 | HALF2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2000** | 168.8 | 169.8 | 171.2 | 171.3 | 171.5 | 172.4 | 172.8 | 172.8 | 173.7 | 174 | 174.1 | 174 | 170.8 | 173.6 |
| **2001** | 175.1 | 175.8 | 176.2 | 176.9 | 177.7 | 178 | 177.5 | 177.5 | 178.3 | 177.7 | 177.4 | 176.7 | 176.6 | 177.5 |
| **2002** | 177.1 | 177.8 | 178.8 | 179.8 | 179.8 | 179.9 | 180.1 | 180.7 | 181 | 181.3 | 181.3 | 180.9 | 178.9 | 180.9 |
| **2003** | 181.7 | 183.1 | 184.2 | 183.8 | 183.5 | 183.7 | 183.9 | 184.6 | 185.2 | 185 | 184.5 | 184.3 | 183.3 | 184.6 |
| **2004** | 185.2 | 186.2 | 187.4 | 188 | 189.1 | 189.7 | 189.4 | 189.5 | 189.9 | 190.9 | 191 | 190.3 | 187.6 | 190.2 |
| **2005** | 190.7 | 191.8 | 193.3 | 194.6 | 194.4 | 194.5 | 195.4 | 196.4 | 198.8 | 199.2 | 197.6 | 196.8 | 193.2 | 197.4 |
| **2006** | 198.3 | 198.7 | 199.8 | 201.5 | 202.5 | 202.9 | 203.5 | 203.9 | 202.9 | 201.8 | 201.5 | 201.8 | 200.6 | 202.6 |
| **2007** | 202.416 | 203.499 | 205.352 | 206.686 | 207.949 | 208.352 | 208.299 | 207.917 | 208.49 | 208.936 | 210.177 | 210.036 | 205.709 | 208.976 |
| **2008** | 211.08 | 211.693 | 213.528 | 214.823 | 216.632 | 218.815 | 219.964 | 219.086 | 218.783 | 216.573 | 212.425 | 210.228 | 214.429 | 216.177 |
| **2009** | 211.143 | 212.193 | 212.709 | 213.24 | 213.856 | 215.693 | 215.351 | 215.834 | 215.969 | 216.177 | 216.33 | 215.949 | 213.139 | 215.935 |
| **2010** | 216.687 | 216.741 | 217.631 | 218.009 | 218.178 | 217.965 | 218.011 | 218.312 | 218.439 | 218.711 | 218.803 | 219.179 | 217.535 | 218.576 |
| **2011** | 220.223 | 221.309 | 223.467 | 224.906 | 225.964 | 225.722 | 225.922 | 226.545 | 226.889 | 226.421 | 226.23 | 225.672 | 223.598 | 226.28 |
| **2012** | 226.665 | 227.663 | 229.392 | 230.085 | 229.815 | 229.478 | 229.104 | 230.379 | 231.407 | 231.317 | 230.221 | 229.601 | 228.85 | 230.338 |
| **2013** | 230.28 | 232.166 | 232.773 | 232.531 | 232.945 | 233.504 | 233.596 | 233.877 | 234.149 | 233.546 | 233.069 | 233.049 | 232.366 | 233.548 |
| **2014** | 233.916 | 234.781 | 236.293 | 237.072 | 237.9 | 238.343 | 238.25 | 237.852 | 238.031 | 237.433 | 236.151 | 234.812 | 236.384 | 237.088 |
| **2015** | 233.707 | 234.722 | 236.119 | 236.599 | 237.805 | 238.638 | 238.654 | 238.316 | 237.945 | 237.838 | 237.336 | 236.525 | 236.265 | 237.769 |
| **2016** | 236.916 | 237.111 | 238.132 | 239.261 | 240.229 | 241.018 | 240.628 | 240.849 | 241.428 | 241.729 | 241.353 | 241.432 | 238.778 | 241.237 |
| **2017** | 242.839 | 243.603 | 243.801 | 244.524 | 244.733 | 244.955 | 244.786 | 245.519 | 246.819 | 246.663 | 246.669 | 246.524 | 244.076 | 246.163 |
| **2018** | 247.867 | 248.991 | 249.554 | 250.546 | 251.588 | 251.989 | 252.006 | 252.146 | 252.439 | 252.885 | 252.038 | 251.233 | 250.089 | 252.125 |
| **2019** | 251.712 | 252.776 | 254.202 | 255.548 | 256.092 | 256.143 | 256.571 | 256.558 | 256.759 | 257.346 | 257.208 | 256.974 | 254.412 | 256.903 |
| **2020** | 257.971 | 258.678 | 258.115 | 256.389 | 256.394 | 257.797 | 259.101 | 259.918 | 260.28 | 260.388 | 260.229 | 260.474 | 257.557 | 260.065 |
| **2021** | 261.582 | 263.014 | 264.877 | 267.054 | 269.195 | 271.696 | 273.003 | 273.567 | 274.31 | 276.589 | 277.948 | 278.802 | 266.236 | 275.703 |
| **2022** | 281.148 | 283.716 | 287.504 | 289.109 | 292.296 | 296.311 | | | | | | | 288.347 | |

| Geocode | County | Municipality | 2010 | 2020 | Change | | Munic. Rank |
|---|---|---|---|---|---|---|---|
| | | | | | Numeric | Percent | |
| | **Pennsylvania** | Pennsylvania | **12,702,379** | **13,002,700** | **300,321** | **2.4%** | |
| 007 | Beaver County | Beaver County | 170,539 | 168,215 | -2,324 | -1.4% | |
| 00704792 | Beaver County | Beaver Falls city | 8987 | 9005 | 18 | 0.2% | 963 |
| 00706240 | Beaver County | Big Beaver borough | 1970 | 1852 | -118 | -6.0% | 1,816 |
| 00721968 | Beaver County | Eastvale borough | 225 | 184 | -41 | -18.2% | 2,477 |
| 00755400 | Beaver County | North Sewickley township | 5488 | 5495 | 7 | 0.1% | 971 |
| 00758375 | Beaver County | Patterson township | 3029 | 3129 | 100 | 3.3% | 594 |
| 00758384 | Beaver County | Patterson Heights borough | 636 | 639 | 3 | 0.5% | 930 |
| 00783472 | Beaver County | West Mayfield borough | 1239 | 1195 | -44 | -3.6% | 1,473 |
| 00784444 | Beaver County | White township | 1394 | 1316 | -78 | -5.6% | 1,762 |

**Cycle 11 forecast (adopted by the Commission on June 24, 2019) by City of Pittsburgh Neighborhood Cluster and Municipality Outside Pittsburgh 2015-2045**

City of Pittsburgh and county totals are at bottom of worksheet

Sorted County, Municipality

NOTE: column names in yellow cells are for mapping

| | | AREA IN SQUARE MILES | | | 2015 | | | | | | | | | 2020 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | WORKPLACE EMPLOYMENT | | | | | | | | | WORKP | |
| unty(or Pittsburgh City) | Municipality (or Pittsburgh neighborhood cluster) | Total | Land | Water | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing |
| 0 | 0 | | 0 | 0 | 0 | 0 | gqpop_15 | totpop_15 | retemp_15 | mfgemp_15 | servemp_15 | othemp_15 | totemp_15 | hholds_20 | avgsize_20 | gqpop_20 | totpop_20 | retemp_20 | mfgemp_20 |
| Beaver | Beaver Falls City | 2.2775 | 2.1608 | 0.1167 | 3,175 | 2.39 | 1,185 | 8,768 | 1,071 | 462 | 3,498 | 1,323 | 6,354 | 3,009 | 2.40 | 1,185 | 8,404 | 1,029 | 409 |
| Beaver | Big Beaver Borough | 18.0012 | 17.8470 | 0.1542 | 801 | 2.39 | 0 | 1,918 | 26 | 5 | 563 | 280 | 874 | 770 | 2.39 | 0 | 1,837 | 25 | 7 |
| Beaver | Eastvale Borough | 0.1215 | 0.0761 | 0.0454 | 84 | 2.82 | 0 | 237 | 40 | 0 | 12 | 6 | 58 | 74 | 2.93 | 0 | 217 | 39 | 1 |
| Beaver | North Sewickley Township | 21.0155 | 20.6130 | 0.4025 | 2,167 | 2.56 | 3 | 5,561 | 190 | 13 | 835 | 213 | 1,251 | 2,103 | 2.55 | 3 | 5,363 | 184 | 14 |
| Beaver | Patterson Heights Borough | 0.2476 | 0.2441 | 0.0035 | 255 | 2.47 | 0 | 630 | 33 | 0 | 136 | 6 | 175 | 247 | 2.47 | 0 | 609 | 32 | 2 |
| Beaver | Patterson Township | 1.7011 | 1.6989 | 0.0022 | 1,311 | 2.28 | 8 | 3,002 | 15 | 0 | 620 | 28 | 663 | 1,294 | 2.27 | 8 | 2,940 | 14 | 2 |
| Beaver | West Mayfield Borough | 0.7836 | 0.7836 | 0.0000 | 504 | 2.55 | 0 | 1,286 | 4 | 50 | 102 | 17 | 173 | 501 | 2.56 | 0 | 1,283 | 5 | 49 |
| Beaver | White Township | 0.7250 | 0.7250 | 0.0000 | 604 | 2.23 | 8 | 1,353 | 5 | 0 | 98 | 14 | 117 | 583 | 2.22 | 8 | 1,304 | 4 | 2 |

| | AREA IN SQUARE MILES | | | 2015 | | | | | | | | | 2020 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | WORKPLACE EMPLOYMENT | | | | | | | | | WORKP | |
| County/region totals | Total | Land | Water | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing |
| Pittsburgh, City of | 58.2860 | 55.4805 | 2.8055 | 132,468 | 2.13 | 23,939 | 305,928 | 30,694 | 7,656 | 299,568 | 16,778 | 354,696 | 132,450 | 2.12 | 23,939 | 304,900 | 32,014 | 7,641 |
| Allegheny (Excludes City of Pittsburgh) | 685.6730 | 674.1324 | 11.5406 | 397,066 | 2.30 | 11,413 | 925,217 | 106,279 | 30,489 | 339,885 | 58,000 | 534,653 | 397,623 | 2.30 | 11,413 | 924,120 | 110,038 | 30,447 |
| Armstrong | 664.2882 | 653.6256 | 10.6626 | 28,524 | 2.36 | 757 | 67,979 | 4,071 | 2,210 | 13,611 | 5,052 | 24,944 | 27,332 | 2.34 | 757 | 64,822 | 4,160 | 2,034 |
| Beaver | 443.6825 | 433.9979 | 9.6846 | 70,079 | 2.38 | 2,951 | 169,785 | 13,374 | 6,957 | 44,256 | 7,058 | 71,645 | 68,468 | 2.37 | 2,951 | 165,356 | 13,247 | 6,462 |
| Butler | 794.6921 | 788.4355 | 6.2562 | 74,476 | 2.42 | 5,584 | 185,689 | 20,488 | 12,830 | 66,232 | 15,922 | 115,472 | 76,551 | 2.40 | 5,584 | 189,577 | 21,551 | 12,461 |
| Fayette | 797.8329 | 789.7719 | 8.0610 | 53,997 | 2.41 | 4,697 | 134,851 | 10,817 | 3,995 | 33,348 | 7,177 | 55,337 | 51,731 | 2.41 | 4,697 | 129,158 | 10,604 | 3,886 |
| Greene | 577.6056 | 575.7618 | 1.8438 | 14,394 | 2.33 | 4,375 | 37,938 | 2,650 | 396 | 8,802 | 7,692 | 19,540 | 14,192 | 2.31 | 4,375 | 37,184 | 2,568 | 386 |
| Indiana | 834.2155 | 828.9756 | 5.2399 | 34,061 | 2.41 | 5,923 | 87,895 | 7,921 | 2,416 | 25,331 | 10,145 | 45,813 | 33,989 | 2.39 | 5,923 | 87,307 | 7,947 | 2,384 |
| Lawrence | 362.6886 | 360.3848 | 2.3038 | 36,435 | 2.38 | 2,361 | 89,162 | 6,814 | 3,921 | 25,248 | 5,239 | 41,222 | 35,262 | 2.37 | 2,361 | 85,935 | 6,751 | 3,947 |
| Washington | 860.3761 | 856.8240 | 3.5521 | 83,739 | 2.42 | 5,255 | 208,226 | 19,051 | 9,478 | 69,515 | 23,173 | 121,217 | 84,406 | 2.42 | 5,255 | 209,558 | 19,660 | 9,250 |
| Westmoreland | 1,036.7786 | 1,025.9157 | 10.8629 | 151,173 | 2.33 | 8,562 | 361,251 | 36,817 | 18,488 | 102,926 | 23,936 | 182,167 | 149,268 | 2.32 | 8,562 | 355,285 | 37,420 | 17,889 |
| SPC Region | 7,116.1191 | 7,043.3057 | 72.8130 | 1,076,412 | 2.32 | 75,817 | 2,573,921 | 258,976 | 98,836 | 1,028,722 | 180,172 | 1,566,706 | 1,071,272 | 2.31 | 75,817 | 2,553,202 | 265,960 | 96,787 |

**Cycle 11 forecast (adopted by th**

City of Pittsburgh and county totals ar

Sorted County, Municipality

NOTE: column names in yellow cells are for m

| | | PLACE EMPLOYMENT | | | | |
|---|---|---|---|---|---|---|
| ounty(or Pittsburgh City | Municipality (or Pittsburgh neighborhood cluster) | Services | Other | Total | Households | Average household size |
| 0 | 0 | servemp_20 | othemp_20 | totemp_20 | hholds_25 | avgsize_25 |
| Beaver | Beaver Falls City | 3,438 | 1,350 | 6,226 | 2,978 | 2.41 |
| Beaver | Big Beaver Borough | 848 | 291 | 1,171 | 790 | 2.38 |
| Beaver | Eastvale Borough | 12 | 13 | 65 | 73 | 2.89 |
| Beaver | North Sewickley Township | 825 | 222 | 1,245 | 2,097 | 2.54 |
| Beaver | Patterson Heights Borough | 135 | 13 | 182 | 248 | 2.44 |
| Beaver | Patterson Township | 620 | 33 | 669 | 1,305 | 2.25 |
| Beaver | West Mayfield Borough | 103 | 25 | 182 | 510 | 2.56 |
| Beaver | White Township | 91 | 26 | 123 | 580 | 2.21 |

| | PLACE EMPLOYMENT | | | | |
|---|---|---|---|---|---|
| County/region totals | Services | Other | Total | Households | Average household size |
| Pittsburgh, City of | 317,187 | 17,493 | 374,335 | 136,051 | 2.11 |
| Allegheny (Excludes City of Pittsburgh) | 359,256 | 60,434 | 560,175 | 405,189 | 2.29 |
| Armstrong | 13,755 | 4,819 | 24,768 | 26,707 | 2.33 |
| Beaver | 45,184 | 7,615 | 72,508 | 68,875 | 2.36 |
| Butler | 69,657 | 16,426 | 120,095 | 78,859 | 2.39 |
| Fayette | 34,138 | 6,950 | 55,578 | 50,787 | 2.40 |
| Greene | 8,569 | 6,987 | 18,510 | 14,141 | 2.29 |
| Indiana | 25,671 | 9,423 | 45,425 | 34,596 | 2.38 |
| Lawrence | 25,295 | 5,217 | 41,210 | 34,811 | 2.36 |
| Washington | 73,396 | 23,891 | 126,197 | 86,246 | 2.42 |
| Westmoreland | 108,194 | 25,352 | 188,855 | 150,737 | 2.31 |
| SPC Region | 1,080,302 | 184,607 | 1,627,656 | 1,086,999 | 2.30 |

**Cycle 11 forecast (adopted by th**

City of Pittsburgh and county totals ar

Sorted County, Municipality

NOTE: column names in yellow cells are for m

| | | 2025 | | | | | | | | 2030 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | WORKPLACE EMPLOYMENT | | | | | | | | | | WORKPLACE EMPLOYMENT | | | | |
| bunty(or Pittsburgh City | Municipality (or Pittsburgh neighborhood cluster) | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| 0 | 0 | gqpop_25 | totpop_25 | retemp_25 | mfgemp_25 | servemp_25 | othemp_25 | totemp_25 | hholds_30 | avgsize_30 | gqpop_30 | totpop_30 | retemp_30 | mfgemp_30 | servemp_30 | othemp_30 | totemp_30 |
| Beaver | Beaver Falls City | 1,185 | 8,367 | 993 | 309 | 3,351 | 1,337 | 5,990 | 3,028 | 2.42 | 1,185 | 8,520 | 975 | 252 | 3,355 | 1,321 | 5,903 |
| Beaver | Big Beaver Borough | 0 | 1,879 | 25 | 3 | 1,073 | 310 | 1,411 | 829 | 2.37 | 0 | 1,965 | 23 | 2 | 1,137 | 354 | 1,516 |
| Beaver | Eastvale Borough | 0 | 211 | 36 | 0 | 11 | 11 | 58 | 73 | 2.89 | 0 | 211 | 36 | 0 | 11 | 10 | 57 |
| Beaver | North Sewickley Township | 3 | 5,321 | 177 | 8 | 800 | 217 | 1,202 | 2,142 | 2.52 | 3 | 5,400 | 172 | 7 | 798 | 213 | 1,190 |
| Beaver | Patterson Heights Borough | 0 | 606 | 31 | 1 | 131 | 11 | 174 | 256 | 2.42 | 0 | 620 | 31 | 0 | 133 | 9 | 173 |
| Beaver | Patterson Township | 8 | 2,945 | 13 | 0 | 608 | 31 | 652 | 1,342 | 2.23 | 8 | 3,007 | 13 | 0 | 606 | 29 | 648 |
| Beaver | West Mayfield Borough | 0 | 1,304 | 5 | 33 | 106 | 23 | 167 | 525 | 2.57 | 0 | 1,349 | 5 | 27 | 113 | 21 | 166 |
| Beaver | White Township | 8 | 1,291 | 4 | 0 | 86 | 23 | 113 | 590 | 2.21 | 8 | 1,309 | 4 | 0 | 87 | 20 | 111 |

| | 2025 | | | | | | | | 2030 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | WORKPLACE EMPLOYMENT | | | | | | | | | | WORKPLACE EMPLOYMENT | | | | |
| County/region totals | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| Pittsburgh, City of | 23,939 | 311,659 | 31,555 | 6,974 | 316,613 | 17,096 | 372,238 | 141,330 | 2.11 | 23,939 | 321,969 | 31,463 | 6,456 | 320,875 | 16,694 | 375,488 |
| Allegheny (Excludes City of Pittsburgh) | 11,413 | 938,526 | 107,804 | 27,741 | 358,847 | 58,814 | 553,206 | 417,727 | 2.28 | 11,413 | 963,797 | 106,063 | 25,548 | 363,733 | 56,898 | 552,242 |
| Armstrong | 757 | 63,052 | 4,016 | 1,840 | 13,625 | 4,553 | 24,034 | 26,625 | 2.32 | 757 | 62,573 | 3,916 | 1,692 | 13,751 | 4,408 | 23,767 |
| Beaver | 2,951 | 165,660 | 12,932 | 5,893 | 44,795 | 7,359 | 70,979 | 70,860 | 2.35 | 2,951 | 169,639 | 12,750 | 5,429 | 45,190 | 7,175 | 70,544 |
| Butler | 5,584 | 193,864 | 21,255 | 11,224 | 69,246 | 15,854 | 117,579 | 82,415 | 2.37 | 5,584 | 201,009 | 21,043 | 10,245 | 70,135 | 15,274 | 116,697 |
| Fayette | 4,697 | 126,620 | 10,262 | 3,550 | 33,774 | 6,648 | 54,234 | 50,898 | 2.40 | 4,697 | 126,610 | 10,026 | 3,265 | 34,094 | 6,491 | 53,876 |
| Greene | 4,375 | 36,790 | 2,475 | 352 | 8,482 | 6,601 | 17,910 | 14,344 | 2.27 | 4,375 | 36,981 | 2,411 | 327 | 8,552 | 6,405 | 17,695 |
| Indiana | 5,923 | 88,299 | 7,810 | 2,172 | 25,548 | 9,334 | 44,864 | 35,815 | 2.37 | 5,923 | 90,698 | 7,726 | 2,005 | 25,899 | 9,423 | 45,053 |
| Lawrence | 2,361 | 84,432 | 6,556 | 3,622 | 25,228 | 4,985 | 40,391 | 35,418 | 2.35 | 2,361 | 85,425 | 6,446 | 3,367 | 25,644 | 4,831 | 40,288 |
| Washington | 5,255 | 213,562 | 19,321 | 8,429 | 73,404 | 23,428 | 124,582 | 89,310 | 2.41 | 5,255 | 220,429 | 19,089 | 7,789 | 74,543 | 23,174 | 124,595 |
| Westmoreland | 8,562 | 357,066 | 36,547 | 16,215 | 107,927 | 24,440 | 185,129 | 155,475 | 2.30 | 8,562 | 366,299 | 36,028 | 14,930 | 109,373 | 23,578 | 183,909 |
| SPC Region | 75,817 | 2,579,530 | 260,533 | 88,012 | 1,077,489 | 179,112 | 1,605,146 | 1,120,217 | 2.29 | 75,817 | 2,645,429 | 256,961 | 81,053 | 1,091,789 | 174,351 | 1,604,154 |

**Cycle 11 forecast (adopted by th**

City of Pittsburgh and county totals ar

Sorted County, Municipality

NOTE: column names in yellow cells are for m

| | | 2035 | | | | | | | | | 2040 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WORKPLACE EMPLOYMENT | | | | | | | | | WORKPLACE EMPLOYMENT | | | | |
| ounty(or Pittsburgh City | Municipality (or Pittsburgh neighborhood cluster) | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| 0 | 0 | hholds_35 | avgsize_35 | gqpop_35 | totpop_35 | retemp_35 | mfgemp_35 | servemp_35 | othemp_35 | totemp_35 | hholds_40 | avgsize_40 | gqpop_40 | totpop_40 | retemp_40 | mfgemp_40 | servemp_40 | othemp_40 | totemp_40 |
| Beaver | Beaver Falls City | 3,081 | 2.43 | 1,185 | 8,687 | 976 | 239 | 3,442 | 1,314 | 5,971 | 3,129 | 2.45 | 1,185 | 8,839 | 987 | 229 | 3,550 | 1,310 | 6,076 |
| Beaver | Big Beaver Borough | 844 | 2.36 | 0 | 1,992 | 23 | 3 | 1,143 | 349 | 1,518 | 862 | 2.35 | 0 | 2,025 | 24 | 2 | 1,159 | 349 | 1,534 |
| Beaver | Eastvale Borough | 73 | 2.92 | 0 | 213 | 36 | 0 | 12 | 8 | 56 | 74 | 2.89 | 0 | 214 | 35 | 0 | 12 | 7 | 54 |
| Beaver | North Sewickley Township | 2,207 | 2.50 | 3 | 5,531 | 173 | 7 | 821 | 211 | 1,212 | 2,262 | 2.49 | 3 | 5,632 | 175 | 7 | 848 | 211 | 1,241 |
| Beaver | Patterson Heights Borough | 265 | 2.40 | 0 | 635 | 31 | 0 | 137 | 8 | 176 | 271 | 2.38 | 0 | 645 | 31 | 0 | 139 | 6 | 176 |
| Beaver | Patterson Township | 1,377 | 2.22 | 8 | 3,065 | 13 | 0 | 616 | 27 | 656 | 1,404 | 2.20 | 8 | 3,100 | 13 | 0 | 628 | 27 | 668 |
| Beaver | West Mayfield Borough | 539 | 2.58 | 0 | 1,389 | 5 | 24 | 121 | 19 | 169 | 550 | 2.58 | 0 | 1,418 | 5 | 22 | 128 | 18 | 173 |
| Beaver | White Township | 600 | 2.20 | 8 | 1,327 | 4 | 0 | 90 | 18 | 112 | 607 | 2.19 | 8 | 1,338 | 4 | 0 | 93 | 16 | 113 |

| | 2035 | | | | | | | | | 2040 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | WORKPLACE EMPLOYMENT | | | | | | | | | WORKPLACE EMPLOYMENT | | | | |
| County/region totals | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| Pittsburgh, City of | 146,977 | 2.10 | 23,939 | 333,067 | 32,272 | 6,217 | 332,566 | 16,985 | 388,040 | 152,774 | 2.10 | 23,939 | 344,473 | 33,601 | 6,111 | 347,332 | 17,759 | 404,803 |
| Allegheny (Excludes City of Pittsburgh) | 430,866 | 2.27 | 11,413 | 989,969 | 107,535 | 24,553 | 377,146 | 57,268 | 566,502 | 443,757 | 2.26 | 11,413 | 1,015,104 | 110,874 | 24,079 | 394,297 | 59,272 | 588,522 |
| Armstrong | 26,934 | 2.31 | 757 | 63,017 | 3,920 | 1,618 | 14,169 | 4,392 | 24,099 | 27,335 | 2.30 | 757 | 63,683 | 3,963 | 1,578 | 14,681 | 4,443 | 24,665 |
| Beaver | 73,039 | 2.34 | 2,951 | 174,012 | 12,821 | 5,169 | 46,364 | 7,021 | 71,375 | 74,901 | 2.33 | 2,951 | 177,584 | 12,989 | 4,991 | 47,747 | 6,954 | 72,681 |
| Butler | 86,517 | 2.35 | 5,584 | 209,286 | 21,405 | 9,760 | 72,638 | 15,237 | 119,040 | 90,241 | 2.34 | 5,584 | 216,520 | 21,957 | 9,485 | 75,624 | 15,462 | 122,528 |
| Fayette | 51,424 | 2.39 | 4,697 | 127,595 | 10,042 | 3,136 | 35,096 | 6,496 | 54,770 | 51,815 | 2.38 | 4,697 | 128,255 | 10,138 | 3,060 | 36,267 | 6,578 | 56,043 |
| Greene | 14,671 | 2.25 | 4,375 | 37,450 | 2,420 | 311 | 8,786 | 6,420 | 17,937 | 15,000 | 2.24 | 4,375 | 37,912 | 2,460 | 300 | 9,083 | 6,551 | 18,394 |
| Indiana | 37,127 | 2.35 | 5,923 | 93,276 | 7,848 | 1,916 | 26,760 | 9,737 | 46,261 | 38,100 | 2.34 | 5,923 | 95,010 | 8,009 | 1,858 | 27,696 | 10,187 | 47,750 |
| Lawrence | 36,507 | 2.33 | 2,361 | 87,531 | 6,496 | 3,240 | 26,539 | 4,759 | 41,034 | 37,490 | 2.32 | 2,361 | 89,361 | 6,599 | 3,161 | 27,558 | 4,732 | 42,050 |
| Washington | 92,809 | 2.40 | 5,255 | 228,261 | 19,440 | 7,486 | 77,373 | 23,696 | 127,995 | 96,068 | 2.40 | 5,255 | 235,444 | 20,066 | 7,330 | 80,825 | 24,756 | 132,977 |
| Westmoreland | 161,336 | 2.29 | 8,562 | 377,950 | 36,450 | 14,312 | 113,058 | 23,403 | 187,223 | 166,525 | 2.28 | 8,562 | 387,880 | 37,175 | 13,962 | 117,387 | 23,596 | 192,120 |
| SPC Region | 1,158,207 | 2.28 | 75,817 | 2,721,414 | 260,649 | 77,718 | 1,130,495 | 175,414 | 1,644,276 | 1,194,006 | 2.27 | 75,817 | 2,791,226 | 267,831 | 75,915 | 1,178,497 | 180,290 | 1,702,533 |

**Cycle 11 forecast (adopted by th**
City of Pittsburgh and county totals ar
Sorted County, Municipality

NOTE: column names in yellow cells are for m

| | | | 2045 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | WORKPLACE EMPLOYMENT | | | | | | |
| unty(or Pittsburgh City) | Municipality (or Pittsburgh neighborhood cluster) | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| 0 | 0 | hhlds_45 | avgsize_45 | gqpop_45 | totpop_45 | retemp_45 | mfgemp_45 | servemp_45 | othemp_45 | totemp_45 |
| Beaver | Beaver Falls City | 3,188 | 2.46 | 1,185 | 9,019 | 1,006 | 220 | 3,685 | 1,310 | 6,221 |
| Beaver | Big Beaver Borough | 876 | 2.34 | 0 | 2,050 | 24 | 2 | 1,172 | 347 | 1,545 |
| Beaver | Eastvale Borough | 74 | 2.91 | 0 | 215 | 36 | 0 | 11 | 7 | 54 |
| Beaver | North Sewickley Township | 2,302 | 2.47 | 3 | 5,700 | 176 | 6 | 871 | 210 | 1,263 |
| Beaver | Patterson Heights Borough | 276 | 2.36 | 0 | 651 | 31 | 0 | 143 | 6 | 180 |
| Beaver | Patterson Township | 1,420 | 2.19 | 8 | 3,114 | 13 | 0 | 637 | 26 | 676 |
| Beaver | West Mayfield Borough | 556 | 2.59 | 0 | 1,440 | 6 | 21 | 134 | 17 | 178 |
| Beaver | White Township | 614 | 2.18 | 8 | 1,349 | 4 | 0 | 97 | 16 | 117 |

| | 2045 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | WORKPLACE EMPLOYMENT | | | | |
| County/region totals | Households | Average household size | Group-quarter population | Total population | Retail | Manufac-turing | Services | Other | Total |
| Pittsburgh, City of | 159,173 | 2.09 | 23,939 | 357,154 | 35,092 | 6,020 | 363,751 | 18,746 | 423,609 |
| Allegheny (Excludes City of Pittsburgh) | 458,330 | 2.25 | 11,413 | 1,043,734 | 114,757 | 23,650 | 413,193 | 62,025 | 613,625 |
| Armstrong | 27,651 | 2.29 | 757 | 64,156 | 3,993 | 1,537 | 15,215 | 4,538 | 25,283 |
| Beaver | 76,453 | 2.32 | 2,951 | 180,383 | 13,147 | 4,830 | 49,164 | 6,949 | 74,090 |
| Butler | 93,322 | 2.32 | 5,584 | 222,117 | 22,436 | 9,219 | 78,674 | 15,765 | 126,094 |
| Fayette | 52,019 | 2.38 | 4,697 | 128,468 | 10,177 | 2,973 | 37,415 | 6,682 | 57,247 |
| Greene | 15,318 | 2.22 | 4,375 | 38,341 | 2,491 | 290 | 9,405 | 6,750 | 18,936 |
| Indiana | 38,684 | 2.32 | 5,923 | 95,804 | 8,125 | 1,801 | 28,598 | 10,715 | 49,239 |
| Lawrence | 38,221 | 2.31 | 2,361 | 90,583 | 6,669 | 3,088 | 28,582 | 4,722 | 43,061 |
| Washington | 98,910 | 2.39 | 5,255 | 241,574 | 20,650 | 7,177 | 84,430 | 26,085 | 138,342 |
| Westmoreland | 170,375 | 2.27 | 8,562 | 394,643 | 37,705 | 13,608 | 121,626 | 23,891 | 196,830 |
| SPC Region | 1,228,456 | 2.26 | 75,817 | 2,856,957 | 275,242 | 74,193 | 1,230,053 | 186,868 | 1,766,356 |

## State-Level Census Counts, 1900 to 2020

| State | 1900 | 1910 | 1920 | 1980 | 1990 | 2000 | 2010 | 2020 |
|---|---|---|---|---|---|---|---|---|
| United States | 76,212,168 | 92,228,496 | 106,021,537 | 226,545,805 | 248,709,873 | 281,421,906 | 308,745,538 | 331,449,281 |
| Alabama | 1,828,697 | 2,138,093 | 2,348,174 | 3,893,888 | 4,040,587 | 4,447,100 | 4,779,736 | 5,024,279 |
| Alaska | 63,592 | 64,356 | 55,036 | 401,851 | 550,043 | 626,932 | 710,231 | 733,391 |
| Arizona | 122,931 | 204,354 | 334,162 | 2,718,215 | 3,665,228 | 5,130,632 | 6,392,017 | 7,151,502 |
| Arkansas | 1,311,564 | 1,574,449 | 1,752,204 | 2,286,435 | 2,350,725 | 2,673,400 | 2,915,918 | 3,011,524 |
| California | 1,485,053 | 2,377,549 | 3,426,861 | 23,667,902 | 29,760,021 | 33,871,648 | 37,253,956 | 39,538,223 |
| Colorado | 539,700 | 799,024 | 939,629 | 2,889,964 | 3,294,394 | 4,301,261 | 5,029,196 | 5,773,714 |
| Connecticut | 908,420 | 1,114,756 | 1,380,631 | 3,107,576 | 3,287,116 | 3,405,565 | 3,574,097 | 3,605,944 |
| Delaware | 184,735 | 202,322 | 223,003 | 594,338 | 666,168 | 783,600 | 897,934 | 989,948 |
| District of Columbia | 278,718 | 331,069 | 437,571 | 638,333 | 606,900 | 572,059 | 601,723 | 689,545 |
| Florida | 528,542 | 752,619 | 968,470 | 9,746,324 | 12,937,926 | 15,982,378 | 18,801,310 | 21,538,187 |
| Georgia | 2,216,331 | 2,609,121 | 2,895,832 | 5,463,105 | 6,478,216 | 8,186,453 | 9,687,653 | 10,711,908 |
| Hawaii | 154,001 | 191,874 | 255,881 | 964,691 | 1,108,229 | 1,211,537 | 1,360,301 | 1,455,271 |
| Idaho | 161,772 | 325,594 | 431,866 | 943,935 | 1,006,749 | 1,293,953 | 1,567,582 | 1,839,106 |
| Illinois | 4,821,550 | 5,638,591 | 6,485,280 | 11,426,518 | 11,430,602 | 12,419,293 | 12,830,632 | 12,812,508 |
| Indiana | 2,516,462 | 2,700,876 | 2,930,390 | 5,490,224 | 5,544,159 | 6,080,485 | 6,483,802 | 6,785,528 |
| Iowa | 2,231,853 | 2,224,771 | 2,404,021 | 2,913,808 | 2,776,755 | 2,926,324 | 3,046,355 | 3,190,369 |
| Kansas | 1,470,495 | 1,690,949 | 1,769,257 | 2,363,679 | 2,477,574 | 2,688,418 | 2,853,118 | 2,937,880 |
| Kentucky | 2,147,174 | 2,289,905 | 2,416,630 | 3,660,777 | 3,685,296 | 4,041,769 | 4,339,367 | 4,505,836 |
| Louisiana | 1,381,625 | 1,656,388 | 1,798,509 | 4,205,900 | 4,219,973 | 4,468,976 | 4,533,372 | 4,657,757 |
| Maine | 694,466 | 742,371 | 768,014 | 1,124,660 | 1,227,928 | 1,274,923 | 1,328,361 | 1,362,359 |
| Maryland | 1,188,044 | 1,295,346 | 1,449,661 | 4,216,975 | 4,781,468 | 5,296,486 | 5,773,552 | 6,177,224 |
| Massachusetts | 2,805,346 | 3,366,416 | 3,852,356 | 5,737,037 | 6,016,425 | 6,349,097 | 6,547,629 | 7,029,917 |
| Michigan | 2,420,982 | 2,810,173 | 3,668,412 | 9,262,078 | 9,295,297 | 9,938,444 | 9,883,640 | 10,077,331 |
| Minnesota | 1,751,394 | 2,075,708 | 2,387,125 | 4,075,970 | 4,375,099 | 4,919,479 | 5,303,925 | 5,706,494 |
| Mississippi | 1,551,270 | 1,797,114 | 1,790,618 | 2,520,638 | 2,573,216 | 2,844,658 | 2,967,297 | 2,961,279 |
| Missouri | 3,106,665 | 3,293,335 | 3,404,055 | 4,916,686 | 5,117,073 | 5,595,211 | 5,988,927 | 6,154,913 |
| Montana | 243,329 | 376,053 | 548,889 | 786,690 | 799,065 | 902,195 | 989,415 | 1,084,225 |
| Nebraska | 1,066,300 | 1,192,214 | 1,296,372 | 1,569,825 | 1,578,385 | 1,711,263 | 1,826,341 | 1,961,504 |
| Nevada | 42,335 | 81,875 | 77,407 | 800,493 | 1,201,833 | 1,998,257 | 2,700,551 | 3,104,614 |
| New Hampshire | 411,588 | 430,572 | 443,083 | 920,610 | 1,109,252 | 1,235,786 | 1,316,470 | 1,377,529 |
| New Jersey | 1,883,669 | 2,537,167 | 3,155,900 | 7,364,823 | 7,730,188 | 8,414,350 | 8,791,894 | 9,288,994 |
| New Mexico | 195,310 | 327,301 | 360,350 | 1,302,894 | 1,515,069 | 1,819,046 | 2,059,179 | 2,117,522 |
| New York | 7,268,894 | 9,113,614 | 10,385,227 | 17,558,072 | 17,990,455 | 18,976,457 | 19,378,102 | 20,201,249 |
| North Carolina | 1,893,810 | 2,206,287 | 2,559,123 | 5,881,766 | 6,628,637 | 8,049,313 | 9,535,483 | 10,439,388 |
| North Dakota | 319,146 | 577,056 | 646,872 | 652,717 | 638,800 | 642,200 | 672,591 | 779,094 |
| Ohio | 4,157,545 | 4,767,121 | 5,759,394 | 10,797,630 | 10,847,115 | 11,353,140 | 11,536,504 | 11,799,448 |
| Oklahoma | 790,391 | 1,657,155 | 2,028,283 | 3,025,290 | 3,145,585 | 3,450,654 | 3,751,351 | 3,959,353 |
| Oregon | 413,536 | 672,765 | 783,389 | 2,633,105 | 2,842,321 | 3,421,399 | 3,831,074 | 4,237,256 |
| Pennsylvania | 6,302,115 | 7,665,111 | 8,720,017 | 11,863,895 | 11,881,643 | 12,281,054 | 12,702,379 | 13,002,700 |
| Rhode Island | 428,556 | 542,610 | 604,397 | 947,154 | 1,003,464 | 1,048,319 | 1,052,567 | 1,097,379 |
| South Carolina | 1,340,316 | 1,515,400 | 1,683,724 | 3,121,820 | 3,486,703 | 4,012,012 | 4,625,364 | 5,118,425 |
| South Dakota | 401,570 | 583,888 | 636,547 | 690,768 | 696,004 | 754,844 | 814,180 | 886,667 |
| Tennessee | 2,020,616 | 2,184,789 | 2,337,885 | 4,591,120 | 4,877,185 | 5,689,283 | 6,346,105 | 6,910,840 |
| Texas | 3,048,710 | 3,896,542 | 4,663,228 | 14,229,191 | 16,986,510 | 20,851,820 | 25,145,561 | 29,145,505 |
| Utah | 276,749 | 373,351 | 449,396 | 1,461,037 | 1,722,850 | 2,233,169 | 2,763,885 | 3,271,616 |
| Vermont | 343,641 | 355,956 | 352,428 | 511,456 | 562,758 | 608,827 | 625,741 | 643,077 |
| Virginia | 1,854,184 | 2,061,612 | 2,309,187 | 5,346,818 | 6,187,358 | 7,078,515 | 8,001,024 | 8,631,393 |
| Washington | 518,103 | 1,141,990 | 1,356,621 | 4,132,156 | 4,866,692 | 5,894,121 | 6,724,540 | 7,705,281 |
| West Virginia | 958,800 | 1,221,119 | 1,463,701 | 1,949,644 | 1,793,477 | 1,808,344 | 1,852,994 | 1,793,716 |
| Wisconsin | 2,069,042 | 2,333,860 | 2,632,067 | 4,705,767 | 4,891,769 | 5,363,675 | 5,686,986 | 5,893,718 |
| Wyoming | 92,531 | 145,965 | 194,402 | 469,557 | 453,588 | 493,782 | 563,626 | 576,851 |

Source: STATS Indiana, using U.S. Census Bureau data

| | *Beaver Falls, PA Data & Demographics (As of July 1, 2021)* | *Township Of North Sewickley Data & Demographics (As of July 1, 2021)* | *Township Of Patterson Data & Demographics (As of July 1, 2021)* | *Big Beaver, PA Data & Demographics (As of July 1, 2021)* | *Eastvale, PA Data & Demographics (As of July 1, 2021)* | *West Mayfield, PA Data & Demographics (As of July 1, 2021)* | *Township Of White Data & Demographics (As of July 1, 2021)* | *Patterson Heights, PA Data & Demographics (As of July 1, 2021)* |
|---|---|---|---|---|---|---|---|---|
| **POPULATION** | | | | | | | | |
| Total Population | 8,578 (100%) | 5,264 (100%) | 2,960 (100%) | 1,912 (100%) | 209 (100%) | 1,106 (100%) | 1,288 (100%) | 542 (100%) |
| Population in Households | 7,488 (87.3%) | 5,264 (100.0%) | 2,953 (99.8%) | 1,906 (99.7%) | 200 (95.7%) | 1,102 (99.6%) | 1,288 (100.0%) | 542 (100.0%) |
| Population in Families | 5,434 (63.3%) | 4,423 (84.0%) | 2,222 (75.1%) | 1,557 (81.4%) | 166 (79.4%) | 890 (80.5%) | 941 (73.1%) | 458 (84.5%) |
| Population in Group Quarters[1] | 1,090 (12.7%) | 0 | 7 ( 0.2%) | 6 ( 0.3%) | 9 ( 4.3%) | 4 ( 0.4%) | 0 | 0 |
| Population Density | 4,031 | 254 | 1,809 | 108 | 2,312 | 1,391 | 1,847 | 2,358 |
| Diversity Index[2] | 46 | 9 | 16 | 10 | 11 | 19 | 32 | 13 |
| **INCOME** | | | | | | | | |
| Median Household Income | $36,115 | $75,058 | $58,967 | $57,276 | $79,909 | $56,878 | $42,534 | $98,135 |
| Average Household Income | $48,974 | $93,577 | $79,058 | $71,166 | $98,788 | $76,610 | $55,580 | $132,983 |
| % of Income for Mortgage[4] | 9% | 9% | 10% | 10% | 8% | 8% | 10% | 10% |
| Per Capita Income | $19,646 | $37,722 | $37,151 | $31,178 | $39,767 | $32,144 | $25,416 | $57,913 |
| Wealth Index[5] | 35 | 107 | 85 | 72 | 137 | 69 | 41 | 239 |
| **HOUSING** | | | | | | | | |
| Total HU (Housing Units) | 4,022 (100%) | 2,304 (100%) | 1,510 (100%) | 903 (100%) | 103 (100%) | 499 (100%) | 650 (100%) | 244 (100%) |
| Owner Occupied HU | 1,637 (40.7%) | 1,841 (79.9%) | 974 (64.5%) | 718 (79.5%) | 80 (77.7%) | 316 (63.3%) | 321 (49.4%) | 210 (86.1%) |
| Renter Occupied HU | 1,696 (42.2%) | 281 (12.2%) | 432 (28.6%) | 121 (13.4%) | 10 ( 9.7%) | 148 (29.7%) | 268 (41.2%) | 17 ( 7.0%) |
| Vacant Housing Units | 689 (17.1%) | 182 ( 7.9%) | 104 ( 6.9%) | 64 ( 7.1%) | 14 (13.6%) | 35 ( 7.0%) | 61 ( 9.4%) | 17 ( 7.0%) |
| Median Home Value | $76,418 | $168,672 | $143,907 | $140,462 | $158,750 | $104,587 | $105,278 | $230,851 |
| Average Home Value | $94,792 | $200,530 | $165,844 | $153,656 | $214,557 | $114,082 | $116,978 | $247,406 |
| Housing Affordability Index[3] | 212 | 224 | 207 | 205 | 321 | 258 | 191 | 228 |
| **HOUSEHOLDS** | | | | | | | | |
| Total Households | 3,333 | 2,122 | 1,406 | 839 | 89 | 464 | 589 | 227 |
| Average Household Size | 2.25 | 2.48 | 2.1 | 2.27 | 2.25 | 2.38 | 2.19 | 2.39 |
| Family Households | 1,871 | 1,553 | 823 | 590 | 63 | 308 | 347 | 162 |
| Average Family Size | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

# PENNSYLVANIA PUBLIC UTILITY COMMISSION

Public Meeting held October 7, 2021

Docket Number: M-2021-3028488

# BUREAU OF TECHNICAL UTILITY SERVICES

# REPORT ON THE QUARTERLY EARNINGS

# OF JURISDICTIONAL UTILITIES

# FOR THE YEAR ENDED

# June 30, 2021

Gladys Brown Dutrieuille, Chairman
John F. Coleman, Jr., Commissioner
Ralph V. Yanora, Commissioner

The market indicated common equity cost rate range consists of data used from the barometer groups and is based on a series of calculations to average the DCF methods.

| **Market Based Returns on Common Equity [1]** | |
|---|---|
| September 10, 2021 | |
| **Water Company Barometer Group** | |
| | Cost Rates |
| | % |
| (1) Current DCF | 8.50 |
| (2) 52-Week Average DCF | 8.61 |
| (3) Average DCF | 8.55 |
| (4) Market Indicated Common Equity Cost Rate Range @ 1 standard deviation around the mean.[2] | 6.40-10.71 |
| (5) CAPM Check of DCF Reasonableness | 9.99 |
| (6) Recent Commission Approved ROEs[3]: *None within last two years | * |
| (7) Distribution System Improvement Charge (DSIC) Return[4]: | **9.80%** |

[1] As calculated by the Bureau of Technical Utility Services

[2] Standard Deviation of 14 DCF observations

[3] ROEs from base rate cases within last two years, fully litigated or stipulated for DSIC purposes

[4] Commission authorized Return on Equity (ROE) for DSIC purposes

Any questions concerning DSIC should be directed to Marc Hoffer of the Bureau of Technical Utility Services at (717) 787-1869.

| WORKING NOTES | | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| GROSS Property, plant and equipment | - | - | - | | 12,898,487 | 13,087,916 | 13,276,525 | 13,467,851 | 13,661,935 | 13,858,815 | 14,058,533 |
| Accumulated Depreciation | - | - | - | | 5,047,800 | 5,255,187 | 5,449,667 | 5,646,950 | 5,847,076 | 6,050,086 | 6,256,022 |
| NET PPE | - | - | - | | 7,850,687 | 7,832,729 | 7,826,858 | 7,820,901 | 7,814,859 | 7,808,729 | 7,802,511 |
| Total Debt | - | - | - | - | - | - | | | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | - | | | | |
| Depreciation / GROSS PPE | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 1.73% | | | | 0 | 0 |
| | | | | Muni CAPX | 0 | 222,858 | 0 | 0 | 0 | 0 | 0 |
| | | | IOU savings | 0% | | | 100% | 100% | 100% | 100% | 100% |
| | | | | CAPX/Prior Yr. GROSS PPE | | | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% |
| | | | | CAPX | 87,357 | 222,858 | 221,893 | 225,090 | 228,334 | 231,624 | 234,962 |
| | | | | Dep rate | 0.00% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% |
| | | | | Half yr. Dep | 0.00% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% |
| | | | | Dep on CAPX | - | 1,928 | 1,919 | 1,947 | 1,975 | 2,004 | 2,032 |
| | | | | Rate of retirement | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | | | | Retired property | 13,104 | 33,429 | 33,284 | 33,764 | 34,250 | 34,744 | 35,244 |
| | | | | Dep on Retired property | - | 578 | 576 | 584 | 593 | 601 | 610 |
| | | | | Dep on Prior yr. GROSS | 243,460 | 239,466 | 226,421 | 229,684 | 232,994 | 236,351 | 239,757 |
| | | | | Total Dep | 243,460 | 240,816 | 227,764 | 231,047 | 234,376 | 237,754 | 241,180 |
| BEAVER | | | | | | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | | | | | | |
| | | | | part of OCN | | | | | | | |
| | | | | NET PPE | | | PURTA | 0.001527765 | | | |
| | | | | Rev | | | Reg Assessment Fee | 0.005652534 | | | |

| | | | | | 2020 | 2021 | 1<br>2022 | 2<br>2023 | 3<br>2024 | 4<br>2025 | 5<br>2026 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BEAVER | | | | | | | | | | | |
| | FIX CIP | | | CIP | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | | | | | part of OCN | = to DepX | | | | | |
| | | | | | 87,357 | 222,858 | | | | | |
| | | | | | | | | | 191 | 71 | 72 |
| | | | | | 2020 | 2021 | | | | | |
| | | | | | | - | - | 4,750.00 | 9,500.00 | 14,250.00 | 71,250.00 |
| Sewer Rental Charges | 0 | 0 | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 2,349,450 | 2,350,140 | 2,351,290 | |
| EDUs | 0 | 0 | 0 | 0 | 5,107 | 5,107 | 5107 | 5108 | 5110 | 5113 | 5128 |
| | | | | | 0 | 0 | 0 | 1 | 2 | 3 | 15 |
| | | 0 | 0 | 0 | 2553.5 | 5107 | 5107 | 5107.5 | 5109 | 5111.5 | |
| | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 591.9651459 | | | | | | |
| | | | | | | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | |
| | | #DIV/0! | #DIV/0! | #DIV/0! | 1183.930292 | 591.9651459 | | | | | |
| BEAVER | | | | | C | 3,259 | 9 | | | | |
| | | | | | E | 5,107 | 15 | | | | |
| | | | | | | 0.64 | | | | | |
| | | | | 1742000 | | | | | | | |
| | | Customer Growth | | | | 0 | 0 | 1 | 1 | 2 | 0.29% |
| | | Delivered to Customer | - | 18.41 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| BEAVER | | Customers | 3,259 | 3,259 | 3,259 | 3,259 | 3,259 | 3,260 | 3,261 | 3,263 | 3,272 |
| | | Total Revenue (Less TAP) | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,557 | 3,101,598 | 3,107,047 |
| | | | | | | | | | | 102.48% | |
| | | avg CUST rev | 937.23 | 965.75 | 927.64 | 927.64 | 927.64 | 927.49 | 927.49 | 950.54 | 949.45 |
| | | avg CUST flow | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | avg EDU rev | #DIV/0! | #DIV/0! | 591.97 | 591.97 | 591.97 | 591.94 | 591.89 | 606.61 | 605.90 |
| | | avg EDU flow | #DIV/0! | #DIV/0! | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| WORKING NOTES | | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| | | Rev Calculated | | | | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,094 | 3,025,484 | 3,106,095 |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|
| | Change | | | 2.5% | | |
| | $ 927.64 | $ 927.64 | $ 927.64 | $ 950.83 | $ 950.83 | $ 950.83 |
| | | | | $ - | $ 23.19 | $ - | $ - |
| | - | - | 464 | 3,100,171 | 927 | 4,497 |
| | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,557 | 3,101,598 | 3,107,047 |
| | - | - | - | 75,614 | - | - |

| Prior yr | | | | | | | |
|---|---|---|---|---|---|---|---|
| NET PURTA | 0.1432% | | 11,216 | 11,208 | 11,200 | 11,191 | 11,182 |
| REV Reg Assessment | 0.5690% | | 17,215 | 17,215 | 17,217 | 17,653 | 17,661 |
| | | | 28,431 | 28,423 | 28,417 | 28,844 | 28,843 |

| City of Beaver Falls Wastewater System Assets | |
|---|---|
| Investor Provided ( | 8,146,961 |
| Gross PP&E | 12,898,487 |
| Net PP&E | 7,850,687 |
| Revenues | 3,025,415 |
| EBITDA | 773,752 |
| EBIT | 532,936 |
| Customers | 3,259 |
| Population | 15,580 |

| | | | | | |
|---|---|---|---|---|---|
| G PPE | - | - | 12,898,487 | 13,087,916 | |
| NPPE | - | - | 7,850,687 | 7,832,729 | |
| Cust | 3,259 | 3,259 | 3,259 | 3,259 | |

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BEAVER | | | | | | | | | | |
| LESS: EOS - Wages & Benefits | 0 | - | - | - | - | 926,870 | | 0.15 | | LESS: EOS - Wages & |
| LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | - | - | | 0.5 | | LESS: EOS - Professi |
| LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | 0 | - | 240,000 | | | | LESS: EOS - Elim |
| BEAVER | | | | | | | | | | |
| Wages | | | 0 | 0 | 0 | 926,870 | | | | |
| Professional Services | | | | | 0 | 0 | | | | |
| Eliminated Exp | | | 0 | 0 | 0 | 240,000 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| BEAVER | | | | | included in OCN | = to DepX |
| Reported CAPX - from the financials | 0 | 0 | 5,945 | 2,811 | 87,357 | 222,858 |

| | 2016 | 2017 | 2018 | 2019 | 2020 | | Assets | Per Books | Difference |
|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | - | - | - | - | 12,898,487 | | 12,898,487 | - | |
| Accumulated Depreciation | - | - | - | - | 5,047,800 | | 5,047,800 | - | |
| NET PPE | - | - | - | - | 7,850,687 | | 7,850,687 | - | 7,850,687 |

| WORKING NOTES | | | | | | | | WORKING N | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Total Debt | - | - | - | - | - | | | 222,914 | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Depreciation Rate | 0.00% | 0.00% | 0.00% | #DIV/0! | 1.73% | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | 222,914.00 | | | | | |

| | 2021 | 2022 | 2023 | 2024 | 2025 | |
|---|---|---|---|---|---|---|
| CAPX | 0 | 0 | 0 | 0 | 0 | 0 |

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | 14,261,129 | 14,466,645 | 14,675,122 | 14,886,604 | 15,101,133 | 15,318,754 | 15,539,511 | 15,763,449 | 15,990,615 | 16,221,054 | 16,454,814 | 16,691,943 | 16,932,489 | 17,176,501 | 17,424,029 |
| Accumulated Depreciation | 6,464,926 | 6,676,840 | 6,891,809 | 7,109,875 | 7,331,083 | 7,555,479 | 7,783,110 | 8,014,020 | 8,248,258 | 8,485,871 | 8,726,908 | 8,971,420 | 9,219,455 | 9,471,064 | 9,726,299 |
| NET PPE | 7,796,203 | 7,789,805 | 7,783,313 | 7,776,729 | 7,770,050 | 7,763,275 | 7,756,401 | 7,749,429 | 7,742,357 | 7,735,183 | 7,727,906 | 7,720,523 | 7,713,034 | 7,705,437 | 7,697,730 |
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation / GROSS PPE | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% |
| | 238,348 | 241,783 | 245,267 | 248,802 | 252,387 | 256,025 | 259,714 | 263,457 | 267,254 | 271,105 | 275,012 | 278,975 | 282,995 | 287,073 | 291,210 |
| | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% |
| | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% |
| | 2,062 | 2,091 | 2,122 | 2,152 | 2,183 | 2,215 | 2,247 | 2,279 | 2,312 | 2,345 | 2,379 | 2,413 | 2,448 | 2,483 | 2,519 |
| | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | 35,752 | 36,267 | 36,790 | 37,320 | 37,858 | 38,404 | 38,957 | 39,519 | 40,088 | 40,666 | 41,252 | 41,846 | 42,449 | 43,061 | 43,682 |
| | 619 | 627 | 636 | 646 | 655 | 664 | 674 | 684 | 694 | 704 | 714 | 724 | 734 | 745 | 756 |
| | 243,213 | 246,718 | 250,273 | 253,880 | 257,538 | 261,250 | 265,014 | 268,834 | 272,708 | 276,638 | 280,624 | 284,668 | 288,771 | 292,932 | 297,153 |
| | 244,656 | 248,181 | 251,758 | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |

145

BEAVER

Depreciation Expense

| | 6<br>2027 | 7<br>2028 | 8<br>2029 | 9<br>2030 | 10<br>2031 | 11<br>2032 | 12<br>2033 | 13<br>2034 | 14<br>2035 | 15<br>2036 | 16<br>2037 | 17<br>2038 | 18<br>2039 | 19<br>2040 | 20<br>2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | 56 | | | | | | | | | | | | | | |
| | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 |
| Sewer Rental Charges | | | | | | | | | | | | | | | |
| EDUs | 5143 | 5158 | 5173 | 5188 | 5203 | 5218 | 5233 | 5248 | 5263 | 5278 | 5293 | 5308 | 5323 | 5338 | 5353 |
| | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |

BEAVER

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% |
| | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| BEAVER | 3,282 | 3,291 | 3,301 | 3,311 | 3,320 | 3,330 | 3,339 | 3,349 | 3,359 | 3,369 | 3,378 | 3,388 | 3,398 | 3,408 | 3,418 |
| | 3,116,058 | 3,343,851 | 3,353,548 | 3,363,273 | 3,592,273 | 3,602,691 | 3,613,139 | 3,804,798 | 3,815,832 | 3,991,454 | 4,003,029 | 4,151,136 | 4,163,174 | 4,338,082 | 4,350,662 |
| | | 107.00% | | | | | | | | | | | | | |
| | 949.45 | 1,015.91 | 1,015.91 | 1,015.91 | 1,081.95 | 1,081.95 | 1,081.95 | 1,136.05 | 1,136.05 | 1,184.90 | 1,184.90 | 1,225.18 | 1,225.18 | 1,272.96 | 1,272.96 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 605.88 | 648.28 | 648.28 | 648.28 | 690.42 | 690.44 | 690.45 | 725.00 | 725.03 | 756.24 | 756.29 | 782.05 | 782.11 | 812.68 | 812.75 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3,111,552 | 3,120,576 | 3,348,700 | 3,358,411 | 3,368,150 | 3,597,482 | 3,607,915 | 3,618,378 | 3,810,315 | 3,821,365 | 3,997,242 | 4,008,833 | 4,157,155 | 4,169,211 | 4,344,372 |

| | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7.0% | | | 6.5% | | | 5.0% | | 4.3% | | 3.4% | | 3.9% | | 3.7% |
| | $ 1,017.38 | $ 1,017.38 | $ 1,017.38 | $ 1,083.51 | $ 1,083.51 | $ 1,083.51 | $ 1,137.69 | $ 1,137.69 | $ 1,186.61 | $ 1,186.61 | $ 1,226.96 | $ 1,226.96 | $ 1,274.81 | $ 1,274.81 | $ 1,321.98 |
| | $ 66.56 | $ - | $ - | $ 66.13 | $ - | $ - | $ 54.18 | $ - | $ 48.92 | $ - | $ 40.34 | $ - | $ 47.85 | $ - | $ 47.17 |
| | 4,505 | 4,518 | 4,849 | 4,863 | 4,877 | 5,209 | 5,224 | 5,239 | 5,517 | 5,533 | 5,788 | 5,804 | 6,019 | 6,037 | 6,290 |
| | 3,116,058 | 3,343,851 | 3,353,548 | 3,363,273 | 3,592,273 | 3,602,691 | 3,613,139 | 3,804,798 | 3,815,832 | 3,991,454 | 4,003,029 | 4,151,136 | 4,163,174 | 4,338,082 | 4,350,662 |
| | 218,124 | - | - | 218,613 | - | - | 180,657 | - | 164,081 | - | 136,103 | - | 162,364 | - | 160,975 |
| | 11,173 | 11,164 | 11,155 | 11,146 | 11,136 | 11,127 | 11,117 | 11,107 | 11,097 | 11,087 | 11,077 | 11,066 | 11,056 | 11,045 | 11,034 |
| | 17,692 | 18,984 | 19,039 | 19,094 | 20,394 | 20,453 | 20,512 | 21,599 | 21,662 | 22,659 | 22,724 | 23,564 | 23,633 | 24,625 | 24,696 |
| | 28,865 | 30,148 | 30,194 | 30,240 | 31,530 | 31,580 | 31,629 | 32,706 | 32,759 | 33,746 | 33,801 | 34,630 | 34,689 | 35,670 | 35,730 |

BEAVER

| | | | | |
|---|---|---|---|---|
| LESS: EOS - Wages & Benefits | Wages & Benefits | 15% savings | 15% | 0.15 |
| LESS: EOS - Professional Services | Net Professional Services | 50% savings | 50% | 0.5 |
| LESS: EOS - Eliminated Expenses | Line Rentals | 10% savings | 100% | 1 |

BEAVER

Wages
Professional Services

Eliminated Exp

BEAVER

Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation Rate | | | | | | | | | | | | | | | |
| Depreciation Expense | | | | | | | | | | | | | | | |
| CAPX | | | | | | | | | | | | | | | |

| | WORKING NOTES | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| GROSS Property, plant and equipment | - | - | - | | 12,898,487 | 13,087,916 | 13,276,525 | 13,467,851 | 13,661,935 | 13,858,815 | 14,058,533 |
| Accumulated Depreciation | - | - | - | | 5,047,800 | 5,255,187 | 5,449,667 | 5,646,950 | 5,847,076 | 6,050,086 | 6,256,022 |
| NET PPE | - | - | - | | 7,850,687 | 7,832,729 | 7,826,858 | 7,820,901 | 7,814,859 | 7,808,729 | 7,802,511 |
| Total Debt | - | - | - | - | - | - | | | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | - | | | | |
| Depreciation / GROSS PPE | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 1.73% | | | | 0 | 0 |
| | | | | Muni CAPX | 0 | 222,858 | 0 | 0 | 0 | 0 | 0 |
| | | | IOU savings | 0% | | | 100% | 100% | 100% | 100% | 100% |
| | | | | CAPX/Prior Yr. GROSS PPE | | | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% |
| | | | | CAPX | 87,357 | 222,858 | 221,893 | 225,090 | 228,334 | 231,624 | 234,962 |
| | | | | Dep rate | 0.00% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% |
| | | | | Half yr. Dep | 0.00% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% |
| | | | | Dep on CAPX | - | 1,928 | 1,919 | 1,947 | 1,975 | 2,004 | 2,032 |
| | | | | Rate of retirement | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | | | | Retired property | 13,104 | 33,429 | 33,284 | 33,764 | 34,250 | 34,744 | 35,244 |
| | | | | Dep on Retired property | - | 578 | 576 | 584 | 593 | 601 | 610 |
| | | | | Dep on Prior yr. GROSS | 243,460 | 239,466 | 226,421 | 229,684 | 232,994 | 236,351 | 239,757 |
| | | | | Total Dep | 243,460 | 240,816 | 227,764 | 231,047 | 234,376 | 237,754 | 241,180 |
| BEAVER | | | | | | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | | | | | | |
| | | | | part of OCN | | | | | | | |
| | | | | NET PPE | | | PURTA | 0.001527765 | | | |
| | | | | Rev | | | Reg Assessment Fee | 0.005652534 | | | |
| | | | | | 2020 | 2021 | 1<br>2022 | 2<br>2023 | 3<br>2024 | 4<br>2025 | 5<br>2026 |
| BEAVER | | | | | | | | | | | |
| | FIX CIP | | | CIP | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | | | | | part of OCN | = to DepX | | | | | |
| | | | | | 87,357 | 222,858 | | | | | |
| | | | | | | | | | 191 | 71 | 72 |
| | | | | | 2020 | 2021 | | | | | |
| | | | | | | - | - | 4,750.00 | 9,500.00 | 14,250.00 | 71,250.00 |
| Sewer Rental Charges | 0 | 0 | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 2,349,450 | 2,350,140 | 2,351,290 | |
| EDUs | 0 | 0 | 0 | 0 | 5,107 | 5,107 | 5107 | 5108 | 5110 | 5113 | 5128 |
| | | | | | 0 | 0 | 0 | 1 | 2 | 3 | 15 |
| | | 0 | 0 | 0 | 2553.5 | 5107 | 5107 | 5107.5 | 5109 | 5111.5 | |
| | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 591.9651459 | | | | | | |
| | | | | | | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | |
| | | #DIV/0! | #DIV/0! | #DIV/0! | 1183.930292 | 591.9651459 | | | | | |
| BEAVER | | | | | C | 3,259 | 9 | | | | |
| | | | | | E | 5,107 | 15 | | | | |
| | | | | | | 0.64 | | | | | |
| | | | | 1742000 | | | | | | | |
| | | Customer Growth | | | | 0 | 0 | 1 | 1 | 2 | 0.29% |
| | | Delivered to Customer | - | 18.41 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| BEAVER | | Customers | 3,259 | 3,259 | 3,259 | 3,259 | 3,259 | 3,260 | 3,261 | 3,263 | 3,272 |
| | | Total Revenue (Less TAP) | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 | 3,275,596 | 3,277,103 | 3,282,861 |
| | | | | | | | | | | 99.98% | |
| | | avg CUST rev | 937.23 | 965.75 | 927.64 | 927.64 | 927.64 | 927.49 | 1,004.48 | 1,004.32 | 1,003.18 |
| | | avg CUST flow | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | avg EDU rev | #DIV/0! | #DIV/0! | 591.97 | 591.97 | 591.97 | 591.94 | 641.02 | 640.94 | 640.18 |
| | | avg EDU flow | #DIV/0! | #DIV/0! | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| WORKING NOTES | | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| | | Rev Calculated | | | | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,094 | 3,276,600 | 3,281,855 |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|
| | Change | | 8.3% | | | 7.0% |
| | $ 927.64 | $ 927.64 | $ 927.64 | $ 1,004.63 | $ 1,004.63 | $ 1,004.63 | $ 1,074.95 |
| | | | | $ 76.99 | $ - | $ - | $ 70.32 |
| | - | - | 464 | 3,275,596 | 1,004 | 4,752 |
| | 3,023,166 | 3,023,166 | 3,023,630 | 3,275,596 | 3,277,103 | 3,282,861 |
| | - | - | 250,961 | - | - | 229,800 |

| Prior yr | | | | | | | |
|---|---|---|---|---|---|---|---|
| NET PURTA | 0.1432% | | | 11,216 | 11,208 | 11,200 | 11,191 | 11,182 |
| REV Reg Assessment | 0.5690% | | | 17,215 | 17,215 | 18,645 | 18,651 | 18,660 |
| | | | | 28,431 | 28,423 | 29,845 | 29,842 | 29,842 |

| City of Beaver Falls Wastewater System Assets | |
|---|---|
| Investor Provided ( | 8,146,961 |
| Gross PP&E | 12,898,487 |
| Net PP&E | 7,850,687 |
| Revenues | 3,025,415 |
| EBITDA | 773,752 |
| EBIT | 532,936 |
| Customers | 3,259 |
| Population | 15,580 |

| | | | | | |
|---|---|---|---|---|---|
| G PPE | - | - | 12,898,487 | 13,087,916 | |
| NPPE | - | - | 7,850,687 | 7,832,729 | |
| Cust | 3,259 | 3,259 | 3,259 | 3,259 | |

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BEAVER | | | | | | | | | | |
| LESS: EOS - Wages & Benefits | 0 | - | - | - | - | 926,870 | | 0.15 | | LESS: EOS - Wages & |
| LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | - | - | | 0.5 | | LESS: EOS - Professi |
| LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | 0 | - | 240,000 | | | | LESS: EOS - Elim |
| BEAVER | | | | | | | | | | |
| Wages | | | 0 | 0 | 0 | 926,870 | | | | |
| Professional Services | | | | | 0 | 0 | | | | |
| Eliminated Exp | | | 0 | 0 | 0 | 240,000 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| BEAVER | | | | | included in OCN | = to DepX |
| Reported CAPX - from the financials | 0 | 0 | 5,945 | 2,811 | 87,357 | 222,858 |

| | 2016 | 2017 | 2018 | 2019 | 2020 | Assets | Per Books | Difference |
|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | - | - | - | - | 12,898,487 | 12,898,487 | - | |
| Accumulated Depreciation | - | - | - | - | 5,047,800 | 5,047,800 | - | |
| NET PPE | - | - | - | - | 7,850,687 | 7,850,687 | - | 7,850,687 |

| WORKING NOTES | | | | | | | | WORKING N | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Total Debt | - | - | - | - | - | | | 222,914 | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Depreciation Rate | 0.00% | 0.00% | 0.00% | #DIV/0! | 1.73% | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | 222,914.00 | | | | | |

| | 2021 | 2022 | 2023 | 2024 | 2025 | | |
|---|---|---|---|---|---|---|---|
| CAPX | 0 | 0 | 0 | 0 | 0 | 0 | |

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | 14,261,129 | 14,466,645 | 14,675,122 | 14,886,604 | 15,101,133 | 15,318,754 | 15,539,511 | 15,763,449 | 15,990,615 | 16,221,054 | 16,454,814 | 16,691,943 | 16,932,489 | 17,176,501 | 17,424,029 |
| Accumulated Depreciation | 6,464,926 | 6,676,840 | 6,891,809 | 7,109,875 | 7,331,083 | 7,555,479 | 7,783,110 | 8,014,020 | 8,248,258 | 8,485,871 | 8,726,908 | 8,971,420 | 9,219,455 | 9,471,064 | 9,726,299 |
| NET PPE | 7,796,203 | 7,789,805 | 7,783,313 | 7,776,729 | 7,770,050 | 7,763,275 | 7,756,401 | 7,749,429 | 7,742,357 | 7,735,183 | 7,727,906 | 7,720,523 | 7,713,034 | 7,705,437 | 7,697,730 |
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation / GROSS PPE | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% | 1.70% |
| | 238,348 | 241,783 | 245,267 | 248,802 | 252,387 | 256,025 | 259,714 | 263,457 | 267,254 | 271,105 | 275,012 | 278,975 | 282,995 | 287,073 | 291,210 |
| | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% | 1.73% |
| | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% | 0.87% |
| | 2,062 | 2,091 | 2,122 | 2,152 | 2,183 | 2,215 | 2,247 | 2,279 | 2,312 | 2,345 | 2,379 | 2,413 | 2,448 | 2,483 | 2,519 |
| | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | 35,752 | 36,267 | 36,790 | 37,320 | 37,858 | 38,404 | 38,957 | 39,519 | 40,088 | 40,666 | 41,252 | 41,846 | 42,449 | 43,061 | 43,682 |
| | 619 | 627 | 636 | 646 | 655 | 664 | 674 | 684 | 694 | 704 | 714 | 724 | 734 | 745 | 756 |
| | 243,213 | 246,718 | 250,273 | 253,880 | 257,538 | 261,250 | 265,014 | 268,834 | 272,708 | 276,638 | 280,624 | 284,668 | 288,771 | 292,932 | 297,153 |
| | 244,656 | 248,181 | 251,758 | 255,386 | 259,066 | 262,800 | 266,587 | 270,429 | 274,326 | 278,279 | 282,290 | 286,357 | 290,484 | 294,670 | 298,917 |

151

BEAVER

Depreciation Expense

| | 6<br>2027 | 7<br>2028 | 8<br>2029 | 9<br>2030 | 10<br>2031 | 11<br>2032 | 12<br>2033 | 13<br>2034 | 14<br>2035 | 15<br>2036 | 16<br>2037 | 17<br>2038 | 18<br>2039 | 19<br>2040 | 20<br>2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | 56 | | | | | | | | | | | | | | |
| | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 |
| Sewer Rental Charges | | | | | | | | | | | | | | | |
| EDUs | 5143 | 5158 | 5173 | 5188 | 5203 | 5218 | 5233 | 5248 | 5263 | 5278 | 5293 | 5308 | 5323 | 5338 | 5353 |
| | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |

BEAVER

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% |
| | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| BEAVER | 3,282 | 3,291 | 3,301 | 3,311 | 3,320 | 3,330 | 3,339 | 3,349 | 3,359 | 3,369 | 3,378 | 3,388 | 3,398 | 3,408 | 3,418 |
| | 3,522,848 | 3,533,064 | 3,543,310 | 3,766,800 | 3,777,724 | 3,788,679 | 4,042,845 | 4,054,570 | 4,066,328 | 4,322,807 | 4,335,344 | 4,500,093 | 4,513,143 | 4,707,281 | 4,720,932 |
| | | 100.00% | | | | | | | | | | | | | |
| | 1,073.40 | 1,073.40 | 1,073.40 | 1,137.80 | 1,137.80 | 1,137.80 | 1,210.62 | 1,210.62 | 1,210.62 | 1,283.26 | 1,283.26 | 1,328.17 | 1,328.17 | 1,381.30 | 1,381.30 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 684.98 | 684.97 | 684.96 | 726.06 | 726.07 | 726.08 | 772.57 | 772.59 | 772.63 | 819.02 | 819.07 | 847.79 | 847.86 | 881.84 | 881.92 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| !OTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3,287,621 | 3,527,956 | 3,538,187 | 3,548,448 | 3,772,262 | 3,783,202 | 3,794,173 | 4,048,707 | 4,060,449 | 4,072,224 | 4,329,075 | 4,341,630 | 4,506,618 | 4,519,687 | 4,714,107 |

| | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 6.0% | | | 6.4% | | | 6.0% | | 3.5% | | 4.0% | | 4.2% |
| | $ 1,074.95 | $ 1,074.95 | $ 1,139.45 | $ 1,139.45 | $ 1,139.45 | $ 1,212.38 | $ 1,212.38 | $ 1,212.38 | $ 1,285.12 | $ 1,285.12 | $ 1,330.10 | $ 1,330.10 | $ 1,383.30 | $ 1,383.30 | $ 1,440.71 |
| | $ - | $ - | $ 64.50 | $ - | $ - | $ 72.92 | $ - | $ - | $ 72.74 | $ - | $ 44.98 | $ - | $ 53.20 | $ - | $ 57.41 |
| | 4,760 | 5,108 | 5,123 | 5,138 | 5,462 | 5,478 | 5,494 | 5,862 | 5,879 | 5,896 | 6,268 | 6,286 | 6,525 | 6,544 | 6,826 |
| | 3,522,848 | 3,533,064 | 3,543,310 | 3,766,800 | 3,777,724 | 3,788,679 | 4,042,845 | 4,054,570 | 4,066,328 | 4,322,807 | 4,335,344 | 4,500,093 | 4,513,143 | 4,707,281 | 4,720,932 |
| | - | - | 212,599 | - | - | 242,475 | - | - | 243,980 | - | 151,737 | - | 180,526 | - | 195,919 |
| | 11,173 | 11,164 | 11,155 | 11,146 | 11,136 | 11,127 | 11,117 | 11,107 | 11,097 | 11,087 | 11,077 | 11,066 | 11,056 | 11,045 | 11,034 |
| | 20,000 | 20,058 | 20,116 | 21,384 | 21,446 | 21,508 | 22,950 | 23,017 | 23,083 | 24,538 | 24,610 | 25,544 | 25,618 | 26,720 | 26,797 |
| | 31,173 | 31,222 | 31,271 | 32,530 | 32,582 | 32,635 | 34,067 | 34,124 | 34,180 | 35,625 | 35,687 | 36,610 | 36,674 | 37,765 | 37,831 |

BEAVER

| | | | | |
|---|---|---|---|---|
| LESS: EOS - Wages & Benefits | Wages & Benefits | 15% savings | 15% | 0.15 |
| LESS: EOS - Professional Services | Net Professional Services | 50% savings | 50% | 0.5 |
| LESS: EOS - Eliminated Expenses | Line Rentals | 10% savings | 100% | 1 |

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation Rate | | | | | | | | | | | | | | | |
| Depreciation Expense | | | | | | | | | | | | | | | |
| CAPX | | | | | | | | | | | | | | | |

| | BCWSA | | | ACSA | | | ALTOONA WATER AUTHORITY | | | CRWA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** |
| NET Property, plant and equipment | 457,544,068 | 453,174,193 | 444,814,214 | 643,502,136 | 629,097,945 | 622,343,318 | 94,458,106 | 100,528,196 | 106,598,286 | 224,285,248 | 203,420,262 | 178,131,377 |
| Operating Income | 17,944,985 | 19,821,564 | 15,116,318 | 80,147,473 | 75,382,370 | 68,023,690 | 4,082,275 | 6,157,037 | 14,022,174 | 19,083,482 | 21,336,089 | 20,313,529 |
| ROR/N PPE | 3.92% | 4.37% | 3.40% | 12.45% | 11.98% | 10.93% | 4.32% | 6.12% | 13.15% | 8.51% | 10.49% | 11.40% |
| 3-Year Average | 3.90% | | | 11.79% | | | 7.87% | | | 10.13% | | |
| Median of Each Year | | 5.08% | | | | | | | | | | |
| Median of Each Entity | | 5.42% | | | | | | | | | | |
| Conclusion | | | 5.25% | | | | | | | | | |

| | CHESTER WATER AUTHORITY | | | ERIE CITY WATER AUTHORITY | | | LASA* | | | RAWA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** | **2020** | **2019** | **2018** |
| NET Property, plant and equipment | 280,862,318 | 282,920,765 | 277,881,505 | 200,008,941 | 194,099,358 | 191,070,499 | 147,014,498 | 140,405,221 | 142,318,075 | 63,336,954 | 66,455,706 | 64,973,550 |
| Operating Income | 4,928,913 | 4,705,194 | 1,487,430 | 13,461,619 | 9,549,652 | 10,005,109 | 6,069,056 | 6,901,580 | 6,054,460 | 3,653,656 | 3,556,133 | 2,945,874 |
| ROR/N PPE | 1.75% | 1.66% | 0.54% | 6.73% | 4.92% | 5.24% | 4.13% | 4.92% | 4.25% | 5.77% | 5.35% | 4.53% |
| 3-Year Average | 1.32% | | | 5.63% | | | 4.43% | | | 5.22% | | |
| Median of Each Year | | | | | | | | | | | | |
| Median of Each Entity | | | | | | | | | | | | |
| Conclusion | | | | | | | | | | | | |

* Fiscal year 3/31

| | WCMA* | | | PITTSBURGH WATER & SEWER | | |
|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| NET Property, plant and equipment | 617,498,278 | 590,631,677 | 554,245,152 | 921,650,000 | 830,578,000 | 757,480,000 |
| Operating Income | 26,537,557 | 23,281,341 | 27,079,696 | 50,831,000 | 65,808,000 | 61,660,000 |
| ROR/N PPE | 4.30% | 3.94% | 4.89% | 5.52% | 7.92% | 8.14% |
| 3-Year Average | 4.38% | | | 7.19% | | |
| Median of Each Year | | | | | | |
| Median of Each Entity | | | | | | |
| Conclusion | | | | | | |

*Fiscal Year 3/31

# BUCKS COUNTY WATER AND SEWER AUTHORITY
## STATEMENTS OF NET POSITION
## YEARS ENDED DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| ASSETS | | |
| Current Assets | | |
| Cash and Cash Equivalents | $ 5,872,075 | $ 5,870,876 |
| Investments | 17,122,426 | 23,051,730 |
| Accounts Receivable, Net of Allowance for Doubtful Accounts | 8,310,705 | 6,175,101 |
| Unbilled Revenue Receivable | 9,768,802 | 9,020,572 |
| Prepaid Expenses | 729,044 | 692,186 |
| Total Current Assets | 41,803,052 | 44,810,465 |
| Non-Current Assets | | |
| Restricted Assets | | |
| Cash and Cash Equivalents | 3,617,503 | 3,922,837 |
| Investments | 63,732,897 | 60,095,138 |
| Interest Receivable | 920,477 | 748,766 |
| Total Restricted Assets | 68,270,877 | 64,766,741 |
| Capital Assets | | |
| Land, Rights-of-Way and Construction in Progress | 81,292,208 | 77,851,553 |
| Other Capital Assets, Net of Accumulated Depreciation | 376,251,860 | 375,322,640 |
| Total Capital Assets, Net | 457,544,068 | 453,174,193 |
| Total Non-Current Assets | 525,814,945 | 517,940,934 |
| Total Assets | 567,617,997 | 562,751,399 |
| Deferred Outflows of Resources | | |
| Deferred Amount from Debt Refundings | 7,790,319 | 8,818,011 |
| Pension: Changes in Assumptions | 591,106 | 591,106 |
| Pension: Difference Between Expected and Actual Experience | 805,127 | 805,127 |
| Pension: Difference Between Projected and Actual Earnings on Investments | 1,691,386 | 1,691,386 |
| Pension: Contributions Made Subsequent to Measurement Date | 4,326,752 | 4,326,752 |
| OPEB: Difference Between Expected and Actual Experience | 26,180 | 34,877 |
| OPEB: Difference Between Projected and Actual Earnings on Plan Investments | - | 1,972 |
| Total Deferred Outflows of Resources | 15,230,870 | 16,269,231 |
| LIABILITIES AND NET POSITION | | |
| Current Liabilities | | |
| Accounts Payable and Accrued Expenses | 12,749,312 | 11,887,091 |
| Current Portion of Bonds Payable | 22,375,000 | 21,345,000 |
| Interest Payable | 745,039 | 803,887 |
| Total Current Liabilities | 35,869,351 | 34,035,978 |
| Non-Current Liabilities | | |
| Customer and Developer Deposits | 3,613,254 | 3,715,610 |
| Bonds Payable, Net of Unamortized Bond Discount and Premium | 223,030,306 | 233,209,683 |
| Net Pension Liability | 1,880,256 | 1,880,256 |
| Net OPEB Liability | 4,026,011 | 3,953,798 |
| Total Non-Current Liabilities | 232,549,827 | 242,759,347 |
| Total Liabilities | 268,419,178 | 276,795,325 |
| Deferred Inflows of Resources | | |
| Pension: Changes in Assumptions | 32,118 | 32,118 |
| OPEB: Changes in Assumptions | 241,345 | 321,526 |
| OPEB: Difference Between Projected and Actual Earnings on Investments | 86,429 | - |
| Proceeds from Sale of Future Revenues | 3,795,454 | 3,967,975 |
| Total Deferred Inflows of Resources | 4,155,346 | 4,321,619 |
| Net Position | | |
| Net Investment in Capital Assets | 229,523,791 | 216,079,031 |
| Restricted for Capital Activity | 15,719,591 | 12,077,609 |
| Restricted for Debt Service | 31,553,004 | 31,514,000 |
| Unrestricted | 33,477,957 | 38,233,046 |
| Total Net Position | $ 310,274,343 | $ 297,903,686 |

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES,
AND CHANGES IN NET POSITION
YEARS ENDED DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| Operating Revenues | | |
| Retail Sewer Service | $ 54,861,161 | $ 49,612,675 |
| Wholesale Sewer Service | 14,337,247 | 20,728,839 |
| Retail Water Service | 11,747,314 | 11,481,175 |
| Wholesale Water Service | 4,663,441 | 4,315,851 |
| Improvement and Tapping Fees | 263,705 | 580,375 |
| Other Revenues | 3,557,822 | 5,875,885 |
| Total Operating Revenues | 89,430,690 | 92,594,800 |
| Expenses | | |
| Operating Expenses | | |
| Sewage Treatment and Water Procurement | | |
| Sewage Treatment | 19,678,584 | 20,534,850 |
| Water Procurement | 5,736,644 | 5,352,970 |
| Total Sewage Treatment and Water Procurement | 25,415,228 | 25,887,820 |
| Plant Operations | | |
| Payroll and Related Costs | 2,732,227 | 1,927,213 |
| Repairs and Maintenance | 1,945,504 | 1,292,778 |
| Electricity | 521,131 | 405,213 |
| Water and Sewage Testing | 249,680 | 256,279 |
| Total Plant Operations | 5,448,542 | 3,881,483 |
| Collection, Transmission and Distribution Service | | |
| Payroll and Related Costs | 8,845,809 | 9,070,825 |
| Repairs and Maintenance | 3,084,311 | 2,347,631 |
| Electricity | 885,701 | 807,210 |
| Other Related Costs | 216,408 | 274,544 |
| Total Collection, Transmission and Distribution Service | 13,032,229 | 12,500,210 |
| Total Operating Expenses | 43,895,999 | 42,269,513 |
| General and Administrative Expenses | | |
| Payroll and Related Costs | 4,412,980 | 4,536,162 |
| Professional Fees | 2,329,876 | 2,732,816 |
| Insurance | 497,923 | 522,165 |
| Other | 2,382,465 | 3,199,536 |
| Total General and Administrative Expense | 9,623,244 | 10,990,679 |
| Total Expenses | 53,519,243 | 53,260,192 |
| Income From Operations Before Depreciation | 35,911,447 | 39,334,608 |
| Depreciation | (17,966,462) | (19,513,044) |
| Operating Income | 17,944,985 | 19,821,564 |
| Nonoperating Revenue (Expense) | | |
| Interest Expense, Net of Amounts Capitalized | (7,770,635) | (8,517,857) |
| Investment Income | 628,113 | 2,078,449 |
| Improvement and Tapping Fees | 1,821,485 | 1,262,884 |
| Amortization | (253,291) | (218,126) |
| Total Nonoperating Expense | (5,574,328) | (5,394,650) |
| Increase In Net Position | 12,370,657 | 14,426,914 |
| Net Position - Beginning of Year | 297,903,686 | 283,476,772 |
| Net Position - End of Year | $ 310,274,343 | $ 297,903,686 |

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2019 AND 2018

## NOTE 6: SEGMENT INFORMATION

As of and for the years ended December 31, 2019 and 2018 segment information is as follows:

| | 2019 | | | |
|---|---|---|---|---|
| Assets | Sewer System | Water System | Administrative Account | Totals |
| Current Assets | | | | |
| Cash and Investments | $ 14,429,267 | $ 11,367,223 | $ 3,126,116 | $ 28,922,606 |
| Accounts Receivable, Unbilled Revenue and Net Intercompany Transfers | 6,989,222 | 17,310,475 | (9,104,024) | 15,195,673 |
| Other | 608,655 | 83,531 | - | 692,186 |
| Non-Current Assets | | | | |
| Restricted Assets | 48,050,977 | 12,345,721 | 4,370,043 | 64,766,741 |
| Capital Assets | 304,158,678 | 142,902,978 | 6,112,537 | 453,174,193 |
| Total Assets | 374,236,799 | 184,009,928 | 4,504,672 | 562,751,399 |
| Deferred Outflows of Resources | | | | |
| Deferred Amount from Debt Refundings | 2,839,649 | 5,978,362 | - | 8,818,011 |
| Pension: Changes in Assumptions | 465,033 | 126,073 | - | 591,106 |
| Pension: Difference Between Expected and Actual Experience | 674,207 | 130,920 | - | 805,127 |
| Pension: Difference Between Projected and Actual Earnings on Investments | 1,437,679 | 253,707 | - | 1,691,386 |
| Pension: Contributions Made Subsequent to Measurement Date | 3,275,976 | 1,050,776 | - | 4,326,752 |
| OPEB: Difference Between Expected and Actual Experience | 29,645 | 5,232 | - | 34,877 |
| OPEB: Difference Between Projected and Actual Earnings on Plan Investments | 1,676 | 296 | - | 1,972 |
| Total Deferred Outflows of Resources | 8,723,865 | 7,545,366 | - | 16,269,231 |
| Liabilities and Net Position | | | | |
| Liabilities | | | | |
| Current Liabilities | 29,501,359 | 3,745,556 | 789,063 | 34,035,978 |
| Non-Current Liabilities | 150,796,046 | 88,247,692 | 3,715,609 | 242,759,347 |
| Total Liabilities | 180,297,405 | 91,993,248 | 4,504,672 | 276,795,325 |
| Deferred Inflows of Resources | | | | |
| Pension: Changes in Assumptions | 27,086 | 5,032 | - | 32,118 |
| Pension: Difference Between Projected and Actual Earnings on Investments | (165,256) | 165,256 | - | - |
| OPEB: Changes in Assumptions | 273,297 | 48,229 | - | 321,526 |
| Proceeds from Sale of Future Revenues | - | 3,967,975 | - | 3,967,975 |
| Total Deferred Inflows of Resources | 135,127 | 4,186,492 | - | 4,321,619 |
| Net Position | | | | |
| Net Investment in Capital Assets | 156,941,099 | 53,025,395 | 6,112,537 | 216,079,031 |
| Restricted for Capital Activity | 5,071,173 | 6,352,002 | 654,434 | 12,077,609 |
| Restricted for Debt Service | 25,520,284 | 5,993,716 | - | 31,514,000 |
| Unrestricted | 14,995,576 | 30,004,441 | (6,766,971) | 38,233,046 |
| Total Net Position | $ 202,528,132 | $ 95,375,554 | $ - | $ 297,903,686 |

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2019 AND 2018

## NOTE 6: SEGMENT INFORMATION (CONTINUED)

| | 2018 | | | |
|---|---|---|---|---|
| Assets | Sewer System | Water System | Administrative Account | Totals |
| Current Assets | | | | |
| Cash and Investments | $ 13,996,611 | $ 9,258,718 | $ 1,343,631 | $ 24,598,960 |
| Accounts Receivable, Unbilled Revenue and Net Intercompany Transfers | 6,114,899 | 18,137,594 | (6,574,182) | 17,678,311 |
| Other | 610,549 | 85,000 | - | 695,549 |
| Non-Current Assets | | | | |
| Restricted Assets | 47,524,162 | 12,202,731 | 3,988,462 | 63,715,355 |
| Capital Assets | 293,945,954 | 145,484,365 | 5,383,895 | 444,814,214 |
| Total Assets | 362,192,175 | 185,168,408 | 4,141,806 | 551,502,389 |
| Deferred Outflows of Resources | | | | |
| Deferred Amount from Debt Refundings | 3,503,369 | 6,462,562 | - | 9,965,931 |
| Pension: Changes in Assumptions | 632,513 | 155,628 | - | 788,141 |
| Pension: Difference Between Expected and Actual Experience | 162,431 | 40,607 | - | 203,038 |
| Pension: Contributions Made Subsequent to Measurement Date | 6,428,229 | 1,607,056 | - | 8,035,285 |
| Total Deferred Outflows of Resources | 10,726,542 | 8,265,853 | - | 18,992,395 |
| Liabilities and Net Position | | | | |
| Liabilities | | | | |
| Current Liabilities | 24,140,550 | 3,373,492 | 645,278 | 28,159,320 |
| Non-Current Liabilities | 156,519,961 | 91,561,281 | 3,496,528 | 251,577,770 |
| Total Liabilities | 180,660,511 | 94,934,773 | 4,141,806 | 279,737,090 |
| Deferred Inflows of Resources | | | | |
| Pension: Changes in Assumptions | 36,187 | 6,638 | - | 42,825 |
| Pension: Difference Between Projected and Actual Earnings on Investments | 2,478,081 | 619,520 | - | 3,097,601 |
| Proceeds from the Sale of Future Revenues | - | 4,140,496 | - | 4,140,496 |
| Total Deferred Inflows of Resources | 2,514,268 | 4,766,654 | - | 7,280,922 |
| Net Position | | | | |
| Net Investment in Capital Assets | 129,539,966 | 61,197,479 | 5,383,898 | 196,121,343 |
| Restricted for Capital Activity | 18,722,168 | - | 491,930 | 19,214,098 |
| Restricted for Debt Service | 28,801,994 | 6,333,246 | - | 35,135,240 |
| Unrestricted | 12,679,810 | 26,202,109 | (5,875,828) | 33,006,091 |
| Total Net Position | $ 189,743,938 | $ 93,732,834 | $ - | $ 283,476,772 |

# BUCKS COUNTY WATER AND SEWER AUTHORITY
## STATEMENTS OF NET POSITION
## DECEMBER 31, 2019 AND 2018

| ASSETS | 2019 | 2018 |
|---|---|---|
| Current Assets | | |
| Cash and Cash Equivalents | $ 5,870,876 | $ 3,803,232 |
| Investments | 23,051,730 | 20,795,728 |
| Accounts Receivable, Net of Allowance for Doubtful Accounts | 6,175,101 | 7,707,994 |
| Unbilled Revenue Receivable | 9,020,572 | 9,970,317 |
| Prepaid Expenses | 692,186 | 695,549 |
| Total Current Assets | 44,810,465 | 42,972,820 |
| Non-Current Assets | | |
| Restricted Assets | | |
| Cash and Cash Equivalents | 3,922,837 | 3,541,256 |
| Investments | 60,095,138 | 59,883,991 |
| Interest Receivable | 748,766 | 290,108 |
| Total Restricted Assets | 64,766,741 | 63,715,355 |
| Capital Assets | | |
| Land, Rights-of-Way and CIP | 77,851,553 | 79,376,857 |
| Other Capital Assets, Net of Accumulated Depreciation | 375,322,640 | 365,437,357 |
| Total Capital Assets, Net | 453,174,193 | 444,814,214 |
| Total Non-Current Assets | 517,940,934 | 508,529,569 |
| Total Assets | 562,751,399 | 551,502,389 |
| Deferred Outflows of Resources | | |
| Deferred Amount from Debt Refundings | 8,818,011 | 9,965,931 |
| Pension: Changes in Assumptions | 591,106 | 788,141 |
| Pension: Difference Between Expected and Actual Experience | 805,127 | 203,038 |
| Pension: Difference Between Projected and Actual Earnings on Investments | 1,691,386 | - |
| Pension: Contributions Made Subsequent to Measurement Date | 4,326,752 | 8,035,285 |
| OPEB: Difference Between Expected and Actual Experience | 34,877 | - |
| OPEB: Difference Between Projected and Actual Earnings on Plan Investments | 1,972 | - |
| Total Deferred Outflows of Resources | 16,269,231 | 18,992,395 |
| LIABILITIES AND NET POSITION | | |
| Current Liabilities | | |
| Accounts Payable and Accrued Expenses | 11,887,091 | 6,872,214 |
| Current Portion of Bonds Payable | 21,345,000 | 20,460,000 |
| Interest Payable | 803,887 | 827,106 |
| Total Current Liabilities | 34,035,978 | 28,159,320 |
| Non-Current Liabilities | | |
| Customer and Developer Deposits | 3,715,610 | 3,496,528 |
| Bonds Payable, Net of Unamortized Bond Discount and Premium | 233,209,683 | 239,927,805 |
| Net Pension Liability | 1,880,256 | 2,296,351 |
| Net OPEB Liability | 3,953,798 | 5,857,086 |
| Total Non-Current Liabilities | 242,759,347 | 251,577,770 |
| Total Liabilities | 276,795,325 | 279,737,090 |
| Deferred Inflows of Resources | | |
| Pension: Changes in Assumptions | 32,118 | 42,825 |
| Pension: Difference Between Projected and Actual Earnings on Investments | - | 3,097,601 |
| OPEB: Changes in Assumptions | 321,526 | - |
| Proceeds from Sale of Future Revenues | 3,967,975 | 4,140,496 |
| Total Deferred Inflows of Resources | 4,321,619 | 7,280,922 |
| Net Position | | |
| Net Investment in Capital Assets | 216,079,031 | 196,121,343 |
| Restricted for Capital Activity | 12,077,609 | 19,214,098 |
| Restricted for Debt Service | 31,514,000 | 35,135,240 |
| Unrestricted | 38,233,046 | 33,006,091 |
| Total Net Position | $ 297,903,686 | $ 283,476,772 |

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES,
AND CHANGES IN NET POSITION
YEARS ENDED DECEMBER 31, 2019 AND 2018

| | 2019 | 2018 |
|---|---|---|
| Operating Revenues | | |
| Retail Sewer Service | $ 49,612,675 | $ 48,634,267 |
| Wholesale Sewer Service | 20,728,839 | 19,105,200 |
| Retail Water Service | 11,481,175 | 11,755,194 |
| Wholesale Water Service | 4,315,851 | 4,357,235 |
| Improvement and Tapping Fees | 580,375 | 279,425 |
| Other Revenues | 5,875,885 | 4,697,553 |
| Total Operating Revenues | 92,594,800 | 88,828,874 |
| Expenses | | |
| Operating Expenses | | |
| Sewage Treatment and Water Procurement | | |
| Sewage Treatment | 20,534,850 | 20,862,709 |
| Water Procurement | 5,352,970 | 5,611,587 |
| Total Sewage Treatment and Water Procurement | 25,887,820 | 26,474,296 |
| Plant Operations | | |
| Payroll and Related Costs | 1,927,213 | 1,592,995 |
| Repairs and Maintenance | 1,292,778 | 1,251,844 |
| Electricity | 405,213 | 461,808 |
| Water and Sewage Testing | 256,279 | 218,091 |
| Total Plant Operations | 3,881,483 | 3,524,738 |
| Collection, Transmission and Distribution Service | | |
| Payroll and Related Costs | 9,070,825 | 8,191,888 |
| Repairs and Maintenance | 2,347,631 | 1,992,003 |
| Electricity | 807,210 | 995,191 |
| Other Related Costs | 274,544 | 298,459 |
| Total Collection, Transmission and Distribution Service | 12,500,210 | 11,477,541 |
| Total Operating Expenses | 42,269,513 | 41,476,575 |
| General and Administrative Expenses | | |
| Payroll and Related Costs | 4,536,162 | 6,780,772 |
| Professional Fees | 2,732,816 | 1,981,255 |
| Insurance | 522,165 | 476,597 |
| Other | 3,199,536 | 4,933,790 |
| Total General and Administrative Expense | 10,990,679 | 14,172,414 |
| Total Expenses | 53,260,192 | 55,648,989 |
| Income From Operations Before Depreciation | 39,334,608 | 33,179,885 |
| Depreciation | (19,513,044) | (18,063,567) |
| Operating Income | 19,821,564 | 15,116,318 |
| Nonoperating Revenue (Expense) | | |
| Interest Expense, | | |
| Net of Amounts Capitalized | (8,517,857) | (9,017,615) |
| Investment Income | 2,078,449 | 2,015,753 |
| Other | - | 4,824 |
| Improvement and Tapping Fees | 1,262,884 | 2,750,737 |
| Amortization | (218,126) | (51,377) |
| Total Nonoperating Expense | (5,394,650) | (4,297,678) |
| Increase In Net Position, Before Contributed Capital | 14,426,914 | 10,818,640 |
| Contributed Capital | - | 779,914 |
| Net Position - Beginning of Year, as Previously Reported | 283,476,772 | 275,130,457 |
| Adjustment for GASB No. 75 | - | (3,252,239) |
| Net Position - Beginning of Year, Restated | 283,476,772 | 271,878,218 |
| Net Position - End of Year | $ 297,903,686 | $ 283,476,772 |

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

## NOTE 6: SEGMENT INFORMATION

As of and for the years ended December 31, 2018 and 2017 segment information is as follows:

| | 2018 | | | |
|---|---|---|---|---|
| Assets | Sewer System | Water System | Administrative Account | Totals |
| Current Assets | | | | |
| Cash and Investments | $ 13,996,611 | $ 9,258,718 | $ 1,343,631 | $ 24,598,960 |
| Accounts Receivable and Unbilled Revenue | 6,114,899 | 18,137,594 | (6,574,182) | 17,678,311 |
| Other | 610,549 | 85,000 | - | 695,549 |
| Non-Current Assets | | | | |
| Restricted Assets | 47,524,162 | 12,202,731 | 3,988,462 | 63,715,355 |
| Capital Assets | 293,945,954 | 145,484,365 | 5,383,895 | 444,814,214 |
| Total Assets | 362,192,175 | 185,168,408 | 4,141,806 | 551,502,389 |
| Deferred Outflows of Resources | | | | |
| Deferred Amount from Debt Refundings | 3,503,369 | 6,462,562 | - | 9,965,931 |
| Changes in Assumptions | 632,513 | 155,628 | - | 788,141 |
| Difference Between Expected and Actual Experience | 162,431 | 40,607 | - | 203,038 |
| Contributions Made Subsequent to Measurement Date | 6,428,229 | 1,607,056 | - | 8,035,285 |
| Total Deferred Outflows of Resources | 10,726,542 | 8,265,853 | - | 18,992,395 |
| Liabilities and Net Position | | | | |
| Liabilities | | | | |
| Current Liabilities | 24,140,550 | 3,373,492 | 645,278 | 28,159,320 |
| Non-Current Liabilities | 156,519,961 | 91,561,281 | 3,496,528 | 251,577,770 |
| Total Liabilities | 180,660,511 | 94,934,773 | 4,141,806 | 279,737,090 |
| Deferred Inflows of Resources | | | | |
| Changes in Assumptions | 36,187 | 6,638 | - | 42,825 |
| Difference Between Projected and Actual Earnings on Investments | 2,478,081 | 619,520 | - | 3,097,601 |
| Proceeds from the Sale of Future Revenues | - | 4,140,496 | - | 4,140,496 |
| Total Deferred Inflows of Resources | 2,514,268 | 4,766,654 | - | 7,280,922 |
| Net Position | | | | |
| Net Investment in Capital Assets | 129,539,966 | 61,197,479 | 5,383,898 | 196,121,343 |
| Restricted for Capital Activity | 18,722,168 | - | 491,930 | 19,214,098 |
| Restricted for Debt Service | 28,801,994 | 6,333,246 | - | 35,135,240 |
| Unrestricted | 12,679,810 | 26,202,109 | (5,875,828) | 33,006,091 |
| Total Net Position | $ 189,743,938 | $ 93,732,834 | $ - | $ 283,476,772 |

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

NOTE 6: SEGMENT INFORMATION (CONTINUED)

| | 2018 | | |
|---|---|---|---|
| | Sewer System | Water System | Totals |
| Operating Revenues | | | |
| Retail Sewer Service | $ 48,634,267 | $ - | $ 48,634,267 |
| Wholesale Sewer Service | 19,105,200 | - | 19,105,200 |
| Retail Water Service | - | 11,755,194 | 11,755,194 |
| Wholesale Water Service | - | 4,357,235 | 4,357,235 |
| Improvement and Tapping Fees | - | 279,425 | 279,425 |
| Other Revenues | 3,130,165 | 1,567,388 | 4,697,553 |
| Total Operating Revenues | 70,869,632 | 17,959,242 | 88,828,874 |
| Expenses | | | |
| Operating Expenses | | | |
| Sewage Treatment and Water Procurement | | | |
| Sewage Treatment | 20,862,709 | - | 20,862,709 |
| Water Procurement | - | 5,611,587 | 5,611,587 |
| Total Sewage and Water Procurement | 20,862,709 | 5,611,587 | 26,474,296 |
| Plant Operations | | | |
| Payroll and Related Costs | 1,592,995 | - | 1,592,995 |
| Repairs and Maintenance | 1,251,844 | - | 1,251,844 |
| Electricity | 461,808 | - | 461,808 |
| Water and Sewage Testing | 218,091 | - | 218,091 |
| Total Plant Operations | 3,524,738 | - | 3,524,738 |
| Collection, Transmission and Distribution Service | | | |
| Payroll and related costs | 6,404,591 | 1,787,297 | 8,191,888 |
| Repairs and maintenance | 1,660,514 | 331,489 | 1,992,003 |
| Electricity | 822,812 | 172,379 | 995,191 |
| Other related costs | 209,224 | 89,235 | 298,459 |
| Total Collection, Transmission and Distribution | 9,097,141 | 2,380,400 | 11,477,541 |
| Service Expense | | | |
| Total Operating Expense | 33,484,588 | 7,991,987 | 41,476,575 |
| General and Administrative Expenses | | | |
| Payroll and related costs | 5,714,319 | 1,066,453 | 6,780,772 |
| Professional fees | 1,747,815 | 233,440 | 1,981,255 |
| Insurance | 395,522 | 81,075 | 476,597 |
| Other | 4,821,938 | 111,852 | 4,933,790 |
| Total General and Administrative Expenses | 12,679,594 | 1,492,820 | 14,172,414 |
| Income from Operations before depreciation | 24,705,450 | 8,474,435 | 33,179,885 |
| Depreciation | (14,696,296) | (3,367,271) | (18,063,567) |
| Operating Income | 10,009,154 | 5,107,164 | 15,116,318 |
| Nonoperating Revenue (Expense) | | | |
| Interest Expense, net of Amounts Capitalized | (5,405,915) | (3,611,700) | (9,017,615) |
| Investment Income | 1,623,182 | 392,571 | 2,015,753 |
| Other | 4,824 | - | 4,824 |
| Improvement and Tapping Fees | 2,750,737 | - | 2,750,737 |
| Amortization | (51,377) | - | (51,377) |
| Total Nonoperating Expense | (1,078,549) | (3,219,129) | (4,297,678) |
| Increase in Net Position, Before Contributed Capital | 8,930,605 | 1,888,035 | 10,818,640 |
| Contributed Capital | 710,204 | 69,710 | 779,914 |
| Net Position - Beginning of Year, as Previously Reported | 182,867,532 | 92,262,925 | 275,130,457 |
| Adjustment for GASB No. 75 | (2,764,403) | (487,836) | (3,252,239) |
| Net Position - Beginning of Year, Restated | 180,103,129 | 91,775,089 | 271,878,218 |
| Net Position, End of Year | $ 189,743,938 | $ 93,732,834 | $ 283,476,772 |

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

NOTE 6: SEGMENT INFORMATION (CONTINUED)

| | 2018 | | | |
|---|---|---|---|---|
| | Sewer System | Water System | Administrative Account | Totals |
| Cash Flows from Operating Activities | | | | |
| Cash Received from Customers | $ 72,660,789 | $ 17,539,631 | $ - | $ 90,200,420 |
| Payments to Suppliers | (31,373,585) | (6,551,971) | - | (37,925,556) |
| Payroll and Related Payments | (13,711,973) | (3,095,494) | - | (16,807,467) |
| Other Operating (Payments) / Transactions | 12,644,098 | (13,022,354) | 222,511 | (155,745) |
| Net Cash Provided from Operations | 40,219,329 | (5,130,188) | 222,511 | 35,311,652 |
| Cash Flows from Capital and Related Financing Activities | | | | |
| Acquisition and Construction of Capital Assets | (12,799,197) | (860,416) | (191,958) | (13,851,571) |
| Improvement and Tapping Fees | 2,750,737 | - | - | 2,750,737 |
| Bond Principal Repayments | (17,784,999) | (2,475,000) | - | (20,259,999) |
| Interest Paid | (6,364,234) | (3,537,201) | - | (9,901,435) |
| Net Cash Used in Capital and Related Financing Activities | (34,197,693) | (6,872,617) | (191,958) | (41,262,268) |
| Cash Flows from Investing Activities | | | | |
| Sale of Investments, Net | (5,599,131) | 12,069,155 | - | 6,470,024 |
| Interest Received | 14,790 | 392,571 | - | 407,361 |
| Net Cash Used in Investing Activities | (5,584,341) | 12,461,726 | - | 6,877,385 |
| Net Increase (Decrease) in Cash and Cash Equivalents | 437,295 | 458,921 | 30,553 | 926,769 |
| Cash and Cash Equivalents - Beginning of Year | 1,529,900 | 33,485 | 4,854,334 | 6,417,719 |
| Cash and Cash Equivalents - End of Year | $ 1,967,195 | $ 492,406 | $ 4,884,887 | $ 7,344,488 |
| Displayed as: | | | | |
| Cash and Cash Equivalents | $ 1,967,195 | $ 492,406 | $ 1,343,631 | $ 3,803,232 |
| Restricted Cash and Cash Equivalents | - | - | 3,541,256 | 3,541,256 |
| | $ 1,967,195 | $ 492,406 | $ 4,884,887 | $ 7,344,488 |
| Reconciliation of Operating Income to Net Cash Provided from Operations: | | | | |
| Operating Income | $ 10,009,154 | $ 5,107,164 | $ - | $ 15,116,318 |
| Adjustments to Reconcile Operating Income to Net Cash Provided from Operating Activities | | | | |
| Depreciation | 14,696,296 | 3,367,271 | - | 18,063,567 |
| Changes in Assets and Liabilities: | | | | |
| Receivables and Unbilled Revenue, Net | 3,276,483 | (247,091) | - | 3,029,392 |
| Prepaid Expenses | (34,155) | (5,410) | - | (39,565) |
| Intercompany Receivables (Payables) | 12,685,022 | (13,036,180) | 351,158 | - |
| Accounts Payable and Accrued Expenses | 531,336 | (121,266) | (164,592) | 245,478 |
| Interest Payable | (37,555) | 16,262 | - | (21,293) |
| Customer and Developer Deposits | - | - | 35,945 | 35,945 |
| Net Pension and OPEB Liabilities and Related Pension Deferrals | (907,252) | (210,938) | - | (1,118,190) |
| Net Cash Provided from Operations | $ 40,219,329 | $ (5,130,188) | $ 222,511 | $ 35,311,652 |

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF NET POSITION

DECEMBER 31, 2020 AND 2019

**Assets and Deferred Outflows of Resources**

| | 2020 | 2019 |
|---|---|---|
| Assets: | | |
| Current assets: | | |
| Cash and cash equivalents | $ 209,431,473 | $ 175,476,686 |
| Accounts receivable: | | |
| Billed sewer revenue | 20,446,710 | 16,702,983 |
| Unbilled sewer revenue | 44,044,901 | 43,666,409 |
| Other | 4,734 | 30,225 |
| Other current assets | 6,634,434 | 6,604,244 |
| Total current assets | 280,562,252 | 242,480,547 |
| Restricted/designated assets: | | |
| Cash and cash equivalents | 272,815,362 | 150,150,904 |
| Investments | - | 84,963,478 |
| Accrued interest receivable | - | 375,444 |
| Total restricted/designated assets | 272,815,362 | 235,489,826 |
| Prepaid bond costs | 5,815,062 | 6,591,319 |
| Nondepreciable capital assets: | | |
| Land | 5,344,896 | 5,344,896 |
| Construction in progress | 94,302,298 | 81,287,241 |
| Total nondepreciable capital assets | 99,647,194 | 86,632,137 |
| Depreciable capital assets - at cost, net of accumulated depreciation | 543,854,942 | 542,465,808 |
| Total | 643,502,136 | 629,097,945 |
| Total Assets | 1,202,694,812 | 1,113,659,637 |
| Deferred Outflows of Resources: | | |
| Related to pensions | 27,581,534 | 35,676,281 |
| Other post-retirement benefits | 1,758,333 | 853,236 |
| Refunding adjustment | 5,247,763 | 6,278,101 |
| Total Deferred Outflows of Resources | 34,587,630 | 42,807,618 |
| **Total Assets and Deferred Outflows of Resources** | $ 1,237,282,442 | $ 1,156,467,255 |

**Liabilities, Deferred Inflows of Resources, and Net Position**

| | 2020 | 2019 |
|---|---|---|
| Liabilities: | | |
| Current liabilities: | | |
| Accounts payable | $ 6,092,972 | $ 7,349,003 |
| Accrued liabilities: | | |
| Compensated absences | 5,950,167 | 4,994,678 |
| Salaries and wages | 1,985,019 | 1,751,181 |
| Accrued interest on bonds | 2,592,551 | 2,638,762 |
| Reserve for litigation | 2,371,900 | 2,371,900 |
| Pretreatment advance payments | 2,600 | 1,850 |
| Current maturities of sewer revenue bonds | 28,785,000 | 27,635,000 |
| Total current liabilities | 47,780,209 | 46,742,374 |
| Long-term liabilities: | | |
| Other post-employment benefits | 13,901,968 | 12,087,137 |
| Net pension liability | 7,266,922 | 28,684,748 |
| Sewer revenue bonds - less current maturities | 670,495,000 | 650,300,000 |
| Unamortized bond premium | 67,960,993 | 50,763,732 |
| Net long-term debt | 738,455,993 | 701,063,732 |
| Total long-term liabilities | 759,624,883 | 741,835,617 |
| Total Liabilities | 807,405,092 | 788,577,991 |
| Deferred Inflows of Resources: | | |
| Related to pensions | 25,133,372 | 9,341,236 |
| Other post-retirement benefits | 3,169,749 | 1,904,424 |
| Total Deferred Inflows of Resources | 28,303,121 | 11,245,660 |
| Net Position: | | |
| Net investment in capital assets | 154,324,268 | 142,167,140 |
| Unrestricted | 247,249,961 | 214,476,464 |
| Total Net Position | 401,574,229 | 356,643,604 |
| **Total Liabilities, Deferred Inflows of Resources, and Net Position** | $ 1,237,282,442 | $ 1,156,467,255 |

The notes to financial statements are an integral part of this statement.

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| **Operating Revenues** | $ 186,799,875 | $ 180,238,305 |
| **Operating Expenses:** | | |
| Treatment | 50,981,608 | 49,805,868 |
| Intercepting sewer systems | 8,771,952 | 8,753,813 |
| Upper Allegheny system | 307,944 | 298,412 |
| Administrative and engineering | 15,682,596 | 15,962,845 |
| Billing and collecting | 4,461,391 | 3,572,073 |
| Management information systems | 4,071,959 | 3,690,385 |
| Total operating expenses before depreciation | 84,277,450 | 82,083,396 |
| **Operating Income Before Depreciation** | 102,522,425 | 98,154,909 |
| Depreciation | 22,374,952 | 22,772,539 |
| **Operating Income** | 80,147,473 | 75,382,370 |
| **Non-operating Revenues (Expenses):** | | |
| Interest income | 2,002,687 | 8,966,272 |
| Interest expense on bonds | (27,485,399) | (28,261,390) |
| Amortization of prepaid bond costs | (516,597) | (596,640) |
| Loss on capital assets retired | (4,573,423) | - |
| Change in value of pension related items | (2,469,057) | (4,177,854) |
| Change in value of OPEB related items | (2,175,059) | (774,061) |
| Total non-operating revenues (expenses) | (35,216,848) | (24,843,673) |
| **Change in Net Position** | 44,930,625 | 50,538,697 |
| **Net Position:** | | |
| Beginning of year | 356,643,604 | 306,104,907 |
| End of year | $ 401,574,229 | $ 356,643,604 |

The notes to financial statements are an integral part of this statement.

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF NET POSITION

DECEMBER 31, 2019 AND 2018

**Assets and Deferred Outflows of Resources**

| | 2019 | 2018 |
|---|---|---|
| Assets: | | |
| Current assets: | | |
| Cash and cash equivalents | $ 175,476,686 | $ 142,482,220 |
| Accounts receivable: | | |
| Billed sewer revenue | 16,702,983 | 16,544,587 |
| Unbilled sewer revenue | 43,666,409 | 41,408,016 |
| Other | 30,225 | 4,469 |
| Other current assets | 6,604,244 | 6,556,274 |
| Total current assets | 242,480,547 | 206,995,566 |
| Restricted/designated assets: | | |
| Cash and cash equivalents | 150,150,904 | 83,445,720 |
| Investments | 84,963,478 | 167,782,528 |
| Accrued interest receivable | 375,444 | 622,842 |
| Total restricted/designated assets | 235,489,826 | 251,851,090 |
| Prepaid bond costs | 6,591,319 | 7,187,959 |
| Nondepreciable capital assets: | | |
| Land | 5,344,896 | 5,344,896 |
| Construction in progress | 81,287,241 | 59,836,813 |
| Total nondepreciable capital assets | 86,632,137 | 65,181,709 |
| Depreciable capital assets - at cost, net of accumulated depreciation | 542,465,808 | 557,161,609 |
| Total | 629,097,945 | 622,343,318 |
| Net pension asset | - | 2,705,577 |
| Total Assets | 1,113,659,637 | 1,091,083,510 |
| Deferred Outflows of Resources: | | |
| Related to pensions | 35,676,281 | 17,633,917 |
| Other post-retirement benefits | 853,236 | 932,894 |
| Refunding adjustment | 6,278,101 | 7,077,328 |
| Total Deferred Outflows of Resources | 42,807,618 | 25,644,139 |
| **Total Assets and Deferred Outflows of Resources** | $ 1,156,467,255 | $ 1,116,727,649 |

**Liabilities, Deferred Inflows of Resources, and Net Position**

| | 2019 | 2018 |
|---|---|---|
| Liabilities: | | |
| Current liabilities: | | |
| Accounts payable | $ 7,349,003 | $ 7,180,579 |
| Accrued liabilities: | | |
| Compensated absences | 4,994,678 | 4,539,483 |
| Salaries and wages | 1,751,181 | 1,529,529 |
| Accrued interest on bonds | 2,638,762 | 2,745,875 |
| Reserve for litigation | 2,371,900 | 2,371,900 |
| Pretreatment advance payments | 1,850 | 24,375 |
| Current maturities of sewer revenue bonds | 27,635,000 | 26,630,000 |
| Total current liabilities | 46,742,374 | 45,021,741 |
| Long-term liabilities: | | |
| Other post-employment benefits | 12,087,137 | 13,297,158 |
| Net pension liability | 28,684,748 | 6,121,872 |
| Sewer revenue bonds - less current maturities | 650,300,000 | 677,935,000 |
| Unamortized bond premium | 50,763,732 | 55,857,500 |
| Net long-term debt | 701,063,732 | 733,792,500 |
| Total long-term liabilities | 741,835,617 | 753,211,530 |
| Total Liabilities | 788,577,991 | 798,233,271 |
| Deferred Inflows of Resources: | | |
| Related to pensions | 9,341,236 | 12,389,471 |
| Other post-retirement benefits | 1,904,424 | - |
| Total Deferred Inflows of Resources | 11,245,660 | 12,389,471 |
| Net Position: | | |
| Net investment in capital assets | 142,167,140 | 120,849,236 |
| Unrestricted | 214,476,464 | 185,255,671 |
| Total Net Position | 356,643,604 | 306,104,907 |
| **Total Liabilities, Deferred Inflows of Resources, and Net Position** | $ 1,156,467,255 | $ 1,116,727,649 |

The notes to financial statements are an integral part of this statement.

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2019 AND 2018

| | 2019 | 2018 |
|---|---|---|
| **Operating Revenues** | $ 180,238,305 | $ 169,724,327 |
| **Operating Expenses:** | | |
| Treatment | 49,805,868 | 47,633,280 |
| Intercepting sewer systems | 8,753,813 | 8,490,808 |
| Upper Allegheny system | 298,412 | 563,244 |
| Administrative and engineering | 15,962,845 | 14,736,160 |
| Billing and collecting | 3,572,073 | 3,482,212 |
| Management information systems | 3,690,385 | 3,723,344 |
| Total operating expenses before depreciation | 82,083,396 | 78,629,048 |
| **Operating Income Before Depreciation** | 98,154,909 | 91,095,279 |
| Depreciation | 22,772,539 | 23,071,589 |
| **Operating Income** | 75,382,370 | 68,023,690 |
| **Non-operating Revenues (Expenses):** | | |
| Interest income, net of amounts capitalized | 8,966,272 | 3,127,451 |
| Interest expense on bonds | (28,261,390) | (20,735,872) |
| Amortization of prepaid bond costs | (596,640) | (629,995) |
| Change in value of pension related items | (4,177,854) | (61,702) |
| Change in value of OPEB related items | (774,061) | (789,172) |
| Total non-operating revenues (expenses) | (24,843,673) | (19,089,290) |
| **Change in Net Position** | 50,538,697 | 48,934,400 |
| **Net Position:** | | |
| Beginning of year | 306,104,907 | 257,170,507 |
| End of year | $ 356,643,604 | $ 306,104,907 |

The notes to financial statements are an integral part of this statement.

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF NET POSITION

DECEMBER 31, 2018 AND 2017

**Assets and Deferred Outflows of Resources**

| | 2018 | 2017 |
|---|---|---|
| Assets: | | |
| Current assets: | | |
| Cash and cash equivalents | $ 142,482,220 | $ 119,248,255 |
| Accounts receivable: | | |
| Billed sewer revenue | 16,544,587 | 17,185,654 |
| Unbilled sewer revenue | 41,408,016 | 40,232,780 |
| Other | 4,469 | 4,635 |
| Other current assets | 6,556,274 | 6,432,263 |
| Total current assets | 206,995,566 | 183,103,587 |
| Restricted/designated assets: | | |
| Cash and cash equivalents | 83,445,720 | 100,289,509 |
| Investments | 167,782,528 | - |
| Accrued interest receivable | 622,842 | - |
| Total restricted/designated assets | 251,851,090 | 100,289,509 |
| Prepaid bond costs | 7,187,959 | 6,472,479 |
| Nondepreciable capital assets: | | |
| Land | 5,344,896 | 5,344,896 |
| Construction in progress | 59,836,813 | 38,371,565 |
| Total nondepreciable capital assets | 65,181,709 | 43,716,461 |
| Depreciable capital assets - at cost, net of accumulated depreciation | 557,161,609 | 564,883,734 |
| Total | 622,343,318 | 608,600,195 |
| Net pension asset | 2,705,577 | - |
| Total Assets | 1,091,083,510 | 898,465,770 |
| Deferred Outflows of Resources: | | |
| Related to pensions | 17,633,917 | 21,247,515 |
| Other post-retirement benefits | 932,894 | - |
| Refunding adjustment | 7,077,328 | 8,074,203 |
| Total Deferred Outflows of Resources | 25,644,139 | 29,321,718 |
| **Total Assets and Deferred Outflows of Resources** | $ 1,116,727,649 | $ 927,787,488 |

**Liabilities, Deferred Inflows of Resources, and Net Position**

| | 2018 | 2017 |
|---|---|---|
| Liabilities: | | |
| Current liabilities: | | |
| Accounts payable | $ 7,180,579 | $ 7,167,120 |
| Accrued liabilities: | | |
| Compensated absences | 4,539,483 | 4,689,828 |
| Salaries and wages | 1,529,529 | 1,441,024 |
| Accrued interest on bonds | 2,745,875 | 2,260,535 |
| Reserve for litigation | 2,371,900 | 2,371,900 |
| Pretreatment advance payments | 24,375 | 71,600 |
| Current maturities of sewer revenue bonds | 26,630,000 | 25,395,000 |
| Total current liabilities | 45,021,741 | 43,397,007 |
| Long-term liabilities: | | |
| Other post-employment benefits | 13,297,158 | 6,199,726 |
| Net pension liability | 6,121,872 | 16,421,705 |
| Sewer revenue bonds - less current maturities | 677,935,000 | 547,335,000 |
| Unamortized bond premium | 55,857,500 | 48,952,220 |
| Net long-term debt | 733,792,500 | 596,287,220 |
| Total long-term liabilities | 753,211,530 | 618,908,651 |
| Total Liabilities | 798,233,271 | 662,305,658 |
| Deferred Inflows of Resources: | | |
| Related to pensions | 12,389,471 | 2,935,957 |
| Net Position: | | |
| Net investment in capital assets | 120,849,236 | 95,281,689 |
| Unrestricted | 185,255,671 | 167,264,184 |
| Total Net Position | 306,104,907 | 262,545,873 |
| **Total Liabilities, Deferred Inflows of Resources, and Net Position** | $ 1,116,727,649 | $ 927,787,488 |

The notes to financial statements are an integral part of this statement.

# ALLEGHENY COUNTY SANITARY AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2018 AND 2017

| | 2018 | 2017 |
|---|---|---|
| **Operating Revenues** | $ 169,724,327 | $ 170,182,173 |
| **Operating Expenses:** | | |
| Treatment | 47,633,280 | 44,821,531 |
| Intercepting sewer systems | 8,490,808 | 7,100,846 |
| Upper Allegheny system | 563,244 | 487,512 |
| Administrative and engineering | 14,736,160 | 13,772,696 |
| Billing and collecting | 3,482,212 | 4,439,250 |
| Management information systems | 3,723,344 | 3,778,272 |
| Total operating expenses before depreciation | 78,629,048 | 74,400,107 |
| **Operating Income Before Depreciation** | 91,095,279 | 95,782,066 |
| Depreciation | 23,071,589 | 22,426,718 |
| **Operating Income** | 68,023,690 | 73,355,348 |
| **Non-operating Revenues (Expenses):** | | |
| Interest income, net of amounts capitalized | 3,127,451 | 1,096,517 |
| Interest expense on bonds, net of amounts capitalized | (20,735,872) | (21,544,440) |
| Amortization of prepaid bond costs | (629,995) | (693,501) |
| Change in value of pension related items | (61,702) | (3,196,667) |
| Change in value of OPEB related items | (789,172) | - |
| Total non-operating revenues (expenses) | (19,089,290) | (24,338,091) |
| **Change in Net Position** | 48,934,400 | 49,017,257 |
| **Net Position:** | | |
| Beginning of year, as restated for 2018 | 257,170,507 | 213,528,616 |
| End of year | $ 306,104,907 | $ 262,545,873 |

The notes to financial statements are an integral part of this statement.

# CAPITAL REGION WATER

## BALANCE SHEETS

DECEMBER 31, 2020 AND 2019

| Assets and Deferred Outflows of Resources | 2020 | 2019 |
|---|---|---|
| Assets: | | |
| Current assets: | | |
| Cash and cash equivalents | $ 33,125,086 | $ 37,818,930 |
| Accounts receivable, net of allowance for uncollectible accounts of $6,812,663 and $6,179,939 | 12,990,450 | 11,392,879 |
| Grants receivable | 207,125 | 481,413 |
| Due from the City of Harrisburg | 3,247,428 | 3,030,340 |
| Prepaid expenses | 631,891 | 407,379 |
| Inventory | 226,727 | 219,675 |
| Total current assets | 50,428,707 | 53,350,616 |
| Restricted assets: | | |
| Cash and cash equivalents - restricted under trust indentures and guarantee agreement | 10,339,323 | 10,728,097 |
| Investments - restricted under trust indentures | 19,133,382 | 23,792,020 |
| Total restricted assets | 29,472,705 | 34,520,117 |
| Noncurrent assets: | | |
| Capital assets, not being depreciated | 41,304,196 | 25,938,916 |
| Capital assets, net of accumulated depreciation of $138,312,983 and $132,254,413 | 182,981,052 | 177,481,346 |
| Net pension asset | 793,994 | - |
| Total noncurrent assets | 225,079,242 | 203,420,262 |
| Total Assets | 304,980,654 | 291,290,995 |
| Deferred Outflows of Resources: | | |
| Deferred loss on refunding | 6,138,866 | 6,849,812 |
| Deferred outflows of resources for other postemployment benefits | 154,587 | 78,714 |
| Deferred outflows of resources for pension | 1,018,573 | 1,518,157 |
| Total Deferred Outflows of Resources | 7,312,026 | 8,446,683 |
| **Total Assets and Deferred Outflows of Resources** | $ 312,292,680 | $ 299,737,678 |

# CAPITAL REGION WATER

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| **Operating Revenues:** | | |
| User charges | $ 46,053,281 | $ 47,556,016 |
| Total operating revenues | 46,053,281 | 47,556,016 |
| **Operating Expenses:** | | |
| Operating | 15,078,242 | 14,776,480 |
| Administrative | 5,832,986 | 5,788,495 |
| Depreciation | 6,058,571 | 5,654,952 |
| Total operating expenses | 26,969,799 | 26,219,927 |
| **Operating Income** | 19,083,482 | 21,336,089 |
| **Non-Operating Revenues (Expenses):** | | |
| Investment income | 426,489 | 1,193,936 |
| Grant revenue | 177,024 | 1,184,617 |
| Gain on sale of easements | 191,516 | 40,000 |
| Miscellaneous income (expense) | 921,942 | 606,499 |
| Gain (loss) on disposal of capital assets | 2,000 | (74,363) |
| Interest expense | (5,725,558) | (5,836,796) |
| Total non-operating revenues (expenses) | (4,006,587) | (2,886,107) |
| **Change in Net Position** | 15,076,895 | 18,449,982 |
| **Net Position:** | | |
| Beginning of year | 94,622,873 | 76,172,891 |
| End of year | $109,699,768 | $ 94,622,873 |

The accompanying notes are an integral part of these financial statements.

# CAPITAL REGION WATER

## BALANCE SHEET

DECEMBER 31, 2019

(with comparative totals as of December 31, 2018)

| Assets and Deferred Outflows of Resources | 2019 | 2018 |
|---|---|---|
| Assets: | | |
| Current assets: | | |
| Cash and cash equivalents | $ 37,818,930 | $ 48,169,716 |
| Accounts receivable, net of allowance for uncollectible accounts of $6,179,939 and $5,914,774 | 11,392,879 | 10,001,747 |
| Grants receivable | 481,413 | 905,431 |
| Due from the City of Harrisburg | 3,030,340 | 3,686,285 |
| Prepaid expenses | 407,379 | 403,089 |
| Inventory | 219,675 | 347,960 |
| Total current assets | 53,350,616 | 63,514,228 |
| Restricted assets: | | |
| Cash and cash equivalents - restricted under trust indentures and guarantee agreement | 10,728,097 | 19,430,292 |
| Investments - restricted under trust indentures | 23,792,020 | 19,433,058 |
| Total restricted assets | 34,520,117 | 38,863,350 |
| Noncurrent assets: | | |
| Capital assets, not being depreciated | 25,938,916 | 16,946,141 |
| Capital assets, net of accumulated depreciation of $132,254,413 and $128,988,007 | 177,481,346 | 160,175,578 |
| Net pension asset | - | 1,009,658 |
| Total noncurrent assets | 203,420,262 | 178,131,377 |
| Total Assets | 291,290,995 | 280,508,955 |
| Deferred Outflows of Resources: | | |
| Deferred loss on refunding | 6,849,812 | 7,877,263 |
| Deferred outflows of resources for other postemployment benefits | 78,714 | 77,533 |
| Deferred outflows of resources for pension | 1,518,157 | 651,522 |
| Total Deferred Outflows of Resources | 8,446,683 | 8,606,318 |
| **Total Assets and Deferred Outflows of Resources** | $ 299,737,678 | $ 289,115,273 |

# CAPITAL REGION WATER

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEAR ENDED DECEMBER 31, 2019

(with comparative totals for the year ended December 31, 2018)

| | 2019 | 2018 |
|---|---|---|
| **Operating Revenues:** | | |
| User charges | $ 47,556,016 | $ 44,895,271 |
| Total operating revenues | 47,556,016 | 44,895,271 |
| **Operating Expenses:** | | |
| Operating | 14,776,480 | 13,894,496 |
| Administrative | 5,788,495 | 5,293,225 |
| Depreciation | 5,654,952 | 5,394,021 |
| Total operating expenses | 26,219,927 | 24,581,742 |
| **Operating Income** | 21,336,089 | 20,313,529 |
| **Non-Operating Revenues (Expenses):** | | |
| Investment income | 1,193,936 | 568,004 |
| Grant revenue | 1,184,617 | 1,502,468 |
| Gain on sale of easements | 40,000 | 4,838,927 |
| Miscellaneous income (expense) | 606,499 | (180,383) |
| Loss on disposal of capital assets | (74,363) | - |
| Interest expense | (5,836,796) | (6,812,458) |
| Total non-operating revenues (expenses) | (2,886,107) | (83,442) |
| **Change in Net Position** | 18,449,982 | 20,230,087 |
| **Net Position:** | | |
| Beginning of year | 76,172,891 | 55,942,804 |
| End of year | $ 94,622,873 | $ 76,172,891 |

The accompanying notes are an integral part of these financial statements.

# CAPITAL REGION WATER

## BALANCE SHEET

DECEMBER 31, 2018

| | |
|---|---|
| **Assets and Deferred Outflows of Resources** | |
| Assets: | |
| Current assets: | |
| Cash and cash equivalents | $ 48,169,716 |
| Accounts receivable, net of allowance for uncollectible accounts of $5,914,774 | 10,001,747 |
| Grants receivable | 905,431 |
| Due from the City of Harrisburg | 3,686,285 |
| Prepaid expenses | 403,089 |
| Inventory | 347,960 |
| Total current assets | 63,514,228 |
| Restricted assets: | |
| Cash and cash equivalents - restricted under trust indentures and guarantee agreement | 19,430,292 |
| Investments - restricted under trust indentures | 19,433,058 |
| Total restricted assets | 38,863,350 |
| Noncurrent assets: | |
| Capital assets, not being depreciated | 16,946,141 |
| Capital assets, net of accumulated depreciation of $128,988,007 | 160,175,578 |
| Net pension asset | 1,009,658 |
| Total noncurrent assets | 178,131,377 |
| Total Assets | 280,508,955 |
| Deferred Outflows of Resources: | |
| Deferred loss on refunding | 7,877,263 |
| Deferred outflows of resources for other postemployment benefits | 77,533 |
| Deferred outflows of resources for pension | 651,522 |
| Total Deferred Outflows of Resources | 8,606,318 |
| **Total Assets and Deferred Outflows of Resources** | $ 289,115,273 |

# CAPITAL REGION WATER

## STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEAR ENDED DECEMBER 31, 2018

| | |
|---|---|
| **Operating Revenues:** | |
| User charges | $ 44,895,271 |
| Total operating revenues | 44,895,271 |
| **Operating Expenses:** | |
| Operating | 13,894,496 |
| Administrative | 5,293,225 |
| Depreciation | 5,394,021 |
| Total operating expenses | 24,581,742 |
| **Operating Income** | 20,313,529 |
| **Non-Operating Revenues (Expenses):** | |
| Investment income | 568,004 |
| Grant revenue | 1,502,468 |
| Gain on sale of easements | 4,838,927 |
| Miscellaneous expense | (180,383) |
| Interest expense | (6,812,458) |
| Total non-operating revenues (expenses) | (83,442) |
| **Change in Net Position** | 20,230,087 |
| **Net Position:** | |
| Beginning of year - restated | 55,942,804 |
| End of year | $ 76,172,891 |

The accompanying notes are an integral part of these financial statements.

# CITY OF ALTOONA
# BLAIR COUNTY, PENNSYLVANIA
# STATEMENT OF NET POSITION
# DECEMBER 31, 2020
# (AMOUNTS EXPRESSED IN WHOLE DOLLARS)

| | PRIMARY GOVERNMENT | COMPONENT UNITS | | |
|---|---|---|---|---|
| | Governmental Activities | Altoona Water Authority | Redevelopment Authority of Altoona | The Parking Authority of the City of Altoona |
| **ASSETS** | | | | |
| Cash and Cash Equivalents | $ 31,413,012 | $ 5,350,729 | $ 246,634 | $ 128,655 |
| Investments | 237,289 | 10,115,673 | 0 | 0 |
| Taxes Receivable | 4,127,451 | 0 | 0 | 0 |
| Accounts Receivable | 0 | 3,890,554 | 0 | 692 |
| Intergovernmental Receivables | 200,975 | 0 | 0 | 0 |
| Loans Receivable - Current | 687,316 | 0 | 9,826 | 0 |
| Other Receivables | 537,728 | 8,295 | 0 | 0 |
| Prepaid Expenses | 302,750 | 228,189 | 0 | 1,017 |
| Inventory | 406,484 | 0 | 0 | 0 |
| Loans Receivable - Long-Term | 5,731,660 | 0 | 94,387 | 0 |
| Right to Use Asset, Net | 0 | 94,458,106 | 0 | 0 |
| Capital Assets, Net of Accumulated Depreciation | 404,818,897 | 0 | 248,717 | 2,489,094 |
| **TOTAL ASSETS** | $448,463,562 | $114,051,546 | $ 599,564 | $2,619,458 |
| **Deferred Outflows of Resources** | | | | |
| Deferred Charges: | | | | |
| Bond Discounts | $ 43,943 | $ 0 | $ 0 | $ 0 |
| Defined Benefit Pensions | 9,503,418 | 1,160,795 | 0 | 0 |
| OPEB Plans | 410,933 | 0 | 0 | 0 |
| Total Deferred Outflows of Resources | $ 9,958,294 | $ 1,160,795 | $ 0 | $ 0 |
| **LIABILITIES** | | | | |
| Accounts Payable | $ 1,940,050 | $ 1,137,391 | $ 580 | $ 17,229 |
| Accrued Payroll | 478,552 | 0 | 0 | 4,136 |
| Payroll Taxes and Benefits Payable | 321,792 | 0 | 0 | 3,263 |
| Accrued Expenses | 0 | 302,112 | 0 | 0 |
| Accrued Payroll, Taxes, and Withholding | 0 | 247,835 | 0 | 0 |
| Accumulated Compensated Absences | 0 | 0 | 0 | 1,093 |
| Accrued Interest | 484,310 | 0 | 0 | 291 |
| Deposits Held | 136,987 | 83,805 | 0 | 0 |
| Unearned Revenues - Grants | 6,720,952 | 0 | 0 | 0 |
| Unearned Revenues - Rent Received in Advance | 0 | 0 | 200 | 32,749 |
| Noncurrent Liabilities: | | | | |
| Due Within One Year | 4,813,139 | 4,243,433 | 0 | 23,132 |
| Due in More Than One Year | 129,441,566 | 139,374,630 | 0 | 141,860 |
| **TOTAL LIABILITIES** | $144,337,348 | $145,389,206 | $ 780 | $ 223,753 |
| **Deferred Inflows of Resources** | | | | |
| Defined Benefit Pensions | $ 13,641,984 | $ 1,975,668 | $ 0 | $ 0 |
| **NET POSITION** | | | | |
| Net Investment in Capital Assets | $335,150,152 | $ 0 | $ 248,717 | $2,324,102 |
| Restricted for: | | | | |
| Highway Aid | 966,475 | 0 | 0 | 0 |
| Capital Expenditures | 6,100,506 | 0 | 0 | 0 |
| Recreation | 243,369 | 0 | 0 | 0 |
| Other Projects | 4,410,401 | 0 | 344,636 | 0 |
| Water Authority | 0 | 0 | 0 | 0 |
| Unrestricted (Deficit) | ( 46,428,379) | ( 32,152,533) | 5,431 | 71,603 |
| **TOTAL NET POSITION** | $300,442,524 | ($ 32,152,533) | $ 598,784 | $2,395,705 |

**See Accompanying Notes and Independent Auditor's Report**

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER OPERATING FUND**

| | 2020 BUDGET 0% |
|---|---|
| **REVENUE** | |
| WATER SALES | 17,900,000 |
| SALES TO OTHER UTILITIES | 500,000 |
| BULK SALES | - |
| CAPITAL SURCHARGE | 500,000 |
| PENALTIES | 90,000 |
| INSTALL/RENEW-SERVICE LINES | 95,000 |
| METER INCOME | 30,000 |
| SHUT OFFS | 60,000 |
| FIRE LINES | 330,000 |
| FINAL READINGS | 45,000 |
| CAPACITY FEES | 30,000 |
| REIMBURSEMENTS-BELLWOOD BORO | 96,589 |
| REIMBURSEMENTS-HOLLIDAYSBURG BORO | 342,652 |
| INTEREST INCOME | 50,000 |
| SERVICE-WASTEWATER DIVISION | 1,161,358 |
| TIMBER SALES | 50,000 |
| OTHER RENTALS | 172,000 |
| MISCELLANEOUS INCOME | 96,000 |
| BAD DEBT RECOVERY | 4,000 |
| **TOTAL REVENUES** | **21,552,599** |
| **EXPENDITURES-ADMINSITRATIVE** | |
| WAGES | 794,997 |
| OFFICER'S COMPENSATION | 1,200 |
| CONSULTING ENGINEERS | 50,000 |
| AUDITING | 15,000 |
| LEGAL FEES | 25,000 |
| TRUSTEES EXPENSE | - |
| OTHER PROFESSIONAL FEES | 75,000 |
| ADVERTISING | 6,000 |
| PUBLIC RELATIONS AND MARKETING | 1,000 |
| TRAVEL/CONFERENCES/EDUCATION | 3,000 |
| DUES & SUPSCRIPTIONS | 7,500 |
| MAINTENANCE BUILDING | 20,000 |
| MAINTENANCE-EQUIPMENT | 12,000 |
| OFFICE SUPPLIES | 6,000 |
| POSTAGE | 2,000 |
| LEASE PAYMENT | 3,799,870 |
| HUMAN RESOURCE EXPENSE | 2,500 |
| SAFETY COMMITTEE EXPENSE | 12,000 |
| TELEPHONE EXPENSE | 15,000 |
| BAD DEBT EXPENSE | 20,000 |
| UTILITIES | 22,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 4,500 |
| **TOTAL ADMINISTRATIVE EXPENDITURES** | **4,894,567** |

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER OPERATING FUND**

| | 2020 BUDGET |
|---|---|
| **EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE** | |
| SOCIAL SECURITY | 423,599 |
| WORKERS COMPENSATION | 84,000 |
| PA UNEMPLOYMENT COMPENSATION | 5,000 |
| PENSION | 488,366 |
| GROUP LIFE, AD&D, LTD , STD | 90,000 |
| HOSPITALIZATION & MAJOR MEDICAL | 1,515,415 |
| HEALTH & WELFARE(AFSCME) | 28,000 |
| MEDICAL EXAMINATIONS | 8,000 |
| INSURANCE-FLEET | 17,773 |
| INSURANCE-ALL RISK PROPERTY | 142,219 |
| INSURANCE-PUBLIC OFFICIAL LIABILITY | 5,954 |
| CONTINGENCIES | 250,000 |
| **TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE** | **3,058,326** |
| ***TOTAL OPERATING EXPENDITURES*** | **15,711,419** |
| **CAPITAL EXPENDITURES** | |
| CONSTRUCTION & RENEWAL | 438,500 |
| VEHICLES | 310,143 |
| OFFICE FURNITURE & EQUIPMENT | - |
| METERS | 10,000 |
| COMPUTER EQUIPMENT | 7,500 |
| FIRE HYDRANTS | 40,000 |
| PLANT EQUIPMENT/RENEWAL | 480,264 |
| OTHER EQUIPMENT | 24,650 |
| **TOTAL CAPITAL EXPENDITURES** | **1,311,057** |
| **DEBT SERVICE & INTEREST** | |
| DEBT SERVICE PAYMENT | 4,408,904 |
| **TOTAL DEBT SERVICE PAYMENT** | **4,408,904** |
| **TOTAL EXPENDITURES** | **21,431,380** |
| **NET REVENUE/(DEFICIT)** | **121,219** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER OPERATING FUND**

| | 2020 BUDGET |
|---|---|
| **REVENUE** | **0%** |
| WASTEWATER RENTALS | 11,600,000 |
| CAPITAL SURCHARGE | 500,000 |
| PENALTIES | 65,000 |
| CAPACITY FEES | 10,000 |
| SEWER INSTALL/TAP FEES | 20,000 |
| SEWER-SURCHARGE/PRETREATMENT | 150,000 |
| SEPTIC HAULER FEES | 500,000 |
| INTERMUNICIPAL SERVICE REIMBURSEMENT | 668,680 |
| INTEREST INCOME | 75,000 |
| MISCELLANEOUS INCOME | 90,000 |
| RECOVERY - CHARGED OFF ACCOUNTS | 2,000 |
| **TOTAL REVENUES** | **13,680,680** |
| **EXPENDITURES-ADMINISTRATIVE** | |
| OFFICER'S COMPENSATION | 1,200 |
| CONSULTING ENGINEERS | 85,000 |
| AUDITING | 12,000 |
| LEGAL FEES | 40,000 |
| TRUSTEE EXPENSE | 5,200 |
| OTHER PROFESSIONAL FEES | 35,000 |
| ADVERTISING | 3,000 |
| PUBLIC RELATIONS EXPENSE | 1,000 |
| TRAVEL/CONFERENCES/EDUCATION | 5,000 |
| DUES & SUPSCRIPTIONS | 7,700 |
| MAINTENANCE-EQUIPMENT | 12,000 |
| OFFICE SUPPLIES | 5,000 |
| POSTAGE | 3,000 |
| LEASE PAYMENT | 2,137,427 |
| PAYMENT FOR WATER DIVISION SERVICES | 1,161,358 |
| HUMAN RESOURCE EXPENSE | 2,500 |
| SAFETY COMMITTEE EXPENSE | 10,000 |
| BAD DEBT EXPENSE | 15,000 |
| TELEPHONE EXPENSE | 7,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 2,000 |
| **TOTAL ADMINISTRATIVE EXPENDITURES** | **3,550,385** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER OPERATING FUND**

| | 2020 BUDGET |
|---|---|
| **EXPENDITURES-SANITARY SEWERS** | |
| WAGES | 690,528 |
| MAINTENANCE-BUILDING | 5,000 |
| GIS SYSTEM EXPENSE | 17,033 |
| TELEPHONE EXPENSE | 2,400 |
| SAFETY EQUIPMENT/CLOTHING | 4,000 |
| MATERIALS & SUPPLIES | 200,000 |
| MAINTENANCE-VEHICLE | 50,000 |
| GASOLINE & OIL | 25,000 |
| DIESEL FUEL | 30,000 |
| STREET CUTS | 150,000 |
| ONE CALL SYSTEM EXPENSE | 4,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 7,100 |
| **TOTAL SANITARY SEWERS EXPENDITURES** | **1,185,061** |
| **EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE** | |
| SOCIAL SECURITY | 164,435 |
| WORKERS COMPENSATION | 42,000 |
| PA UNEMPLOYMENT COMPENSATION | 2,500 |
| PENSION | 230,800 |
| GROUP LIFE, AD&D, LTD | 30,000 |
| HOSPITALIZATION & MAJR MEDICAL | 653,800 |
| HEALTH & WELFARE(AFSCME) | 11,000 |
| MEDICAL EXAMINATIONS | 5,000 |
| INSURANCE-FLEET | 11,972 |
| INSURANCE-ALL RISK PROPERTY | 113,442 |
| INSURANCE-BOILER MACHINERY | - |
| INSURANCE-PUBLIC OFFICIAL LIAB | 5,658 |
| CONTINGENCIES | 100,000 |
| **TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE** | **1,370,607** |
| ***TOTAL OPERATING EXPENDITURES*** | **9,369,495** |

# CITY OF ALTOONA
# BLAIR COUNTY, PENNSYLVANIA
# STATEMENT OF NET POSITION
# DECEMBER 31, 2019
# (AMOUNTS EXPRESSED IN WHOLE DOLLARS)

| | PRIMARY GOVERNMENT | COMPONENT UNITS | | |
|---|---|---|---|---|
| | Governmental Activities | Altoona Water Authority | Redevelopment Authority of Altoona | The Parking Authority of the City of Altoona |
| **ASSETS** | | | | |
| Cash and Cash Equivalents | $ 24,556,757 | $ 2,142,068 | $ 217,510 | $ 157,819 |
| Investments | 366,982 | 12,127,836 | 0 | 0 |
| Taxes Receivable | 4,174,803 | 0 | 0 | 0 |
| Accounts Receivable | 0 | 3,750,328 | 2,816 | 3,568 |
| Intergovernmental Receivables | 321,540 | 0 | 0 | 0 |
| Loans Receivable – Current | 795,935 | 0 | 8,972 | 0 |
| Other Receivables | 193,952 | 14,619 | 0 | 0 |
| Prepaid Expenses | 314,090 | 25,755 | 0 | 1,667 |
| Inventory | 512,219 | 0 | 0 | 0 |
| Loans Receivable – Long-Term | 5,374,360 | 0 | 103,723 | 0 |
| Right to Use Asset, Net | 0 | 100,528,196 | 0 | 0 |
| Capital Assets, Net of Accumulated Depreciation | 405,378,818 | 0 | 254,542 | 2,527,780 |
| **TOTAL ASSETS** | $441,989,456 | $118,588,802 | $ 587,563 | $2,690,834 |
| **Deferred Outflows of Resources** | | | | |
| Deferred Charges: | | | | |
| Bond Discounts | $ 780,363 | $ 0 | $ 0 | $ 0 |
| Defined Benefit Pensions | 10,878,514 | 1,651,319 | | |
| OPEB Plans | 1,130,677 | 0 | 0 | 0 |
| Total Deferred Outflows of Resources | $ 12,789,554 | $ 1,651,319 | $ 0 | $ 0 |
| **LIABILITIES** | | | | |
| Accounts Payable | $ 2,790,042 | $ 1,732,865 | $ 4,978 | $ 14,842 |
| Accrued Payroll | 362,296 | 0 | 0 | 0 |
| Payroll Taxes and Benefits Payable | 134,704 | 0 | 0 | 3,459 |
| Accrued Expenses | 0 | 0 | 0 | 2,958 |
| Accrued Payroll, Taxes, and Withholding | 0 | 427,226 | 0 | 0 |
| Accumulated Compensated Absences | 0 | 279,288 | 0 | 2,119 |
| Accrued Interest | 295,444 | 0 | 0 | 321 |
| Deposits Held | 112,334 | 83,805 | 0 | 0 |
| Unearned Revenues – Grants | 6,271,037 | 0 | 0 | 0 |
| Unearned Revenues - Rent Received in Advance | 0 | 0 | 200 | 39,412 |
| Noncurrent Liabilities: | | | | |
| Due Within One Year | 3,835,073 | 7,205,690 | 0 | 22,257 |
| Due in More Than One Year | 118,568,396 | 150,406,922 | 0 | 164,998 |
| **TOTAL LIABILITIES** | $132,369,326 | $160,135,796 | $ 5,178 | $ 250,366 |
| **Deferred Inflows of Resources** | | | | |
| Defined Benefit Pensions | $ 12,696,000 | $ 1,965,233 | $ 0 | $ 0 |
| **NET POSITION** | | | | |
| Net Investment in Capital Assets | $345,530,381 | $ 0 | $ 254,542 | $2,340,525 |
| Restricted for: | | | 0 | 0 |
| Highway Aid | 894,316 | 0 | 0 | 0 |
| Capital Expenditures | 8,184,878 | 0 | 0 | 0 |
| Recreation | 231,511 | 0 | 0 | 0 |
| Other Projects | 5,470,093 | 0 | 339,715 | 0 |
| Water Authority | 0 | 0 | 0 | 0 |
| Unrestricted (Deficit) | ( 50,597,495) | ( 41,860,908) | ( 11,872) | 99,943 |
| **TOTAL NET POSITION** | $309,713,684 | ($ 41,860,908) | $ 582,385 | $2,440,468 |

See Accompanying Notes and Independent Auditor's Report

## ALTOONA WATER AUTHORITY
## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

| | Year Ended December 31, 2017 | 2016 |
|---|---|---|
| **Operating Revenues, Securing Revenue Bonds** | | |
| Water/Sewer Rentals | $ 28,033,026 | $ 27,234,701 |
| Installations and Renewals Service Lines | 119,509 | 116,080 |
| Meter Sales, Shut-Offs, and Remotes | 224,910 | 224,676 |
| Timber Sales | 40,197 | 142,007 |
| Septic Hauler Fees | 75,649 | 81,269 |
| Fire Hydrant and Line Rentals | 343,767 | 331,999 |
| Service to Wastewater Division | 1,057,455 | 1,097,406 |
| Miscellaneous | 322,114 | 414,937 |
| Intermunicipal Service Reimbursements | 1,409,183 | 1,346,227 |
| **Total Operating Revenues** | 31,625,810 | 30,989,302 |
| **Operating Expenses - Functional and Departmental** | | |
| Administration | 2,117,738 | 5,106,472 |
| Billing and Collection | 709,035 | 750,662 |
| Purification and Distribution/Disposal | 5,001,575 | 5,078,445 |
| Meter Division | 482,163 | 476,819 |
| Maintenance | 3,823,793 | 3,918,953 |
| Fringe Benefits and Insurance | 3,706,216 | 3,838,891 |
| Depreciation and Amortization | 6,796,548 | 7,861,126 |
| **Total Operating Expenses-Functional and Departmental** | 22,637,068 | 27,031,368 |
| **Operating Income** | 8,988,742 | 3,957,934 |
| **Nonoperating Revenues and (Expenses)** | | |
| Capital Contribution to City of Altoona | (223,701,014) | -- |
| Investment Income | 80,223 | 50,052 |
| Interest Expense | ( 2,813,892) | ( 2,983,688) |
| Fees and Miscellaneous | ( 379) | ( 839) |
| Gain on Disposition of Fixed Assets | 45,961 | 34,612 |
| Contributed Capital | 16,825 | -- |
| Amortization Bond Issue Costs | ( 125,478) | ( 126,251) |
| **Total Nonoperating Revenues and (Expenses)** | (226,497,754) | ( 3,026,114) |
| **Net Income** | (217,509,012) | 931,820 |
| **Net Position - January 1** | 146,894,669 | 145,962,849 |
| **Net Position - December 31** | **$( 70,614,343)** | **$ 146,894,669** |

See Accompanying Notes to Financial Statements

## ALTOONA WATER AUTHORITY
## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

| | Year Ended December 31, 2018 | 2017 |
|---|---|---|
| **Operating Revenues, Securing Revenue Bonds** | | |
| Water/Sewer Rentals | $ 30,794,341 | $ 28,033,026 |
| Installations and Renewals Service Lines | 139,503 | 119,509 |
| Meter Sales, Shut-Offs, and Remotes | 250,565 | 224,910 |
| Timber Sales | 116,337 | 40,197 |
| Septic Hauler Fees | 2,269,905 | 75,649 |
| Fire Hydrant and Line Rentals | 341,023 | 343,767 |
| Service to Wastewater Division | 1,047,022 | 1,057,455 |
| Miscellaneous | 421,392 | 322,114 |
| Intermunicipal Service Reimbursements | 1,231,099 | 1,409,183 |
| **Total Operating Revenues** | 36,611,187 | 31,625,810 |
| **Operating Expenses - Functional and Departmental** | | |
| Administration | 2,180,781 | 2,117,738 |
| Billing and Collection | 681,880 | 709,035 |
| Purification and Distribution/Disposal | 5,060,425 | 5,001,575 |
| Meter Division | 505,784 | 482,163 |
| Maintenance | 3,956,167 | 3,823,793 |
| Fringe Benefits and Insurance | 4,133,886 | 3,706,216 |
| Depreciation and Amortization | 6,070,090 | 6,796,548 |
| **Total Operating Expenses-Functional and Departmental** | 22,589,013 | 22,637,068 |
| **Operating Income** | 14,022,174 | 8,988,742 |
| **Nonoperating Revenues and (Expenses)** | | |
| Capital Contribution to City of Altoona | ( 4,277,135) | (223,701,014) |
| Investment Income | 170,111 | 80,223 |
| Interest Expense | ( 6,783,092) | ( 2,813,892) |
| Fees and Miscellaneous | -- | ( 379) |
| Gain on Disposition of Fixed Assets | 105,075 | 45,961 |
| Contributed Capital | 201,042 | 16,825 |
| Amortization Bond Issue Costs | ( 154,988) | ( 125,478) |
| **Total Nonoperating Revenues and (Expenses)** | ( 10,738,987) | (226,497,754) |
| **Net Income/(Loss)** | 3,283,187 | (217,509,012) |
| **Net Position - January 1** | ( 70,614,343) | 146,894,669 |
| **Net Position - December 31** | **$( 67,331,156)** | **$( 70,614,343)** |

See Accompanying Notes to Financial Statements

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **REVENUE** | |
| WATER SALES | 17,474,179 |
| SALES TO OTHER UTILITIES | 450,000 |
| BULK SALES | - |
| CAPITAL SURCHARGE | 500,000 |
| PENALTIES | 90,000 |
| INSTALL/RENEW-SERVICE LINES | 95,000 |
| METER INCOME | 30,000 |
| SHUT OFFS | 60,000 |
| FIRE LINES | 330,000 |
| FINAL READINGS | 45,000 |
| CAPACITY FEES | 30,000 |
| REIMBURSEMENTS-BELLWOOD BORO | 261,257 |
| REIMBURSEMENTS-HOLLIDAYSBURG BORO | 743,153 |
| INTEREST INCOME | 70,000 |
| SERVICE-WASTEWATER DIVISION | 1,112,400 |
| TIMBER SALES | 50,000 |
| OTHER RENTALS | 172,000 |
| MISCELLANEOUS INCOME | 96,000 |
| BAD DEBT RECOVERY | 4,000 |
| **TOTAL REVENUES** | **21,612,989** |
| **EXPENDITURES-ADMINSITRATIVE** | |
| WAGES | 770,879 |
| OFFICER'S COMPENSATION | 1,200 |
| CONSULTING ENGINEERS | 45,000 |
| AUDITING | 15,000 |
| LEGAL FEES | 25,000 |
| TRUSTEES EXPENSE | 4,200 |
| OTHER PROFESSIONAL FEES | 100,000 |
| ADVERTISING | 6,000 |
| PUBLIC RELATIONS AND MARKETING | 1,000 |
| TRAVEL/CONFERENCES/EDUCATION | 2,500 |
| DUES & SUPSCRIPTIONS | 6,500 |
| MAINTENANCE BUILDING | 15,000 |
| MAINTENANCE-EQUIPMENT | 12,000 |
| OFFICE SUPPLIES | 6,000 |
| POSTAGE | 2,000 |
| LEASE PAYMENT | 2,730,010 |
| HUMAN RESOURCE EXPENSE | 2,500 |
| SAFETY COMMITTEE EXPENSE | 12,000 |
| TELEPHONE EXPENSE | 15,000 |
| BAD DEBT EXPENSE | 20,000 |
| UTILITIES | 22,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 2,500 |
| **TOTAL ADMINISTRATIVE EXPENDITURES** | **3,816,289** |

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-BILLING & COLLECTION** | |
| WAGES | 467,320 |
| TRAVEL/CONFERENCES/EDUCATION | 500 |
| MAINTENANCE-EQUIPMENT | 10,000 |
| OFFICE SUPPLIES | 20,000 |
| UTILITY BILLING SOFTWARE HOSTING | 85,000 |
| POSTAGE | 145,000 |
| COLLECTION EXPENSE | 7,000 |
| TELEPHONE EXPENSE | 3,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 4,000 |
| **TOTAL BILLING & COLLECTION EXPENDITRURES** | **741,820** |
| **EXPENDITURES-PURIFICATION & DISTRIBUTION** | |
| WAGES | 1,247,592 |
| TRAVEL/CONFERENCES/EDUCATION | 7,000 |
| DAM INSPECTIONS | 27,000 |
| TELEPHONE EXPENSE | 2,700 |
| MAINTENANCE-WATER PUMP STATION | - |
| MAINTENANCE-TANKS | - |
| MAINTENANCE-WATERSHED | 15,000 |
| SOURCE WATER PROTECTION | 6,000 |
| UTILITIES | 105,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 8,000 |
| **TOTAL PURIFICATION & DISTRIBUTION EXPENDITURES** | **1,418,292** |
| **EXPENDITURES-HORSESHOE CURVE WTP** | |
| LAB COSTS/SUPPLIES | 32,500 |
| TELEPHONE EXPENSE | 4,200 |
| ELECTRICITY | 130,000 |
| CHEMICALS | 89,250 |
| MAINTENANCE | 86,250 |
| SLUDGE DISPOSAL | 10,000 |
| UTILITIES - PROPANE HEATING | 65,000 |
| **TOTAL HORSESHOE CURVE EXPENDITURES** | **417,200** |
| **EXPENDITURES-MILL RUN WTP** | |
| LAB COSTS/SUPPLIES | 17,300 |
| TELEPHONE EXPENSE | 1,300 |
| ELECTRICITY | 40,000 |
| CHEMICALS | 18,900 |
| MAINTENANCE | 25,000 |
| SLUDGE DISPOSAL | 3,000 |
| UTILITIES - PROPANE HEATING | 15,000 |
| **TOTAL MILL RUN EXPENDITURES** | **120,500** |

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-TIPTON WTP** | |
| LAB COSTS/SUPPLIES | 25,800 |
| TELEPHONE EXPENSE | 1,500 |
| ELECTRICITY | 54,000 |
| CHEMICALS | 31,500 |
| MAINTENANCE | 23,000 |
| SLUDGE DISPOSAL | 3,000 |
| UTILITIES - PROPANE HEATING | 10,000 |
| **TOTAL TIPTON EXPENDITURES** | **148,800** |
| **EXPENDITURES-KETTLE WTP** | |
| LAB COSTS/SUPPLIES | 3,000 |
| TELEPHONE EXPENSE | 1,000 |
| ELECTRICITY | 7,000 |
| CHEMICALS | 2,000 |
| MAINTENANCE | 5,000 |
| SLUDGE DISPOSAL | |
| UTILITIES - PROPANE HEATING | 4,500 |
| **TOTAL KETTLE EXPENDITURES** | **22,500** |
| **EXPENDITURES-HOMER GAP WTP** | |
| LAB COSTS/SUPPLIES | 2,000 |
| TELEPHONE EXPENSE | 400 |
| ELECTRICITY | 7,000 |
| CHEMICALS | 2,000 |
| MAINTENANCE | 4,000 |
| SLUDGE DISPOSAL | - |
| UTILITIES - PROPANE HEATING | 5,000 |
| **TOTAL HOMER GAP EXPENDITURES** | **20,400** |
| **EXPENDITURES-PLANE NINE WTP** | |
| LAB COSTS/SUPPLIES | 32,500 |
| TELEPHONE EXPENSE | 1,500 |
| ELECTRICITY | 75,000 |
| CHEMICALS | 31,500 |
| MAINTENANCE | 23,000 |
| SLUDGE DISPOSAL | 3,000 |
| UTILITIES - PROPANE HEATING | 15,000 |
| INSURANCE | 11,000 |
| **TOTAL PLANE NINE EXPENDITURES** | **192,500** |

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-BELLWOOD WTP** | |
| LAB COSTS/SUPPLIES | 32,500 |
| TELEPHONE EXPENSE | 1,400 |
| ELECTRICITY | 75,000 |
| CHEMICALS | 54,600 |
| MAINTENANCE | 28,750 |
| SLUDGE DISPOSAL | 4,000 |
| UTILITIES - PROPANE HEATING | 20,000 |
| INSURANCE | 10,000 |
| **TOTAL BELLWOOD EXPENDITURES** | **226,250** |
| **EXPENDITURES-METER DIVISION** | |
| WAGES | 450,182 |
| MAINTENANCE-EQUIPMENT | 30,000 |
| TELEPHONE EXPENSE | 5,000 |
| OFFICE SUPPLIES/UNIFORMS/MAINT. | 2,000 |
| MATERIALS & SUPPLIES | 20,000 |
| GASOLINE & OIL | 18,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 3,500 |
| | - |
| **TOTAL METER DIVISION EXPENDITURES** | **528,682** |
| **EXPENDITURES-MAINTENANCE** | |
| WAGES | 2,446,757 |
| TRAVEL/CONFERENCES/EDUCATION | 14,000 |
| MAINTENANCE-BUILDING | 10,000 |
| MAINTENANCE-EQUIPMENT | 8,000 |
| MAINTENANCE-COMMUNICATION EQUIPMENT | 500 |
| OFFICE SUPPLIES | 3,000 |
| GIS SYSTEM EXPENSE | 11,200 |
| TELEPHONE EXPENSE | 16,000 |
| SAFETY EQUIPMENT/CLOTHING | 10,000 |
| MAINTENANCE - WATER PUMP STATIONS | 12,000 |
| MAINTENANCE - TANKS | 30,000 |
| UTILITIES | 18,000 |
| MECHANICS UNIFORMS | 2,000 |
| MATERIALS & SUPPLIES | 400,000 |
| LEASE EXPENSE | 14,051 |
| MAINTENANCE-VEHICLE | 75,000 |
| GASOLINE & OIL | 55,000 |
| DIESEL FUEL | 65,000 |
| STREET CUTS | 325,000 |
| ONE CALL SYSTEM EXPENSE | 7,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 15,000 |
| **TOTAL MAINTENANCE EXPENDITURES** | **3,537,508** |

**ALTOONA WATER AUTHORITY**
**WATER DIVISION**
**WATER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE** | |
| SOCIAL SECURITY | 411,779 |
| WORKMENS COMPENSATION | 140,000 |
| PA UNEMPLOYMENT COMPENSATION | 5,000 |
| PENSION | 486,300 |
| GROUP LIFE, AD&D, LTD , STD | 90,000 |
| HOSPITALIZATION & MAJOR MEDICAL | 1,480,000 |
| HEALTH & WELFARE(AFSCME) | 28,329 |
| MEDICAL EXAMINATIONS | 8,000 |
| INSURANCE-FLEET | 24,601 |
| INSURANCE-ALL RISK PROPERTY | 147,898 |
| INSURANCE-PUBLIC OFFICIAL LIABILITY | 3,685 |
| CONTINGENCIES | - |
| **TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE** | **2,825,592** |
| ***TOTAL OPERATING EXPENDITURES*** | **14,016,333** |
| **CAPITAL EXPENDITURES** | |
| CONSTRUCTION & RENEWAL | 612,912 |
| VEHICLES | - |
| OFFICE FURNITURE & EQUIPMENT | - |
| METERS | - |
| COMPUTER EQUIPMENT | - |
| FIRE HYDRANTS | - |
| PLANT EQUIPMENT/RENEWAL | - |
| OTHER EQUIPMENT | - |
| **TOTAL CAPITAL EXPENDITURES** | **612,912** |
| **DEBT SERVICE & INTEREST** | |
| DEBT SERVICE PAYMENT | 6,435,936 |
| **TOTAL DEBT SERVICE PAYMENT** | **6,435,936** |
| **TOTAL EXPENDITURES** | **21,065,181** |
| **NET REVENUE/(DEFICIT)** | **547,808** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **REVENUE** | **0%** |
| WASTEWATER RENTALS | 11,343,481 |
| CAPITAL SURCHARGE | 500,000 |
| PENALTIES | 65,000 |
| CAPACITY FEES | 10,000 |
| SEWER INSTALL/TAP FEES | 20,000 |
| SEWER-SURCHARGE/PRETREATMENT | 150,000 |
| SEPTIC HAULER FEES | 190,000 |
| INTERMUNICIPAL SERVICE REIMBURSEMENT | 592,855 |
| INTEREST INCOME | 25,000 |
| MISCELLANEOUS INCOME | 90,000 |
| RECOVERY - CHARGED OFF ACCOUNTS | 2,000 |
| **TOTAL REVENUES** | **12,988,336** |
| **EXPENDITURES-ADMINISTRATIVE** | |
| OFFICER'S COMPENSATION | 1,200 |
| CONSULTING ENGINEERS | 113,000 |
| AUDITING | 12,000 |
| LEGAL FEES | 40,000 |
| TRUSTEE EXPENSE | 5,200 |
| OTHER PROFESSIONAL FEES | 35,000 |
| ADVERTISING | 3,000 |
| PUBLIC RELATIONS EXPENSE | 1,000 |
| TRAVEL/CONFERENCES/EDUCATION | 5,000 |
| DUES & SUPSCRIPTIONS | 6,700 |
| MAINTENANCE-EQUIPMENT | 12,000 |
| OFFICE SUPPLIES | 5,000 |
| POSTAGE | 3,000 |
| PAYMENT FOR CITY SERVICES | 1,535,630 |
| PAYMENT FOR WATER DIVISION SERVICES | 1,112,400 |
| HUMAN RESOURCE EXPENSE | 2,500 |
| SAFETY COMMITTEE EXPENSE | 10,000 |
| BAD DEBT EXPENSE | 15,000 |
| TELEPHONE EXPENSE | 7,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 2,000 |
| **TOTAL ADMINISTRATIVE EXPENDITURES** | **2,926,630** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-DISPOSAL PLANTS** | |
| WAGES | 1,338,792 |
| TRAVEL/CONFERENCE/EDUCATION | 16,000 |
| PRETREATMENT MONITORING | 60,000 |
| TELEPHONE EXPENSE | 4,500 |
| SAFETY EQUIPMENT/CLOTHING | 1,500 |
| MAINTENANCE - PUMP STATIONS | 4,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 10,000 |
| **TOTAL DISPOSAL PLANTS EXPENDITURES** | **1,434,792** |
| **EXPENDITURES - EASTERLY PLANT** | |
| LAB COSTS & SUPPLIES | 55,000 |
| TELEPHONE EXPENSE | 2,000 |
| ELECTRICITY-PLANTS | 350,000 |
| CHEMICALS | 70,000 |
| MAINTENANCE-PLANTS | 103,000 |
| MAINTENANCE-CSO'S | 15,000 |
| SLUDGE DISPOSAL | 20,000 |
| NATURAL GAS & OIL | 35,000 |
| **TOTAL EASTERLY PLANT EXPENDITURES** | **650,000** |
| **EXPENDITURES - WESTERLY PLANT** | |
| LAB COSTS & SUPPLIES | 55,000 |
| TELEPHONE EXPENSE | 10,000 |
| ELECTRICITY-PLANTS | 500,000 |
| CHEMICALS | 95,000 |
| MAINTENANCE-PLANTS | 204,000 |
| MAINTENANCE-CSO'S | 15,000 |
| SLUDGE DISPOSAL | 20,000 |
| NATURAL GAS & OIL | 55,000 |
| **TOTAL WESTERLY PLANT EXPENDITURES** | **954,000** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **EXPENDITURES-SANITARY SEWERS** | |
| WAGES | 682,400 |
| MAINTENANCE-BUILDING | 4,000 |
| GIS SYSTEM EXPENSE | 11,200 |
| TELEPHONE EXPENSE | 2,400 |
| SAFETY EQUIPMENT/CLOTHING | 4,000 |
| MATERIALS & SUPPLIES | 180,000 |
| MAINTENANCE-VEHICLE | 40,000 |
| GASOLINE & OIL | 20,000 |
| DIESEL FUEL | 30,000 |
| STREET CUTS | 150,000 |
| ONE CALL SYSTEM EXPENSE | 4,000 |
| SMALL TOOLS, EQUIPMENT, FURNITURE | 3,000 |
| **TOTAL SANITARY SEWERS EXPENDITURES** | **1,131,000** |
| **EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE** | |
| SOCIAL SECURITY | 154,621 |
| WORKMENS COMPENSATION | 68,000 |
| PA UNEMPLOYMENT COMPENSATION | 2,500 |
| PENSION | 230,000 |
| GROUP LIFE, AD&D, LTD | 30,000 |
| HOSPITALIZATION & MAJR MEDICAL | 636,354 |
| HEALTH & WELFARE(AFSCME) | 11,600 |
| MEDICAL EXAMINATIONS | 5,000 |
| INSURANCE-FLEET | 16,436 |
| INSURANCE-ALL RISK PROPERTY | 103,458 |
| INSURANCE-BOILER MACHINERY | - |
| INSURANCE-PUBLIC OFFICIAL LIAB | 3,474 |
| CONTINGENCIES | - |
| **TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE** | **1,261,443** |
| ***TOTAL OPERATING EXPENDITURES*** | **8,357,865** |

**ALTOONA WATER AUTHORITY**
**WASTEWATER DIVISION**
**SEWER REVENUE FUND**

| | 2019 BUDGET |
|---|---|
| **CAPITAL EXPENTITURES** | |
| CONSTRUCTION & RENEWAL | - |
| VEHICLES | 431,000 |
| OFFICE FURNITURE & EQUIPMENT | 8,000 |
| COMPUTER EQUIPMENT | 15,500 |
| PLANT EQUIPMENT/RENEWAL | - |
| OTHER EQUIPMENT | 9,000 |
| **TOTAL CAPITAL EXPENDITURES** | **463,500** |
| **DEBT SERVICE & INTEREST** | |
| DEBT SERVICE PAYMENT | 4,154,608 |
| **TOTAL DEBT SERVICE PAYMENT** | **4,154,608** |
| **TOTAL EXPENDITURES** | **12,975,973** |
| **NET REVENUE/(DEFICIT)** | **12,363** |

**CITY OF READING**

**COMBINING STATEMENT OF NET POSITION - WATER FUNDS**

**December 31, 2019**

| | City Water Fund | Reading Area Water Authority | Eliminations | Total Water Fund |
|---|---|---|---|---|
| **ASSETS** | | | | |
| Current assets: | | | | |
| Cash | $ 1,858,893 | $ 13,894,351 | $ - | $ 15,753,244 |
| Investments | 119,120 | - | - | 119,120 |
| Accounts receivable, net | 1,687 | 5,230,760 | - | 5,232,447 |
| Interfund receivables | 293,208 | - | (224,755) | 68,453 |
| Inventory | - | 160,309 | - | 160,309 |
| Prepaid expenses | - | 54,600 | - | 54,600 |
| Total current assets | 2,272,908 | 19,340,020 | (224,755) | 21,388,173 |
| Restricted assets - cash and investments | - | 9,570,456 | - | 9,570,456 |
| Noncurrent assets: | | | | |
| Capital assets not being depreciated | 2,059,359 | 270,252 | - | 2,329,611 |
| Capital assets, net of accumulated depreciation | 9,380,774 | 66,185,454 | - | 75,566,228 |
| Total capital assets, net | 11,440,133 | 66,455,706 | - | 77,895,839 |
| Rights to leased land | - | 917,715 | - | 917,715 |
| Total noncurrent assets | 11,440,133 | 67,373,421 | - | 78,813,554 |
| **TOTAL ASSETS** | 13,713,041 | 96,283,897 | (224,755) | 109,772,183 |
| **DEFERRED OUTFLOWS** | | | | |
| Deferred charge on bond refunding | 123,536 | 917,612 | - | 1,041,148 |
| Deferred outflows of resources for pension | 599,238 | - | - | 599,238 |
| Deferred outflows of resources for other postemployment benefits | 20,939 | - | - | 20,939 |
| **TOTAL DEFERRED OUTFLOWS** | 743,713 | 917,612 | - | 1,661,325 |
| **LIABILITIES** | | | | |
| Current liabilities: | | | | |
| Accounts payable | 14,606 | 378,233 | - | 392,839 |
| Interfund payables | 4,214,064 | 224,755 | (224,755) | 4,214,064 |
| Accrued interest | - | 297,398 | - | 297,398 |
| Accrued payroll and compensated absences | - | 790,915 | - | 790,915 |
| Escrow deposits | - | 107,245 | - | 107,245 |
| Current portion notes and bonds payable | 99,498 | 3,379,254 | - | 3,478,752 |
| Total current liabilities | 4,328,168 | 5,177,800 | (224,755) | 9,281,213 |
| Noncurrent liabilities: | | | | |
| Notes and Bonds payable, net | 3,065,323 | 77,462,829 | - | 80,528,152 |
| Net pension liability | 1,178,813 | - | - | 1,178,813 |
| Other postemployment benefits | 144,972 | - | - | 144,972 |
| Total noncurrent liabilities | 4,389,108 | 77,462,829 | - | 81,851,937 |
| **TOTAL LIABILITIES** | 8,717,276 | 82,640,629 | (224,755) | 91,133,150 |
| **DEFERRED INFLOWS** | | | | |
| Deferred inflows of resources for pension | 576,698 | - | - | 576,698 |
| Deferred inflows of resources for other postemployment benefits | 1,900 | - | - | 1,900 |
| **TOTAL DEFERRED INFLOWS** | 578,598 | - | - | 578,598 |
| **NET POSITION** | | | | |
| Net investment in capital assets | 8,398,848 | (13,468,765) | - | (5,069,917) |
| Restricted for debt service | - | 7,592,650 | - | 7,592,650 |
| Restricted for capital assets | - | 1,879,990 | - | 1,879,990 |
| Unrestricted | (3,237,968) | 18,557,005 | - | 15,319,037 |
| **TOTAL NET POSITION** | $ 5,160,880 | $ 14,560,880 | $ - | $ 19,721,760 |

*See note to supplementary information.*

**CITY OF READING**

**COMBINING STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - WATER FUNDS**

**Year Ended December 31, 2019**

| | City Water Fund | Reading Area Water Authority | Eliminations | Total Water Fund |
|---|---|---|---|---|
| **OPERATING REVENUES** | | | | |
| Charges for services | $ 12,151,531 | $ 32,093,301 | $ (12,151,531) | $ 32,093,301 |
| Other | 487,110 | 41,836 | - | 528,946 |
| **TOTAL OPERATING REVENUES** | 12,638,641 | 32,135,137 | (12,151,531) | 32,622,247 |
| **OPERATING EXPENSES** | | | | |
| Lease payments | - | 12,142,535 | (12,142,535) | - |
| Personnel | 441,051 | 6,372,046 | - | 6,813,097 |
| Depreciation and amortization | 596,856 | 4,311,994 | - | 4,908,850 |
| Risk management | 65,800 | - | - | 65,800 |
| Contracted Services | - | 907,019 | - | 907,019 |
| Chemicals and supplies | - | 1,173,058 | - | 1,173,058 |
| Utilities | - | 655,444 | - | 655,444 |
| Other | 1,869,230 | 3,016,908 | (8,996) | 4,877,142 |
| **TOTAL OPERATING EXPENSES** | 2,972,937 | 28,579,004 | (12,151,531) | 19,400,410 |
| **OPERATING INCOME** | 9,665,704 | 3,556,133 | - | 13,221,837 |
| **NONOPERATING REVENUES (EXPENSES)** | | | | |
| Intergovernmental revenue | - | 125,000 | - | 125,000 |
| Interest income | 2,445 | 597,173 | - | 599,618 |
| Interest expense | (154,896) | (3,768,727) | - | (3,923,623) |
| Gain (loss) on sale of solid waste accounts receivable | - | 68,728 | - | 68,728 |
| Other | - | 19,797 | - | 19,797 |
| **NET NONOPERATING REVENUES (EXPENSES)** | (152,451) | (2,958,029) | - | (3,110,480) |
| **INCOME BEFORE TRANSFERS** | 9,513,253 | 598,104 | - | 10,111,357 |
| Transfers out - lease payments | (9,774,710) | - | - | (9,774,710) |
| **CHANGE IN NET POSITION** | (261,457) | 598,104 | - | 336,647 |
| **NET POSITION - BEGINNING OF YEAR - RESTATED** | 5,422,337 | 13,962,776 | - | 19,385,113 |
| **NET POSITION - END OF YEAR** | $ 5,160,880 | $ 14,560,880 | $ - | $ 19,721,760 |

## Financial Information

**Net Position -** The following schedule presents a summary of net position comparison at December 31, 2018, 2017, and 2016:

| | 2018 | 2017 (As Restated) | 2016 (As Restated) |
|---|---|---|---|
| **Assets** | | | |
| Unrestricted current assets | **$ 25,886,197** | $ 24,371,571 | $ 20,614,911 |
| Restricted current assets | **3,389,010** | 11,067,725 | 19,177,064 |
| Capital assets, net | **64,973,550** | 59,036,648 | 55,262,527 |
| Other asset | **351,810** | 1,020,000 | 1,020,000 |
| **Deferred Outflow of Resources** | **1,054,979** | 1,197,798 | 1,346,286 |
| **Total Assets and Deferred Outflow of Resources** | **$ 102,255,546** | $ 96,693,742 | $ 97,420,788 |
| **Liabilities** | | | |
| Current liabilities | **$ 7,496,258** | $ 5,387,837 | $ 5,985,559 |
| Long-term debt | **80,796,512** | 84,017,089 | 87,200,895 |
| **Total Liabilities** | **$ 88,292,770** | $ 89,404,926 | $ 93,186,454 |
| **Net Position** | | | |
| Net investment in capital assets | **$ (18,130,096)** | $ (27,177,795) | $ (22,222,481) |
| Restricted for debt service | **7,513,275** | 7,426,839 | 7,409,503 |
| Unrestricted | **24,579,597** | 27,039,772 | 19,047,312 |
| **Total Net Position** | **$ 13,962,776** | $ 7,288,816 | $ 4,234,334 |

Current liabilities increased by 39.1% in 2018 compared to a decrease by 10.0% in 2017 and an increase by 20.7% in 2016. The 2018 increase is attributable to increases in capital accounts payable.

**Revenues -** The following schedule presents a summary of revenues for the years ended December 31, 2018, 2017, and 2016:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Operating Revenues** | | | |
| Water billings | **$ 29,663,185** | $ 29,736,140 | $ 29,622,297 |
| Interest and penalty charges | **541,209** | 472,340 | 586,502 |
| Tampered meter and other charges | **310,720** | 449,933 | 591,344 |
| Tapping and connection fees | **50,610** | 177,175 | 86,244 |
| Abandonment fees | **20,107** | 60,907 | 32,001 |
| **Total Operating Revenues** | **$ 30,585,831** | $ 30,896,495 | $ 30,918,388 |

The 2018 fiscal year's total operating revenue decreased by 1.0% compared to 2017, and decreased by 0.1% and increased by 11.7% in 2017 and 2016, respectively.

**Financial Information (continued)**

**Expenses -** The following schedule presents a summary of expenses for the years ended December 31, 2018, 2017, and 2016:

| | 2018 | 2017 (As Restated) | 2016 (As Restated) |
|---|---|---|---|
| **Operating Expenses** | | | |
| Lease payments, City of Reading | **$ 11,640,032** | $ 11,426,339 | $ 11,441,419 |
| Chemical supplies | **1,051,101** | 746,486 | 1,197,002 |
| Meter reading | **-** | - | 539,483 |
| Salaries, payroll taxes, and employee benefits | **6,213,345** | 5,877,245 | 5,529,809 |
| Contracted services | **967,302** | 849,520 | 1,089,676 |
| Other | **3,895,738** | 3,176,042 | 2,881,120 |
| **Total Operating Expenses** | **$ 23,767,518** | $ 22,075,632 | $ 22,678,509 |

The $1,691,886 increase in expenses is primarily the result of the increase in chemical supplies, salaries, payroll taxes and employee benefits, and bad debt expense.

**Changes in Net Position -** The following schedule presents a summary of changes in net position for the years ended December 31, 2018, 2017, and 2016:

| | 2018 | 2017 (As Restated) | 2016 (As Restated) |
|---|---|---|---|
| Operating revenues | **$ 30,585,831** | $ 30,896,495 | $ 30,918,388 |
| Operating expenses | **23,767,518** | 22,075,632 | 22,678,509 |
| **Operating Income before Depreciation** | **6,818,313** | 8,820,863 | 8,239,879 |
| Depreciation and amortization | **3,872,439** | 3,304,835 | 2,946,682 |
| **Operating Income** | **2,945,874** | 5,516,028 | 5,293,197 |
| Nonoperating revenues (expenses), net | **3,728,086** | (2,461,546) | (3,468,433) |
| **Increase in Net Position** | **$ 6,673,960** | $ 3,054,482 | $ 1,824,764 |

**LANCASTER AREA SEWER AUTHORITY**
**Statements of Net Position**
**March 31, 2021 and 2020**

| | 2021 | 2020 |
|---|---|---|
| **Assets and Deferred Outflows of Resources** | | |
| **Current Assets** | | |
| Cash and cash equivalents | $ 4,644,074 | $ 2,445,432 |
| Funds in custody of trustee, restricted cash | 4,210,000 | 6,209,890 |
| Investments | - | 1,500,000 |
| Accounts receivable | 3,593,825 | 2,752,178 |
| Prepaid expenses | 71,764 | 69,116 |
| Total Current Assets | 12,519,663 | 12,976,616 |
| Capital Assets | | |
| Capital assets not being depreciated | | |
| Land | 875,181 | 95,181 |
| Construction in progress | 4,742,245 | 5,206,076 |
| Capital assets being depreciated | | |
| Sewer system - lines | 122,165,152 | 112,758,402 |
| Sewer system - pump stations | 41,931,866 | 41,163,499 |
| Sewer system - treatment plant | 72,170,735 | 70,517,190 |
| Buildings and improvements | 4,090,201 | 3,669,937 |
| Technology | 1,424,091 | 1,424,091 |
| Vehicles | 2,529,916 | 2,346,319 |
| Equipment | 1,077,480 | 996,387 |
| Accumulated depreciation | (103,992,369) | (97,771,861) |
| Capital Assets, Net | 147,014,498 | 140,405,221 |
| Accounts receivable, net of current portion | 161,167 | 188,278 |
| Funds in custody of trustee, restricted cash, net of current portion | 21,447,170 | 19,013,907 |
| Funds in custody of trustee, restricted investments | 4,337,053 | 6,978,398 |
| Total Assets | 185,479,551 | 179,562,420 |
| **Deferred Outflows of Resources** | | |
| Pension | 496,415 | 957,717 |
| Total Assets and Deferred Outflows of Resources | $ 185,975,966 | $ 180,520,137 |

*The Notes to Financial Statements are an integral part of these statements.* | 14

## LANCASTER AREA SEWER AUTHORITY
### Statements of Revenues, Expenses, and Changes in Net Position
### Years Ended March 31, 2021 and 2020

| | 2021 | 2020 |
|---|---|---|
| **Operating Revenue** | | |
| Sewer rental | $ 22,534,309 | $ 21,682,126 |
| Industrial waste surcharges | 357,471 | 416,698 |
| Bulk treatment fees | 406,091 | 118,171 |
| Trucked waste program | 503,123 | 465,481 |
| Interest and penalties | 254,311 | 317,239 |
| Miscellaneous income | 321,335 | 304,333 |
| Total operating revenue | 24,376,640 | 23,304,048 |
| **Operating Expenses** | | |
| Administrative | 3,841,748 | 4,069,985 |
| Collection department | 7,913,564 | 6,702,101 |
| Treatment plant | 5,168,757 | 4,508,047 |
| Pretreatment program and laboratory department | 306,245 | 346,310 |
| Columbia Borough | 741,975 | 776,025 |
| West Earl | 335,295 | - |
| Total operating expenses | 18,307,584 | 16,402,468 |
| Operating income | 6,069,056 | 6,901,580 |
| **Nonoperating Revenues (Expenses)** | | |
| Interest income | 99,485 | 793,490 |
| Tapping fees | 1,322,458 | 1,123,675 |
| Capacity reservation fees | 287,960 | 215,181 |
| Proceeds from sale of assets | 66,100 | 40,911 |
| Interest expense | (2,519,082) | (2,603,702) |
| Bond issue costs | (109,314) | - |
| Amortization | 555,179 | 286,257 |
| Total nonoperating revenues (expenses) | (297,214) | (144,188) |
| Income before capital contributions | 5,771,842 | 6,757,392 |
| Capital contributions | 1,075,815 | 851,741 |
| Increase in net position | 6,847,657 | 7,609,133 |
| Net position at beginning of year | 104,086,085 | 96,476,952 |
| Net position at end of year | $ 110,933,742 | $ 104,086,085 |

*The Notes to Financial Statements are an integral part of these statements.* | 16

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2018, 2017, and 2016. The change in net position increased from $ 4.6 million in fiscal year 2017 to $ 9.0 million in fiscal year 2018. Operating income increased $ 381,000 over last year while non-operating revenue (expense) increased $ 3.2 million over fiscal year 2017.

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Operating revenue | $ 21,499,186 | $ 20,849,832 | $ 19,713,716 |
| Operating expenses | 15,978,558 | 15,710,138 | 14,557,000 |
| Operating income | 5,520,628 | 5,139,694 | 5,156,716 |
| Non-operating revenue (expenses) | 2,251,417 | (908,165) | (1,983,244) |
| Income before capital contribution | 7,772,045 | 4,231,529 | 3,173,472 |
| Capital contribution | 1,224,093 | 324,142 | 551,477 |
| Change in net position | 8,996,138 | 4,555,671 | 3,724,949 |
| Net position, beginning of year | 81,380,843 | 76,825,172 | 73,100,223 |
| Net position, end of year | $ 90,376,981 | $ 81,380,843 | $ 76,825,172 |

**Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position**

Table 3 and Table 4 below show a breakdown of fiscal year 2018 Operating Revenue and Operating Expenses, respectively.

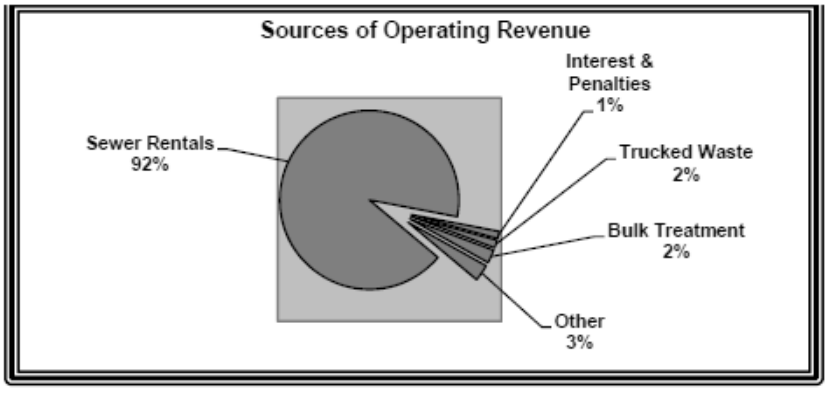



**Table 3 - Sources of Operating Revenue - Fiscal Year 2018**

*Financial Analysis (Continued)*

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2019, 2018, and 2017. The change in net position decreased from $ 9.0 million in fiscal year 2018 to $ 6.1 million in fiscal year 2019. Operating income increased $ 564,000 over last year while non-operating revenue (expense) decreased $ 3.1 million over fiscal year 2018.

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Operating revenue | $ 22,974,614 | $ 21,499,186 | $ 20,849,832 |
| Operating expenses | 16,889,502 | 15,978,558 | 15,710,138 |
| Operating income | 6,085,112 | 5,520,628 | 5,139,694 |
| Non-operating revenue (expenses) | (825,158) | 2,251,417 | (908,165) |
| Income before capital contribution | 5,259,954 | 7,772,045 | 4,231,529 |
| Capital contribution | 840,017 | 1,224,093 | 324,142 |
| Change in net position | 6,099,971 | 8,996,138 | 4,555,671 |
| Net position, beginning of year | 90,376,981 | 81,380,843 | 76,825,172 |
| Net position, end of year | $ 96,476,952 | $ 90,376,981 | $ 81,380,843 |

**Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position**

Table 3 and Table 4 below show a breakdown of fiscal year 2019 Operating Revenue and Operating Expenses, respectively.

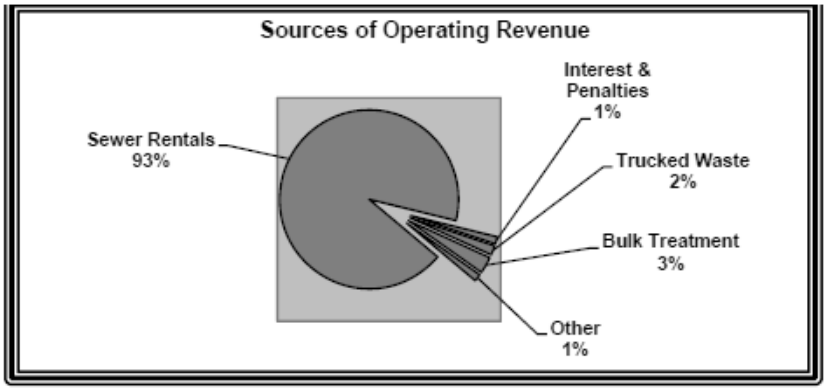



**Table 3 - Sources of Operating Revenue - Fiscal Year 2019**

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2020, 2019, and 2018. The change in net position increased from $ 6.1 million in fiscal year 2019 to $ 7.6 million in fiscal year 2020. Operating income increased $ 847,000 over last year while non-operating expenses decreased $ 650,000 over fiscal year 2019.

| | 2020 | 2019 | 2018 |
|---|---|---|---|
| Operating revenue | $ 23,304,048 | $ 22,943,962 | $ 21,499,186 |
| Operating expenses | 16,402,468 | 16,889,502 | 15,978,558 |
| Operating income | 6,901,580 | 6,054,460 | 5,520,628 |
| Non-operating revenue (expenses) | (144,188) | (794,506) | 2,251,417 |
| Income before capital contribution | 6,757,392 | 5,259,954 | 7,772,045 |
| Capital contribution | 851,741 | 840,017 | 1,224,093 |
| Change in net position | 7,609,133 | 6,099,971 | 8,996,138 |
| Net position, beginning of year | 96,476,952 | 90,376,981 | 81,380,843 |
| Net position, end of year | $ 104,086,085 | $ 96,476,952 | $ 90,376,981 |

**Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position**

Table 3 and Table 4 below show a breakdown of fiscal year 2020 Operating Revenue and Operating Expenses, respectively.

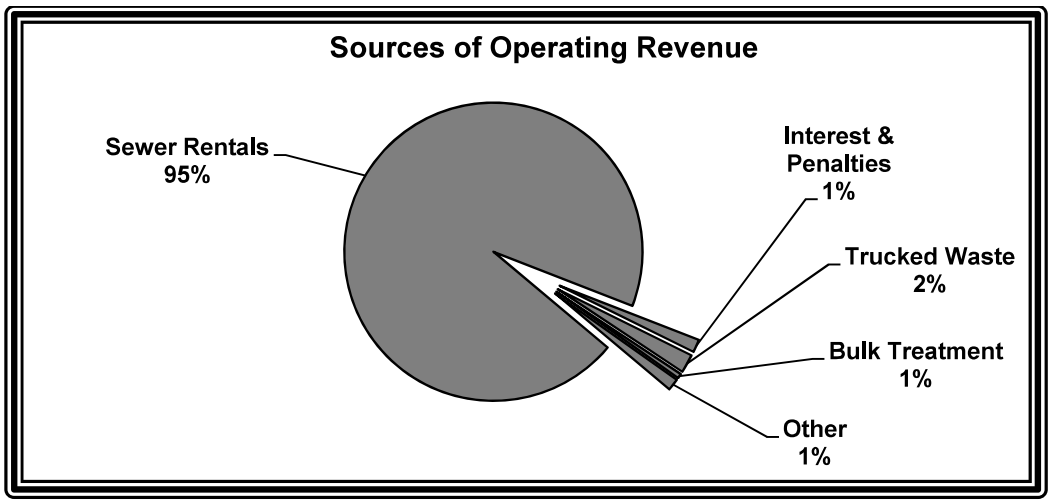



**Table 3 - Sources of Operating Revenue - Fiscal Year 2020**

### Revenue

In fiscal year 2018, revenue exceeded budgeted revenue by 7.2% resulting from capacity reservation and tapping fee income exceeding budget, which offset below-budget investment and other income.

### Expenses

Expenses, excluding depreciation, were 5.3% over budget. Interest expense was below budget as 52% of paid interest expense was capitalized as project costs. This was offset by above-budget expenditures in Administrative and Treatment Plant expenses. Higher than budgeted legal expenses of $ 31,000 and amortization of pension liability of $ 58,000 generated above-budget Administrative expenses. Treatment plant expenses for nutrient credit purchases to remain in compliance with the Authority's discharge permit were over-budget by $ 62,000 and expenses for sludge disposal were over-budget by $ 91,000. Above-budget expense for depreciation of $ 573,000 accounts for 71.2% of the negative budget variance in operating expenses.

## *CAPITAL ASSETS AND DEBT ADMINISTRATION*

### *Capital Assets*

The Authority's capital assets, net of accumulated depreciation, as of March 31, 2018 were $ 141.2 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2018, 2017, and 2016 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Construction in progress | $ 41,124,606 | $ 24,247,571 | $ 8,328,405 |
| Land | 95,181 | 95,181 | 95,181 |
| Sewer System | | | |
| Lines | 102,594,800 | 99,909,426 | 99,088,012 |
| Pump stations | 38,845,592 | 33,042,528 | 32,887,101 |
| Treatment plant | 38,193,779 | 38,039,056 | 37,266,392 |
| Buildings and improvements | 3,640,150 | 3,640,150 | 3,199,420 |
| Technology | 1,424,091 | 1,353,402 | 1,295,369 |
| Vehicles | 2,291,170 | 1,760,826 | 1,706,256 |
| Equipment | 830,745 | 830,745 | 830,745 |
| | 229,040,114 | 202,918,885 | 184,696,881 |
| Total accumulated depreciation | (87,820,739) | (83,211,180) | (78,843,305) |
| Total Capital Assets | $ 141,219,375 | $ 119,707,705 | $ 105,853,576 |

**Table 6 - Condensed Statement of Capital Assets - Fiscal Years 2018, 2017, and 2016**

*Budgetary Highlights (Continued)*

**Revenue**

In fiscal year 2019, actual revenue exceeded budgeted revenue by $ 820,000 resulting from sewer rental, investment, and other income exceeding budget. These were partially offset by below-budget revenue in capacity reservation and tapping fee income.

**Expenses**

Expenses, excluding depreciation, were $ 1.5 million over budget. Above average rainfall generated a 40% increase in flow through the collection system and treatment plant for the year. Consequently, electricity and chemical costs, sewer treatment costs from the City of Lancaster and the Borough of Columbia, and nutrient credit purchase costs were $ 1.4 million over budget. When combined with extensive rehabilitation of the centrifuge at the treatment plant, the operating expenses, excluding depreciation, exceeded budget by $ 1.5 million. Above-budget expense for depreciation of $ 308,000 accounts for the balance of the negative budget variance in operating expenses.

## *CAPITAL ASSETS AND DEBT ADMINISTRATION*

### *Capital Assets*

The Authority's capital assets, net of accumulated depreciation, as of March 31, 2019 were $ 142.3 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2019, 2018, and 2017 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Construction in progress | $ 37,011,554 | $ 41,124,606 | $ 24,247,571 |
| Land | 95,181 | 95,181 | 95,181 |
| Sewer System | | | |
| Lines | 110,392,727 | 102,594,800 | 99,909,426 |
| Pump stations | 40,897,235 | 38,845,592 | 33,042,528 |
| Treatment plant | 38,262,279 | 38,193,779 | 38,039,056 |
| Buildings and improvements | 3,640,150 | 3,640,150 | 3,640,150 |
| Technology | 1,424,091 | 1,424,091 | 1,353,402 |
| Vehicles | 2,295,745 | 2,291,170 | 1,760,826 |
| Equipment | 977,181 | 830,745 | 830,745 |
| | 234,996,143 | 229,040,114 | 202,918,885 |
| Total accumulated depreciation | (92,678,068) | (87,820,739) | (83,211,180) |
| Total Capital Assets | $ 142,318,075 | $ 141,219,375 | $ 119,707,705 |

**Table 6 - Condensed Statement of Capital Assets -
Fiscal Years 2019, 2018, and 2017**

In fiscal year 2020, actual revenue was below budgeted revenue by $ 7,000 resulting from below-budget revenue in sewer rental and surcharges. These were offset by above-budget revenue in capacity reservation and tapping fee income and investment income.

### Expenses

Expenses were $ 127,000 under budget. Above-budget expenses for required equipment maintenance in our collection system were offset by below-budget depreciation costs as well as below-budget expenditures at the treatment plant and laboratory.

## *CAPITAL ASSETS AND DEBT ADMINISTRATION*

### *Capital Assets*

The Authority's total capital assets, net of accumulated depreciation, as of March 31, 2020 were $ 140.4 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2020, 2019, and 2018 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

| | 2020 | 2019 | 2018 |
|---|---|---|---|
| Construction in progress | $ 5,206,076 | $ 37,011,554 | $ 41,124,606 |
| Land | 95,181 | 95,181 | 95,181 |
| Sewer System | | | |
| Lines | 112,758,402 | 110,392,727 | 102,594,800 |
| Pump stations | 41,163,499 | 40,897,235 | 38,845,592 |
| Treatment plant | 70,517,190 | 38,262,279 | 38,193,779 |
| Buildings and improvements | 3,669,937 | 3,640,150 | 3,640,150 |
| Technology | 1,424,091 | 1,424,091 | 1,424,091 |
| Vehicles | 2,346,319 | 2,295,745 | 2,291,170 |
| Equipment | 996,387 | 977,181 | 830,745 |
| | 238,177,082 | 234,996,143 | 229,040,114 |
| Total accumulated depreciation | (97,771,861) | (92,678,068) | (87,820,739) |
| Total Capital Assets | $ 140,405,221 | $ 142,318,075 | $ 141,219,375 |

**Table 6 - Condensed Statement of Capital Assets -**
**Fiscal Years 2020, 2019, and 2018**

### *Debt Administration*

As of March 31, 2020, the Authority had $ 66.4 million of bonds outstanding including $ 56.5 million in Sewer Revenue Bonds and $ 9.9 million of bonds through a subsidy agreement with the Borough of Columbia. Unamortized bond premiums of $ 2.8 million bring the total bonds payable liability to $ 69.3 million. Bond principal payments of $ 5.8 million and amortization of bond premiums of $ 0.3 million reduced the total bonds payable liability by $ 6.1 million from the March 31, 2019 balance of $ 75.4 million.

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Net Position**
**March 31, 2021 and 2020**

| | 2021 | 2020 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents, unrestricted (Note 3) | $ 32,955,491 | $ 29,663,969 |
| Accounts receivable, customers (net of allowance for doubtful accounts of $474,033 in 2021 and 2020) | 6,110,790 | 7,014,694 |
| Unbilled water and sewer service | 10,669,704 | 10,722,797 |
| Surcharges receivable, current portion | 350,000 | 350,000 |
| Other receivables | 235,285 | 216,612 |
| Material and supplies | 3,914,453 | 3,630,945 |
| Prepaid expenses | 1,023,104 | 1,121,573 |
| **Total Current Assets** | 55,258,827 | 52,720,590 |
| Property, Plant and Equipment | | |
| Property, plant and equipment (Note 2) | 857,061,066 | 813,804,411 |
| Less: accumulated depreciation | (239,562,788) | (225,388,158) |
| **Property, Plant and Equipment, Net** | 617,498,278 | 588,416,253 |
| Non-Current Assets | | |
| Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2021 and 2020 | 1,166,543 | 1,465,670 |
| Prepaid bond insurance | 920,538 | 867,810 |
| Restricted assets: | | |
| Special funds held by trustee (Note 4 & 5) | 140,795,056 | 176,264,906 |
| Restricted cash held by the Authority (Note 6) | 3,613,385 | 6,663,291 |
| **Total Non-Current Assets** | 146,495,522 | 185,261,677 |
| **Total Assets** | 819,252,627 | 826,398,520 |
| Deferred Outflows of Resources | | |
| Net difference between projected and actual earnings on pension plan investments | - | 7,199,443 |
| Changes in assumptions related to pensions | 29,403 | - |
| Difference between expected and actual experience related to pensions | 549,765 | 835,078 |
| Contribution to pension plan subsequent to measurement date | 51,812 | - |
| Difference between expected and actual experience related to OPEB | 16,345 | 20,431 |
| Changes in assumptions related to OPEB | 7,818,150 | 7,138,277 |
| Deferred losses on bond refundings, net of amortization (Note 8) | 3,104,156 | 3,413,275 |
| **Total Deferred Outflows of Resources** | 11,569,631 | 18,606,504 |

*(continued)*
*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Revenues, Expenses and Changes in Net Position**
**Fiscal Years Ended March 31, 2021 and 2020**

| | 2021 | 2020 |
|---|---|---|
| Operating Revenues | | |
| Water | $ 88,548,010 | $ 86,373,308 |
| Wastewater | 17,024,421 | 16,156,229 |
| Other operating revenues | 1,945,458 | 2,930,304 |
| **Total Operating Revenues** | 107,517,889 | 105,459,841 |
| Operating Expenses | | |
| Source of supply | 1,075,085 | 1,072,453 |
| Treatment system | 8,688,752 | 8,651,822 |
| Distribution | 21,126,537 | 20,592,367 |
| Engineering | 1,674,676 | 1,599,655 |
| Wastewater system | 9,424,097 | 8,871,707 |
| Landfill | 4,842 | 4,790 |
| Depreciation and amortization | 15,777,383 | 14,151,165 |
| Commercial and general | 21,858,960 | 25,934,541 |
| Management fee | 1,350,000 | 1,300,000 |
| **Total Operating Expenses** | 80,980,332 | 82,178,500 |
| **Operating Income Before Non-Operating Expenses** | 26,537,557 | 23,281,341 |
| Non-Operating Revenues (Expenses) | | |
| Investment income | 2,891,362 | 4,775,646 |
| Net increase in the fair value of investments | 40,103 | 43,786 |
| Interest expense | (19,831,042) | (21,188,625) |
| Loss on disposals of property, plant and equipment | (199,495) | (775,797) |
| **Total Non-Operating Expenses** | (17,099,072) | (17,144,990) |
| **Income Before Capital Contributions** | 9,438,485 | 6,136,351 |
| Capital Contributions | 6,497,060 | 5,193,678 |
| **Increase in Net Position** | 15,935,545 | 11,330,029 |
| **Total Net Position, Beginning of Fiscal Year** | 156,507,789 | 145,177,760 |
| **Total Net Position, End of Fiscal Year** | $ 172,443,334 | $ 156,507,789 |

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Net Position**
**March 31, 2020 and 2019**

| | 2020 | 2019 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents, unrestricted (Note 3) | $ 29,663,969 | $ 27,812,712 |
| Accounts receivable, customers (net of allowance for doubtful accounts of $474,033 in 2020 and $473,827 in 2019) | 7,014,694 | 6,547,940 |
| Unbilled water and sewer service | 10,722,797 | 9,852,958 |
| Surcharges receivable, current portion | 350,000 | 350,000 |
| Other receivables | 216,612 | 498,933 |
| Material and supplies | 3,630,945 | 2,868,304 |
| Prepaid expenses | 1,121,573 | 352,547 |
| **Total Current Assets** | 52,720,590 | 48,283,394 |
| Property, Plant and Equipment | | |
| Property, plant and equipment (Note 2) | 816,019,835 | 767,648,700 |
| Less: accumulated depreciation | (225,388,158) | (213,403,548) |
| **Property, Plant and Equipment, Net** | 590,631,677 | 554,245,152 |
| Non-Current Assets | | |
| Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2020 and 2019 | 1,465,670 | 1,509,942 |
| Prepaid bond insurance | 867,810 | 913,328 |
| Restricted assets: | | |
| Special funds held by trustee (Note 4 & 5) | 176,264,906 | 207,837,151 |
| Restricted cash held by the Authority (Note 6) | 6,663,291 | 16,415,126 |
| **Total Non-Current Assets** | 185,261,677 | 226,675,547 |
| **Total Assets** | 828,613,944 | 829,204,093 |
| Deferred Outflows of Resources | | |
| Net difference between projected and actual earnings on pension plan investments | 7,199,443 | 30,552 |
| Changes in assumptions related to pensions | - | 57,541 |
| Difference between expected and actual experience related to pensions | 835,078 | 602,541 |
| Contribution to pension plan subsequent to measurement date | - | 150,548 |
| Difference between expected and actual experience related to OPEB | 20,431 | 24,517 |
| Changes in assumptions related to OPEB | 7,138,277 | 1,501,026 |
| Deferred losses on bond refundings, net of amortization (Note 8) | 3,413,275 | 4,283,283 |
| **Total Deferred Outflows of Resources** | 18,606,504 | 6,650,008 |

*(continued)*

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Net Position**
**March 31, 2019 and 2018**

| | 2019 | Restated 2018 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents, unrestricted (Note 3) | $ 27,812,712 | $ 19,209,356 |
| Accounts receivable, customers (net of allowance for doubtful accounts of $473,827 in 2019 and $470,533 in 2018) | 6,547,940 | 6,298,373 |
| Unbilled water and sewer service | 9,852,958 | 9,851,714 |
| Surcharges receivable, current portion | 350,000 | 350,000 |
| Other receivables | 498,933 | 1,070,190 |
| Inventory - material and supplies | 2,868,304 | 2,515,551 |
| Prepaid expenses | 352,547 | 200,121 |
| **Total Current Assets** | 48,283,394 | 39,495,305 |
| Property, Plant and Equipment | | |
| Property, plant and equipment (Note 2) | 767,648,700 | 711,563,565 |
| Less: accumulated depreciation | (213,403,548) | (201,495,896) |
| **Property, Plant and Equipment, Net** | 554,245,152 | 510,067,669 |
| Non-Current Assets | | |
| Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2019 and 2018 | 1,509,942 | 1,653,673 |
| Prepaid bond insurance | 913,328 | 958,845 |
| Restricted assets: | | |
| Special funds held by trustee (Note 4 & 5) | 207,837,151 | 234,717,525 |
| Restricted cash held by the Authority (Note 6) | 16,415,126 | 19,597,310 |
| **Total Non-Current Assets** | 226,675,547 | 256,927,353 |
| **Total Assets** | 829,204,093 | 806,490,327 |
| Deferred Outflows of Resources | | |
| Net difference between projected and actual earnings on pension plan investments | 30,552 | - |
| Changes in assumptions related to pensions | 57,541 | 77,283 |
| Difference between expected and actual experience related to pensions | 602,541 | 825,024 |
| Contribution to pension plan subsequent to measurement date | 150,548 | 56,041 |
| Difference between expected and actual experience related to OPEB | 24,517 | - |
| Changes in assumptions related to OPEB | 1,501,026 | - |
| Deferred losses on bond refundings, net of amortization (Note 8) | 4,283,283 | 4,612,214 |
| **Total Deferred Outflows of Resources** | 6,650,008 | 5,570,562 |

*(continued)*

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Net Position**
**March 31, 2018 and 2017**

| | 2018 | 2017 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents, unrestricted (Note 3) | $ 19,209,356 | $ 15,067,865 |
| Accounts receivable, customers (net of allowance for doubtful accounts of $470,533 in 2018 and $458,506 in 2017) | 6,298,373 | 5,597,012 |
| Unbilled water and sewer service | 9,851,714 | 9,777,602 |
| Surcharges receivable, current portion | 350,000 | 350,000 |
| Other receivables | 1,070,190 | 5,178,590 |
| Inventory - material and supplies | 2,515,551 | 2,289,998 |
| Prepaid expenses | 200,121 | 129,312 |
| **Total Current Assets** | 39,495,305 | 38,390,379 |
| Property, Plant and Equipment | | |
| Property, plant and equipment (Note 2) | 711,563,565 | 662,320,792 |
| Less: accumulated depreciation | (201,495,896) | (189,824,163) |
| **Property, Plant and Equipment, net** | 510,067,669 | 472,496,629 |
| Non-Current Assets | | |
| Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2018 and 2017 | 1,653,673 | 1,959,138 |
| Prepaid bond insurance | 958,845 | 596,655 |
| Restricted assets: | | |
| Special funds held by trustee (Note 4 & 5) | 234,717,525 | 254,963,842 |
| Restricted cash held by authority (Note 6) | 19,597,310 | 19,003,328 |
| **Total Non-Current Assets** | 256,927,353 | 276,522,963 |
| **Total Assets** | 806,490,327 | 787,409,971 |
| Deferred Outflows of Resources | | |
| Net difference between projected and actual earnings on pension plan investments | - | 170,728 |
| Changes in assumptions related to pensions | 77,283 | - |
| Difference between expected and actual experience related to pensions | 825,024 | 104,074 |
| Contribution to pension plan subsequent to measurement date | 56,041 | - |
| Deferred losses on bond refundings, net of amortization (Note 8) | 4,612,214 | 1,205,212 |
| **Total Deferred Outflows of Resources** | 5,570,562 | 1,480,014 |

*(continued)*

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Revenues, Expenses and Changes in Net Position**
**Fiscal Years Ended March 31, 2020 and 2019**

| | 2020 | 2019 |
|---|---|---|
| Operating Revenues | | |
| Water | $ 86,373,308 | $ 86,597,707 |
| Wastewater | 16,156,229 | 15,286,438 |
| Other operating revenues | 2,930,304 | 5,450,849 |
| **Total Operating Revenues** | 105,459,841 | 107,334,994 |
| Operating Expenses | | |
| Source of supply | 1,072,453 | 935,776 |
| Treatment system | 8,651,822 | 8,810,618 |
| Distribution | 20,592,367 | 18,735,370 |
| Engineering | 1,599,655 | 1,530,906 |
| Wastewater system | 8,871,707 | 8,444,588 |
| Landfill | 4,790 | 4,765 |
| Depreciation and amortization | 14,151,165 | 13,433,385 |
| Commercial and general | 25,934,541 | 27,059,890 |
| Management fee | 1,300,000 | 1,300,000 |
| **Total Operating Expenses** | 82,178,500 | 80,255,298 |
| **Operating Income Before Non-Operating Expenses** | 23,281,341 | 27,079,696 |
| Non-Operating Revenues (Expenses) | | |
| Investment income | 4,775,646 | 4,943,913 |
| Net increase in the fair value of investments | 43,786 | 20,450 |
| Interest expense | (21,188,625) | (20,975,541) |
| Loss on disposals of property, plant and equipment | (775,797) | (403,367) |
| **Total Non-Operating Expenses** | (17,144,990) | (16,414,545) |
| **Income Before Capital Contributions** | 6,136,351 | 10,665,151 |
| Capital Contributions | 5,193,678 | 6,523,749 |
| **Increase in Net Position** | 11,330,029 | 17,188,900 |
| **Total Net Position, Beginning of Fiscal Year** | 145,177,760 | 127,988,860 |
| **Total Net Position, End of Fiscal Year** | $ 156,507,789 | $ 145,177,760 |

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Revenues, Expenses and Changes in Net Position**
**Fiscal Years Ended March 31, 2019 and 2018**

| | 2019 | Restated 2018 |
|---|---|---|
| Operating Revenues | | |
| Water | $ 86,597,707 | $ 81,638,410 |
| Wastewater | 15,286,438 | 14,901,786 |
| Other operating revenues | 5,450,849 | 3,527,303 |
| **Total Operating Revenues** | 107,334,994 | 100,067,499 |
| Operating Expenses | | |
| Source of supply | 935,776 | 865,364 |
| Treatment system | 8,810,618 | 8,002,831 |
| Distribution | 18,735,370 | 17,775,014 |
| Engineering | 1,530,906 | 1,307,465 |
| Wastewater system | 8,444,588 | 8,509,813 |
| Landfill | 4,765 | 43,367 |
| Depreciation and amortization | 13,433,385 | 12,577,264 |
| Commercial and general | 27,059,890 | 28,228,521 |
| Management fee | 1,300,000 | 1,225,000 |
| **Total Operating Expenses** | 80,255,298 | 78,534,639 |
| **Operating Income Before Non-Operating Revenues** | 27,079,696 | 21,532,860 |
| Non-Operating Revenues (Expenses) | | |
| Investment income | 4,943,913 | 3,535,070 |
| Net increase (decrease) in the fair value of investments | 20,450 | (407,750) |
| Interest expense | (20,975,541) | (15,262,836) |
| Loss on disposals of property | (403,367) | (336,175) |
| **Total Non-Operating Expenses** | (16,414,545) | (12,471,691) |
| **Income Before Capital Contributions** | 10,665,151 | 9,061,169 |
| Capital Contributions | 6,523,749 | 13,400,327 |
| **Increase in Net Position** | 17,188,900 | 22,461,496 |
| **Total Net Position, Beginning of Fiscal Year** | 127,988,860 | 135,957,658 |
| **Prior Period Adjustment, see Note 19** | - | (30,430,294) |
| **Total Net Position, End of Fiscal Year** | $ 145,177,760 | $ 127,988,860 |

*See accompanying notes to the financial statements.*

**MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY**
**Statements of Revenues, Expenses and Changes in Net Position**
**Fiscal Years Ended March 31, 2018 and 2017**

| | 2018 | 2017 |
|---|---|---|
| Operating Revenues | | |
| Water | $ 81,638,410 | $ 77,440,502 |
| Wastewater | 14,901,786 | 14,121,562 |
| Other operating revenues | 3,527,303 | 2,858,021 |
| **Total Operating Revenues** | 100,067,499 | 94,420,085 |
| Operating Expenses | | |
| Source of supply | 865,364 | 861,886 |
| Treatment system | 8,002,831 | 8,006,826 |
| Distribution | 17,775,014 | 17,459,687 |
| Engineering | 1,307,465 | 1,271,392 |
| Wastewater system | 8,509,813 | 7,632,386 |
| Landfill | 43,367 | 12,005 |
| Depreciation and amortization | 12,577,264 | 11,562,121 |
| Commercial and general | 28,228,521 | 25,817,145 |
| Management fee | 1,225,000 | 1,200,000 |
| **Total Operating Expenses** | 78,534,639 | 73,823,448 |
| **Operating Income Before Non-Operating Revenues** | 21,532,860 | 20,596,637 |
| Non-Operating Revenues (Expenses) | | |
| Investment income | 3,535,070 | 3,225,914 |
| Net increase (decrease) in the fair value of investments | (407,750) | 431,964 |
| Interest expense | (15,262,836) | (15,032,096) |
| Loss on disposals of property | (336,175) | (1,732,987) |
| **Total Non-Operating Expenses** | (12,471,691) | (13,107,205) |
| **Income Before Capital Contributions** | 9,061,169 | 7,489,432 |
| Capital Contributions | 13,400,327 | 13,432,729 |
| **Increase in Net Position** | 22,461,496 | 20,922,161 |
| **Total Net Position, Beginning of Year** | 135,957,658 | 115,035,497 |
| **Total Net Position, End of Year** | $ 158,419,154 | $ 135,957,658 |

*See accompanying notes to the financial statements.*

# ERIE CITY WATER AUTHORITY
# (AKA ERIE WATER WORKS)
## Statement of Net Position
### December 31, 2020 and 2019

| | 2020 | 2019 |
|---|---|---|
| ASSETS AND DEFERRED OUTFLOWS OF RESOURCES | | |
| Current Assets | | |
| Cash and cash equivalents | **$ 15,840,370** | $ 12,385,206 |
| Restricted cash - workers' compensation fund | **279,455** | 338,915 |
| Investments - cash and certificates of deposit (at par) | **795,109** | 846,875 |
| Receivables - customers, net | **5,791,611** | 3,974,224 |
| Current portion of customer receivables | **19,600** | 19,600 |
| Inventories, at cost | **1,549,331** | 1,627,035 |
| Prepaid expenses | **1,340,963** | 865,774 |
| Total current assets | **25,616,439** | 20,057,629 |
| Non-Current Assets | | |
| Restricted investments | | |
| Amount provided for retirement of long-term debt | **7,686,000** | 8,864,436 |
| Amount provided for future system improvements | **11,941,433** | 19,881,874 |
| Board designated reserve for capital expenditures | **5,000,000** | 5,000,000 |
| Investment in self-liquidity bonds | **5,225,000** | 5,325,000 |
| Long-term customer receivables | **117,932** | 137,221 |
| Capital assets, net of accumulated depreciation | | |
| Contributed capital assets | **2,508,257** | 2,829,653 |
| Purchased capital assets | **197,500,684** | 191,269,705 |
| Total non-current assets | **229,979,306** | 233,307,889 |
| Total assets | **255,595,745** | 253,365,518 |
| Deferred Outflows of Resources | | |
| Deferred City of Erie lease payments | **103,067,058** | 5,033,530 |
| Changes in pension experience | **1,753,594** | 1,254,876 |
| Changes in pension investment returns | **-** | - |
| Changes in pension assumptions | **1,969,111** | 2,724,471 |
| Deferred loss on advanced bond refunding, net | **23,376,680** | 11,836,635 |
| Deferred bond swap fee, net | **11,179,830** | 11,912,546 |
| Total deferred outflow of resources | **141,346,273** | 32,762,058 |
| Total assets and deferred outflow of resources | **$ 396,942,018** | $ 286,127,576 |

The notes to the financial statements are an integral part of these statements.

# ERIE CITY WATER AUTHORITY
# (AKA ERIE WATER WORKS)
## Statement of Revenues, Expenses and Changes in Net Position
### December 31, 2020 and 2019

| | 2020 | 2019 |
|---|---|---|
| Operating revenues | **$ 40,725,085** | $ 40,086,711 |
| Operating expenses | | |
| Personnel | **6,112,365** | 6,345,483 |
| Personnel benefits | **3,504,971** | 4,689,942 |
| Supplies and materials | **2,012,909** | 2,010,029 |
| Other services and charges | **5,037,083** | 5,498,375 |
| City of Erie lease | **2,850,000** | 3,600,000 |
| Total operating expenses | **19,517,328** | 22,143,829 |
| Operating income before depreciation | **21,207,757** | 17,942,882 |
| Depreciation | **7,746,138** | 8,393,230 |
| Operating income | **13,461,619** | 9,549,652 |
| Non-operating revenue (expense) | | |
| Interest expense | **(13,588,313)** | (12,123,859) |
| Other revenue (expense), net | **(153,290)** | 1,651,260 |
| Net loss before contributed capital | **(279,984)** | (922,947) |
| Capital asset contributions | **-** | - |
| CHANGE IN NET POSITION | **(279,984)** | (922,947) |
| Net Position | | |
| Beginning of year | **(55,786,094)** | (54,863,147) |
| End of year | **$ (56,066,078)** | $ (55,786,094) |

The notes to the financial statements are an integral part of these statements.

# Erie City Water Authority
## Statements of Financial Position

| | As of December 31, | | | |
|---|---|---|---|---|
| | 2019 | 2018 | Change | % Change |
| ASSETS | | | | |
| Current assets | $ 20,057,629 | $ 17,026,267 | $ 3,031,362 | 17.80% |
| Restricted investments | 28,746,310 | 32,386,195 | (3,639,885) | -11.24% |
| Capital assets, net of accumulated depreciation | 194,099,358 | 191,070,499 | 3,028,859 | 1.59% |
| Other non-current assets | 10,462,221 | 10,481,961 | (19,740) | -0.19% |
| Deferred outflows of resources | 32,762,058 | 34,530,203 | (1,768,145) | -5.12% |
| Total Assets and Deferred Outflows | $ 286,127,576 | $ 285,495,125 | $ 632,451 | 0.22% |
| LIABILITIES AND NET POSITION | | | | |
| Current liabilities | $ 7,175,123 | $ 8,766,073 | $ (1,590,950) | -18.15% |
| Long-term debt, net of unaccreted discounts | 306,968,863 | 310,547,787 | (3,578,924) | -1.15% |
| Other non-current liabilities | 25,881,649 | 21,044,412 | 4,837,237 | 22.99% |
| Deferred inflow of resources | 1,888,035 | - | 1,888,035 | 0.00% |
| Total liabilities and deferred inflow of resources | 341,913,670 | 340,358,272 | 1,555,398 | 0.46% |
| Net position - | | | | |
| Net investment in capital assets | 15,948,959 | 11,468,894 | 4,480,065 | 39.06% |
| Restricted for capital projects, debt service | 8,864,436 | 9,849,537 | (985,101) | -10.00% |
| Unrestricted | (80,599,489) | (76,181,578) | (4,417,911) | 5.80% |
| Total net position | (55,786,094) | (54,863,147) | (922,947) | 1.68% |
| Total liabilities and net position | $ 286,127,576 | $ 285,495,125 | $ 632,451 | 0.22% |

Changes in Net Position –

The Authority's net position decreased by $922,947 in 2019. The 2019 decrease in the net position resulted from several factors related to materials and supplies costs and personnel related costs that was offset by savings on interest expense.

Total operating revenues for the year ended December 31, 2019 of $40,086,711 increased $316,562 (0.80%) compared to December 31, 2018.

Total operating expenses of $22,143,829 increased $756,012 (3.53%).

Total 2019 expenses of $42,660,918 compared to $44,001,398 in 2018 decreased $1,340,480 (11.11%).

to $285.50 million. Total liabilities and inflows increased $36.14 million [11.88%] to $340.36 million. The primary reasons for the increase are discussed in the following *Changes in Net Position* section.

Restricted investments of $32.39 million increased $21.03 million [285.19%], primarily from $27 million of new capital project funds from the 2018 bond issue.

Capital assets (net of depreciation) increased $3.09 million. Gross capital assets (before depreciation) increased $11.47 million representing capital additions in accordance with the Authority's adopted capital project program.

**ERIE CITY WATER AUTHORITY**
**STATEMENTS OF FINANCIAL POSITION**

| | As of December 31, | | | |
|---|---|---|---|---|
| | 2018 | 2017 | $ Change | % Change |
| ASSETS | | | | |
| Current assets | $ 17,026,267 | $ 13,116,705 | $ 3,909,562 | 29.8% |
| Restricted investments | 32,386,195 | 11,356,255 | 21,029,940 | 185.2% |
| Capital assets, net of accumulated depreciation | 191,070,499 | 187,981,855 | 3,088,644 | 1.6% |
| Other non-current assets | 10,481,961 | 10,665,706 | ( 183,745 ) | ( 1.7% ) |
| Deferred outflows of resources | 34,530,203 | 30,999,314 | 3,530,889 | 11.4% |
| Total Assets and Deferred Outflows | $ 285,495,125 | $ 254,119,835 | $ 31,375,290 | 12.3% |

| | As of December 31, | | | |
|---|---|---|---|---|
| | 2018 | 2017 | $ Change | % Change |
| LIABILITIES AND NET ASSETS | | | | |
| Current liabilities | $ 8,766,073 | $ 7,893,978 | $ 872,095 | 29.8% |
| Long-term debt, net of unaccreted discounts | 310,547,787 | 284,395,079 | 26,152,708 | 9.2% |
| Other non-current liabilities | 21,044,412 | 11,930,218 | ( 9,114,194 ) | 76.4% |
| Deferred inflow of resources | - | 1,113,991 | ( 1,113,991 ) | - |
| Total liabilities and deferred outflow of resources | 340,358,272 | 305,333,266 | 35,025,006 | 11.5% |
| Net position – | | | | |
| Invested in capital assets, net of related debt | 11,468,894 | 7,320,870 | 4,148,024 | 56.7% |
| Restricted for capital projects, debt service | 9,849,537 | 7,691,083 | 2,158,454 | 28.1% |
| Unrestricted | ( 76,181,578 ) | ( 66,225,384 ) | ( 9,956,194 ) | ( 15.0% ) |
| Total net position | ( 54,863,147 ) | ( 51,213,431 ) | ( 3,649,716 ) | ( 7.1% ) |
| Total liabilities and net position | $ 285,495,125 | $ 254,119,835 | ( $ 31,375,290 ) | ( 12.3% ) |

*Changes in Net Position –*

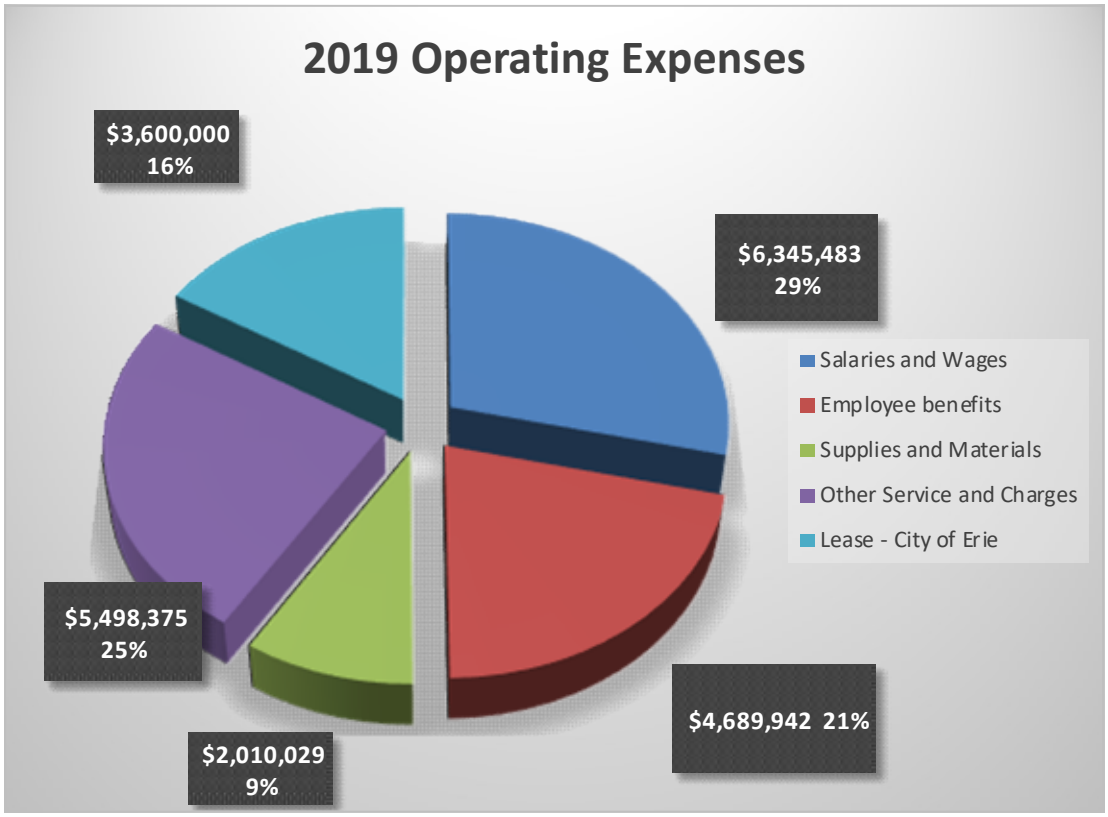
The Authority's net position decreased by <$3.65> million in 2018, compared to a <$.84> million decrease in 2017. The 2018 decrease in the net position resulted from several factors – $1.84 million increase in pension costs, $1.1 million increase in interest expense and $1.03 million of bond issue costs.

Total operating revenues for the year ended December 31, 2018 of $39.8 million increased $1.3 million [3.3%] compared to December 31, 2017.

Total operating expenses of $21.4 million increased $2.48 million [13.1%]. The majority of the

# ERIE CITY WATER AUTHORITY
## STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

| | For the year ended December 31, | | | |
|---|---|---|---|---|
| | 2019 | 2018 | Change | % Change |
| Operations | | | | |
| Operating revenues | $ 40,086,711 | $ 39,770,149 | $ 316,562 | 0.80% |
| Operating expenses | (22,143,829) | (21,387,817) | (756,012) | 3.53% |
| Depreciation | (8,393,230) | (8,377,223) | (16,007) | 0.19% |
| Operating income | $ 9,549,652 | $ 10,005,109 | $ (455,457) | -4.55% |
| Non-operating revenue (expense) | | | | |
| Interest expense | $ (12,123,859) | $ (14,236,358) | $ 2,112,499 | -14.84% |
| Other revenues | 2,302,321 | 1,948,092 | 354,229 | 18.18% |
| Other expenses | (651,061) | (1,446,534) | 795,473 | -54.99% |
| | (10,472,599) | (13,734,800) | 3,262,201 | -23.75% |
| Net loss before capital contributions | (922,947) | (3,729,691) | 2,806,744 | -75.25% |
| Capital assets contributions | - | 79,975 | (79,975) | -100.00% |
| Change in net position | $ (922,947) | $ (3,649,716) | $ 2,726,769 | -74.71% |

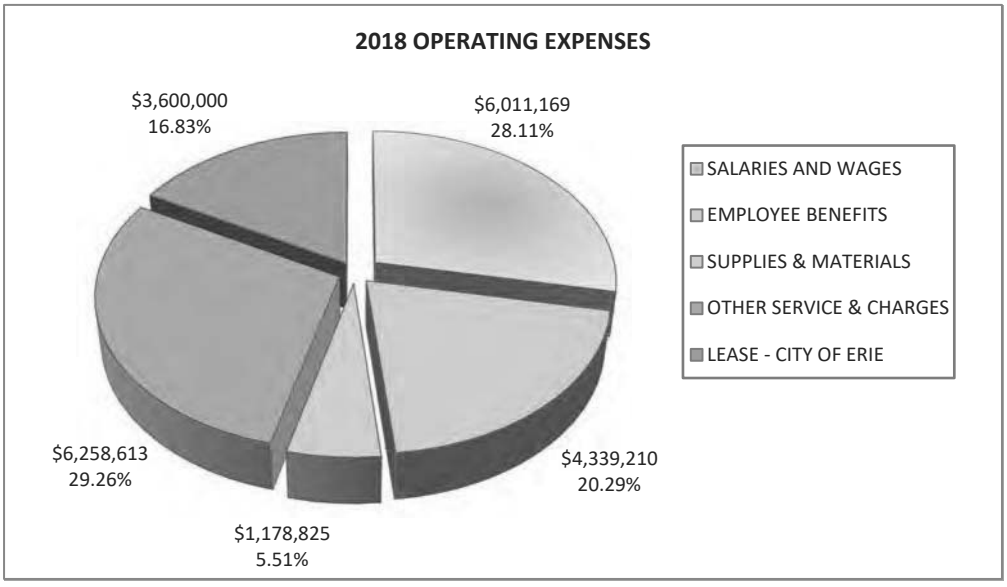


2018 decrease in operating expenses was attributable to higher pension costs and contracted services.

Total 2018 expenses of $44.0 million $40.3 million increased $3.7 million [9.18%] compared to 2017.

**ERIE CITY WATER AUTHORITY**
**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

| | For the year ended December 31, | | | |
|---|---|---|---|---|
| | 2018 | 2017 | $ Change | % Change |
| Operations - | | | | |
| Operating revenues | $ 39,770,149 | $ 38,483,311 | $ 1,286,838 | 3.3% |
| Operating expenses | ( 21,387,817 ) | ( 18,912,253 ) | 2,475,564 | 13.1% |
| Depreciation | ( 8,377,223 ) | ( 8,214,879 ) | 162,344 | ( 2.0% ) |
| Operating income | 10,005,109 | 11,356,179 | 1,351,070 | ( 11.9% ) |
| Non-operating revenue (expense) | | | | |
| Interest expense | ( 14,236,358 ) | ( 13,165,069 ) | 1,071,289 | 8.1% |
| Other revenues | 1,948,092 | 1,326,328 | 621,764 | 46.9% |
| Other expenses | ( 1,446,534 ) | ( 354,727 ) | 1,091,807 | 307.8% |
| | ( 13,734,800 ) | ( 12,193,468 ) | 1,541,332 | 12.6% |
| Net loss before capital contributions | ( 3,729,691 ) | ( 837,289 ) | ( 2,892,402 ) | ( 345.4% ) |
| Capital asset contributions | 79,975 | | 79,975 | - |
| Change in net position | ( $ 3,649,716 ) | ( $ 837,289 ) | ( $ 2,812,427 ) | ( 335.9% ) |



**Chester Water Authority**
**Statements of Net Position**
**December 31, 2019 and 2018**

Assets and Deferred Outflows of Resources

| | December 31, 2019 | December 31, 2018 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents | $ 12,498,028 | $ 9,680,971 |
| Investments | 1,224,596 | 1,207,385 |
| Accounts receivable, net of allowance for doubtful accounts of $300,000 in both 2019 and 2018 | 4,715,593 | 4,215,519 |
| Unbilled revenue | 4,184,067 | 4,143,347 |
| Materials and supplies | 2,392,807 | 2,894,794 |
| Other current assets | 225,137 | 44,735 |
| Total Current Assets | 25,240,228 | 22,186,751 |
| Non-Current Assets | | |
| Property, plant, and equipment—net of accumulated depreciation | 282,114,520 | 277,881,505 |
| Net pension asset | 806,245 | - |
| Total Non-Current Assets | 282,920,765 | 277,881,505 |
| Restricted Assets | | |
| Cash and cash equivalents | 28,304,535 | 7,629,992 |
| Total Restricted Assets | 28,304,535 | 7,629,992 |
| Total Assets | 336,465,528 | 307,698,248 |
| Deferred Outflows of Resources | | |
| Changes in pension investment returns and actuarial assumptions | 1,134,806 | 4,646,383 |
| Changes in OPEB investment returns and actuarial assumptions | 1,912,766 | 420,158 |
| Total Deferred Outflows of Resources | 3,047,572 | 5,066,541 |
| Total Assets and Deferred Outflows of Resources | $ 339,513,100 | $ 312,764,789 |

See accompanying notes to financial statements.

**Chester Water Authority**
**Statements of Revenues, Expenses, and Changes In Net Position**
**For The Years Ended December 31, 2019 and 2018**

| | December 31, 2019 | December 31, 2018 |
|---|---|---|
| Operating Revenues | | |
| Residential | $ 16,511,126 | $ 16,270,379 |
| Commercial | 7,179,069 | 7,006,726 |
| Industrial | 9,832,034 | 8,262,780 |
| Fire protection | 4,063,901 | 3,902,103 |
| Capacity charges, flat and late fee revenues | 1,374,484 | 1,134,612 |
| Sales to other water utilities | 6,802,562 | 6,749,553 |
| Total Operating Revenues | 45,763,176 | 43,326,153 |
| Operating Expenses | | |
| Purification and Pumping | 7,409,809 | 7,479,180 |
| Distribution | 6,687,166 | 7,989,652 |
| Administrative | 13,672,346 | 12,605,483 |
| Finance/customer service, billing and collections | 3,834,971 | 4,189,300 |
| Depreciation | 9,453,690 | 9,575,108 |
| Total Operating Expenses | 41,057,982 | 41,838,723 |
| Operating Income | 4,705,194 | 1,487,430 |
| Non-Operating Revenues/(Expenses) | | |
| Net investment income | 155,689 | 131,632 |
| Interest expense | (2,810,444) | (2,776,729) |
| Other nonoperating revenues | 311,563 | 514,232 |
| Amortization of bond discounts and debt issuance costs | 479,795 | 401,140 |
| Gain (loss) on disposal of property and equipment | 302,194 | 17,882 |
| Total Non-Operating Revenues/(Expenses) | (1,561,203) | (1,711,843) |
| Income (Loss) Before Contributions | 3,143,991 | (224,413) |
| Capital Contributions | 894,723 | 5,652,845 |
| Change In Net Position | 4,038,714 | 5,428,432 |
| Net Position - Beginning of year, as previously reported | 234,034,302 | 233,538,507 |
| Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability | - | (4,932,637) |
| Net Position - Beginning of year, restated | 234,034,302 | 228,605,870 |
| Net Position - End of year | $ 238,073,016 | $ 234,034,302 |

See accompanying notes to financial statements.

**Chester Water Authority**
**Statements of Net Position**
**December 31, 2018 and 2017**

Assets and Deferred Outflows of Resources

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents | $ 9,680,971 | $ 12,277,333 |
| Investments | 1,207,385 | 1,185,056 |
| Accounts receivable, net of allowance for doubtful accounts of $300,000 in both 2018 and 2017 | 4,215,519 | 4,018,123 |
| Unbilled revenue | 4,143,347 | 4,100,936 |
| Materials and supplies | 2,894,794 | 2,438,785 |
| Other current assets | 44,734 | 72,551 |
| Total Current Assets | 22,186,750 | 24,092,784 |
| Non-Current Assets | | |
| Property, plant, and equipment—net of accumulated depreciation | 277,881,505 | 271,133,389 |
| Net pension asset | - | 1,501,182 |
| Total Non-Current Assets | 277,881,505 | 272,634,571 |
| Restricted Assets | | |
| Cash and cash equivalents | 7,629,992 | 7,549,260 |
| Total Restricted Assets | 7,629,992 | 7,549,260 |
| Total Assets | 307,698,247 | 304,276,615 |
| Deferred Outflows of Resources | | |
| Changes in pension investment returns and actuarial assumptions | 4,646,383 | 1,479,458 |
| Changes in OPEB investment returns and actuarial assumptions | 420,158 | - |
| Total Deferred Outflows of Resources | 5,066,541 | 1,479,458 |
| Total Assets and Deferred Outflows of Resources | $ 312,764,788 | $ 305,756,073 |

See accompanying notes to financial statements.

**Chester Water Authority**
**Statements of Revenues, Expenses, and Changes In Net Position**
**For The Years Ended December 31, 2018 and 2017**

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Operating Revenues | | |
| Residential | $ 16,270,379 | $ 16,471,074 |
| Commercial | 7,006,726 | 5,885,341 |
| Industrial | 8,262,780 | 7,414,215 |
| Fire protection | 3,902,103 | 4,001,045 |
| Capacity charges, flat and late fee revenues | 1,134,612 | 1,360,899 |
| Sales to other water utilities | 6,749,553 | 7,158,892 |
| Total Operating Revenues | 43,326,153 | 42,291,466 |
| Operating Expenses | | |
| Purification and Pumping | 7,479,180 | 7,326,031 |
| Distribution | 7,989,652 | 7,159,659 |
| Administrative | 12,605,483 | 11,664,820 |
| Finance/customer service, billing and collections | 4,189,300 | 3,824,583 |
| Depreciation | 9,575,108 | 9,521,150 |
| Total Operating Expenses | 41,838,723 | 39,496,243 |
| Operating Income | 1,487,430 | 2,795,223 |
| Non-Operating Revenues (Expenses) | | |
| Net investment income | 131,632 | 146,144 |
| Interest expense | (2,776,729) | (2,681,713) |
| Other nonoperating revenues | 514,231 | 982,798 |
| Amortization of bond discounts and debt issuance costs | 401,140 | 250,136 |
| Gain (loss) on disposal of property and equipment | 17,882 | (481,900) |
| Total Non-Operating Revenues/(Expenses) | (1,711,844) | (1,784,535) |
| (Loss) Income Before Contributions | (224,414) | 1,010,688 |
| Capital Contributions | 5,652,845 | 2,699,498 |
| Change In Net Position | 5,428,431 | 3,710,186 |
| Net Position—Beginning of year, as previously reported | 233,538,507 | 229,828,321 |
| Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability | (4,932,637) | - |
| Net Position - Beginning of year, restated | 228,605,870 | 229,828,321 |
| Net Position—End of year | $ 234,034,301 | $ 233,538,507 |

See accompanying notes to financial statements.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 60,210 | $ 64,680 |
| Accounts receivable, net: | | |
| Water: | | |
| Billed | 7,400 | 7,138 |
| Unbilled | 7,955 | 8,965 |
| Total water | 15,355 | 16,103 |
| Wastewater treatment: | | |
| Billed | 3,676 | 2,130 |
| Unbilled | 3,457 | 3,725 |
| Total wastewater treatment | 7,133 | 5,855 |
| Other receivables | 1,924 | 2,450 |
| Total accounts receivable, net | 24,412 | 24,408 |
| Prepaid expenses | 1,737 | 707 |
| Inventory | 2,075 | 1,597 |
| Total current assets | 88,434 | 91,392 |
| Noncurrent assets: | | |
| Restricted assets: | | |
| Cash and cash equivalents | 16,201 | 16,360 |
| Investments | 9,705 | 9,604 |
| Total restricted assets | 25,906 | 25,964 |
| Capital assets, not being depreciated | 155,050 | 135,287 |
| Capital assets, net of accumulated depreciation | 766,600 | 695,291 |
| Total noncurrent assets | 947,556 | 856,542 |
| **Total Assets** | 1,035,990 | 947,934 |
| **Deferred Outflows of Resources** | | |
| Deferred charge on refunding | 91,827 | 99,012 |
| Accumulated decrease in fair value of hedging derivatives | 33,863 | 13,351 |
| **Total Deferred Outflows of Resources** | 125,690 | 112,363 |

(Continued)

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

*(Dollars expressed in thousands)*

YEARS ENDED DECEMBER 31, 2020 AND 2019

| | 2020 | 2019 |
|---|---|---|
| **Operating Revenues:** | | |
| Residential, commercial, and industrial water sales | $ 162,676 | $ 171,681 |
| Wastewater treatment | 71,899 | 70,970 |
| Other | 7,422 | 6,398 |
| Total operating revenues | 241,997 | 249,049 |
| **Operating Expenses:** | | |
| Direct operating expenses | 92,134 | 89,512 |
| Wastewater treatment | 72,698 | 72,389 |
| Reimbursement for City of Pittsburgh indirect services | 4,289 | 1,991 |
| Expense of water provided by other entities | 386 | 1,338 |
| Depreciation | 21,659 | 18,011 |
| Total operating expenses | 191,166 | 183,241 |
| **Operating Income** | 50,831 | 65,808 |
| **Non-operating Revenues (Expenses):** | | |
| Federal and private grants | 7,001 | 6,922 |
| Interest revenue | 201 | 719 |
| Investment income (loss) - change in fair value of swap | - | (4,180) |
| Interest and amortization | (37,463) | (38,740) |
| Bond issuance costs | (2,075) | (2,462) |
| Total non-operating revenues (expenses) | (32,336) | (37,741) |
| **Net Income before Capital Contribution and Special Item** | 18,495 | 28,067 |
| **Capital Contribution:** | | |
| Donated property | 76 | 110 |
| **Special Item:** | | |
| Private lead line replacement | (18,832) | (22,283) |
| **Net Income (Loss)** | (261) | 5,894 |
| **Net Position:** | | |
| Beginning of year | 1,535 | (4,359) |
| End of year | $ 1,274 | $ 1,535 |

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2019 AND 2018

| | 2019 | 2018 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 64,680 | $ 46,920 |
| Accounts receivable, net: | | |
| Water: | | |
| Billed | 7,138 | 8,537 |
| Unbilled | 8,965 | 8,583 |
| Total water | 16,103 | 17,120 |
| Wastewater treatment: | | |
| Billed | 2,130 | 7,014 |
| Unbilled | 3,725 | 3,719 |
| Total wastewater treatment | 5,855 | 10,733 |
| Other receivables | 2,450 | 1,510 |
| Total accounts receivable, net | 24,408 | 29,363 |
| Prepaid expenses | 707 | 520 |
| Inventory | 1,597 | 1,984 |
| Total current assets | 91,392 | 78,787 |
| Noncurrent assets: | | |
| Restricted assets: | | |
| Cash and cash equivalents | 16,360 | 13,970 |
| Investments | 9,604 | 9,356 |
| Total restricted assets | 25,964 | 23,326 |
| Hedging derivative - interest rate swap | - | 4,750 |
| Capital assets, not being depreciated | 135,287 | 139,303 |
| Capital assets, net of accumulated depreciation | 695,291 | 618,177 |
| Total noncurrent assets | 856,542 | 785,556 |
| **Total Assets** | 947,934 | 864,343 |
| **Deferred Outflows of Resources** | | |
| Deferred charge on refunding | 99,012 | 102,534 |
| Accumulated decrease in fair value of hedging derivatives | 13,351 | 757 |
| **Total Deferred Outflows of Resources** | 112,363 | 103,291 |

(Continued)

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

*(Dollars expressed in thousands)*

YEARS ENDED DECEMBER 31, 2019 AND 2018

| | 2019 | 2018 |
|---|---|---|
| **Operating Revenues:** | | |
| Residential, commercial, and industrial water sales | $ 171,681 | $ 159,506 |
| Wastewater treatment | 70,970 | 67,261 |
| Other | 6,398 | 4,967 |
| Total operating revenues | 249,049 | 231,734 |
| **Operating Expenses:** | | |
| Direct operating expenses | 89,512 | 72,633 |
| Wastewater treatment | 72,389 | 71,822 |
| Reimbursement for City of Pittsburgh services | 1,991 | 4,911 |
| Expense of water provided by other entities: | | |
| Subsidy of customers located in the City | 1,338 | 3,814 |
| Depreciation | 18,011 | 16,894 |
| Total operating expenses | 183,241 | 170,074 |
| **Operating Income** | 65,808 | 61,660 |
| **Non-operating Revenues (Expenses):** | | |
| Federal and private grants | 6,922 | - |
| Donated property | 110 | 13,649 |
| Interest revenue | 719 | 469 |
| Investment income (loss) - change in fair value of swap | (4,180) | 2,542 |
| Interest and amortization | (38,740) | (34,365) |
| Bond issuance costs | (2,462) | - |
| Total non-operating revenues (expenses) | (37,631) | (17,705) |
| **Net Income before Special Item** | 28,177 | 43,955 |
| **Special Item:** | | |
| Private lead line replacement | (22,283) | (4,478) |
| **Net Income** | 5,894 | 39,477 |
| **Net Position:** | | |
| Beginning of year | (4,359) | (43,836) |
| End of year | $ 1,535 | $ (4,359) |

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2018 AND 2017

| | 2018 | 2017 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 46,920 | $ 11,076 |
| Accounts receivable, net: | | |
| Water: | | |
| Billed | 8,537 | 9,335 |
| Unbilled | 8,583 | 6,760 |
| Total water | 17,120 | 16,095 |
| Wastewater treatment: | | |
| Billed | 7,014 | 9,975 |
| Unbilled | 3,719 | 3,746 |
| Total wastewater treatment | 10,733 | 13,721 |
| Other receivables | 1,510 | 1,074 |
| Total accounts receivable, net | 29,363 | 30,890 |
| Prepaid expenses | 520 | 674 |
| Inventory | 1,984 | 3,777 |
| Total current assets | 78,787 | 46,417 |
| Noncurrent assets: | | |
| Restricted assets: | | |
| Cash and cash equivalents | 13,970 | 18,264 |
| Investments | 9,356 | 11,684 |
| Total restricted assets | 23,326 | 29,948 |
| Hedging derivative - interest rate swap | 4,750 | - |
| Capital assets, not being depreciated | 139,303 | 100,240 |
| Capital assets, net of accumulated depreciation | 618,177 | 589,567 |
| Total noncurrent assets | 785,556 | 719,755 |
| **Total Assets** | 864,343 | 766,172 |
| **Deferred Outflows of Resources** | | |
| Deferred charge on refunding | 102,534 | 110,326 |
| Accumulated decrease in fair value of hedging derivatives | 757 | 3,279 |
| **Total Deferred Outflows of Resources** | 103,291 | 113,605 |

(Continued)

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

*(Dollars expressed in thousands)*

YEARS ENDED DECEMBER 31, 2018 AND 2017

| | 2018 | 2017 |
|---|---|---|
| **Operating Revenues:** | | |
| Residential, commercial, and industrial water sales | $ 159,506 | $ 128,488 |
| Wastewater treatment | 67,261 | 68,935 |
| Other | 4,967 | 5,573 |
| Total operating revenues | 231,734 | 202,996 |
| **Operating Expenses:** | | |
| Direct operating expenses | 72,633 | 71,156 |
| Wastewater treatment | 71,822 | 75,107 |
| Reimbursement for City of Pittsburgh services | 4,911 | 5,363 |
| Expense of water provided by other entities: | | |
| Subsidy of customers located in the City | 3,814 | 5,594 |
| Depreciation | 16,894 | 16,172 |
| Total operating expenses | 170,074 | 173,392 |
| **Operating Income** | 61,660 | 29,604 |
| **Non-operating Revenues (Expenses):** | | |
| Donated property | 13,649 | 1,595 |
| Interest revenue | 469 | 460 |
| Investment income (loss) - change in fair value of swap | 2,542 | 835 |
| Interest and amortization | (34,365) | (34,913) |
| Bond issuance costs | - | (3,894) |
| Total non-operating revenues (expenses) | (17,705) | (35,917) |
| **Special Item:** | | |
| Private lead line replacement | (4,478) | - |
| **Net Income (Loss)** | 39,477 | (6,313) |
| **Net Position:** | | |
| Beginning of year | (43,836) | (37,523) |
| End of year | $ (4,359) | $ (43,836) |

The notes to financial statements are an integral part of this statement.

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What It's Worth

# Cost of Capital Professional

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Gannett Fleming

Valuation Date
12/31/2020

Returns Reference – Start Year
EARLIEST YEAR

Returns Reference – End Year
2020

Returns Calculation - Mean
Arithmetic
Geometric

ERP Size Premium IRP CoE WACC Summary

| | Firms | | | Portfolio | | Size Premium | |
|---|---|---|---|---|---|---|---|
| Decile | Count | Min size ('000) | Max Size ('000) | Annual Return | Beta | S&P 500 | Beta Adjusted |
| 1 - Largest | 199 | $29,075,803 | $1,966,078,882 | 11.06% | 0.92 | (0.75%) | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 186 | $13,178,743 | $28,808,073 | 12.82% | 1.04 | 1.01% |
| 3 | 210 | $6,743,361 | $13,177,828 | 13.66% | 1.11 | 1.85% |
| 4 | 218 | $3,861,858 | $6,710,676 | 13.67% | 1.13 | 1.86% |
| 5 | 255 | $2,445,693 | $3,836,536 | 14.49% | 1.17 | 2.68% |
| 6 | 246 | $1,591,865 | $2,444,745 | 14.82% | 1.18 | 3.01% |
| 7 | 306 | $911,586 | $1,591,765 | 15.63% | 1.26 | 3.82% |
| 8 | 365 | $451,955 | $911,103 | 15.91% | 1.31 | 4.10% |
| 9 | 412 | $190,019 | $451,800 | 16.69% | 1.34 | 4.88% |
| 10 - Smallest | 569 | $2,194 | $189,831 | 19.64% | 1.40 | 7.83% |
| 1 through 2 | 385 | $13,178,743 | $1,966,078,882 | 11.32% | 0.94 | (0.48%) |
| 3 through 5 | 683 | $2,445,693 | $13,177,828 | 13.80% | 1.13 | 1.99% |
| 6 through 8 | 917 | $451,955 | $2,444,745 | 15.27% | 1.23 | 3.46% |
| 9 through 10 | 981 | $2,194 | $451,800 | 17.53% | 1.35 | 5.72% |
| 1 through 5 | 1,068 | $2,445,693 | $1,966,078,882 | 11.64% | 0.96 | (0.17%) |
| 6 through 10 | 1,898 | $2,194 | $2,444,745 | 15.49% | 1.24 | 3.68% |

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

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| | WORKING NOTES | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| GROSS Property, plant and equipment | - | - | - | | 47,000,000 | 47,189,429 | 47,806,577 | 48,431,796 | 49,065,192 | 49,706,871 | 50,356,942 |
| Accumulated Depreciation | - | - | - | | - | 207,261 | 843,216 | 1,487,488 | 2,140,187 | 2,801,420 | 3,471,302 |
| NET PPE | - | - | - | | 47,000,000 | 46,982,168 | 46,963,361 | 46,944,308 | 46,925,005 | 46,905,451 | 46,885,640 |
| Total Debt | - | - | - | - | - | - | | | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | - | | | | |
| Depreciation / GROSS PPE | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 1.57% | | | | 0 | 0 |
| | | | | Muni CAPX | 0 | 222,858 | 0 | 0 | 0 | 0 | 0 |
| | | | IOU savings | 0% | | | 100% | 100% | 100% | 100% | 100% |
| | | | | CAPX/Prior Yr. GROSS PPE | | | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% |
| | | | | CAPX | 87,357 | 222,858 | 726,057 | 735,552 | 745,172 | 754,917 | 764,790 |
| | | | | Dep rate | 0.00% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% |
| | | | | Half yr. Dep | 0.00% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% |
| | | | | Dep on CAPX | - | 1,749 | 5,700 | 5,774 | 5,850 | 5,926 | 6,004 |
| | | | | Rate of retirement | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | | | | Retired property | 13,104 | 33,429 | 108,909 | 110,333 | 111,776 | 113,238 | 114,719 |
| | | | | Dep on Retired property | - | 525 | 1,710 | 1,732 | 1,755 | 1,778 | 1,801 |
| | | | | Dep on Prior yr. GROSS | 243,460 | 239,466 | 740,874 | 750,563 | 760,379 | 770,324 | 780,398 |
| | | | | Total Dep | 243,460 | 240,690 | 744,864 | 754,605 | 764,474 | 774,472 | 784,601 |
| BEAVER | | | | | | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | | | | | | |
| | | | | part of OCN | | | | | | | |
| | | | | NET PPE | | | PURTA | 0.001527765 | | | |
| | | | | Rev | | | Reg Assessment Fee | 0.005652534 | | | |
| | | | | | 2020 | 2021 | 1<br>2022 | 2<br>2023 | 3<br>2024 | 4<br>2025 | 5<br>2026 |
| BEAVER | | | | | | | | | | | |
| | FIX CIP | | | CIP | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | | | | part of OCN | = to DepX | | | | | | |
| | | | | | 87,357 | 222,858 | | | | | |
| | | | | | | | | | 191 | 71 | 72 |
| | | | | | 2020 | 2021 | | | | | |
| | | | | | | - | - | 4,750.00 | 9,500.00 | 14,250.00 | 71,250.00 |
| Sewer Rental Charges | 0 | 0 | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 2,349,450 | 2,350,140 | 2,351,290 | |
| EDUs | 0 | 0 | 0 | 0 | 5,107 | 5,107 | 5107 | 5108 | 5110 | 5113 | 5128 |
| | | | | | 0 | 0 | 0 | 1 | 2 | 3 | 15 |
| | | 0 | 0 | 0 | 2553.5 | 5107 | 5107 | 5107.5 | 5109 | 5111.5 | |
| | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 591.9651459 | | | | | | |
| | | | | | | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | |
| | | #DIV/0! | #DIV/0! | #DIV/0! | 1183.930292 | 591.9651459 | | | | | |
| BEAVER | | | | | C | 3,259 | 9 | | | | |
| | | | | | E | 5,107 | 15 | | | | |
| | | | | | | 0.64 | | | | | |
| | | | | 1742000 | | | | | | | |
| | | Customer Growth | | | | 0 | 0 | 1 | 1 | 2 | 0.29% |
| | | Delivered to Customer | - | 18.41 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| BEAVER | | Customers | 3,259 | 3,259 | 3,259 | 3,259 | 3,259 | 3,260 | 3,261 | 3,263 | 3,272 |
| | | Total Revenue (Less TAP) | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 | 4,536,836 | 4,538,923 | 4,546,898 |
| | | | | | | | | | | 99.98% | |
| | | avg CUST rev | 937.23 | 965.75 | 927.64 | 927.64 | 927.64 | 927.49 | 1,391.24 | 1,391.03 | 1,389.44 |
| | | avg CUST flow | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | avg EDU rev | #DIV/0! | #DIV/0! | 591.97 | 591.97 | 591.97 | 591.94 | 887.83 | 887.72 | 886.68 |
| | | avg EDU flow | #DIV/0! | #DIV/0! | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| WORKING NOTES | | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| | | Rev Calculated | | | | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,094 | 4,538,227 | 4,545,504 |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|
| | Change | | 50.0% | | | 8.0% |
| | $ 927.64 | $ 927.64 | $ 927.64 | $ 1,391.45 | $ 1,391.45 | $ 1,391.45 | $ 1,502.77 |
| | | | | $ 463.82 | $ - | $ - | $ 111.32 |
| | - | - | 464 | 4,536,836 | 1,391 | 6,581 |
| | 3,023,166 | 3,023,166 | 3,023,630 | 4,536,836 | 4,538,923 | 4,546,898 |
| | - | - | 1,511,815 | - | - | 363,752 |

| Prior yr | | | | | | | |
|---|---|---|---|---|---|---|---|
| NET PURTA | 0.1432% | | | 67,278 | 67,252 | 67,224 | 67,197 | 67,169 |
| REV Reg Assessment | 0.5690% | | | 17,215 | 17,215 | 25,819 | 25,827 | 25,839 |
| | | | | 84,493 | 84,467 | 93,043 | 93,024 | 93,008 |

| City of Beaver Falls Wastewater System Assets | |
|---|---|
| Investor Provided ( | 8,146,961 |
| Gross PP&E | 47,000,000 |
| Net PP&E | 47,000,000 |
| Revenues | 3,025,415 |
| EBITDA | 773,752 |
| EBIT | 533,061 |
| Customers | 3,259 |
| Population | 15,580 |

| | | | | | |
|---|---|---|---|---|---|
| G PPE | - | - | 47,000,000 | 47,189,429 | |
| NPPE | - | - | 47,000,000 | 46,982,168 | |
| Cust | 3,259 | 3,259 | 3,259 | 3,259 | |

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BEAVER | | | | | | | | | | |
| LESS: EOS - Wages & Benefits | 0 | - | - | - | - | 926,870 | | 0.15 | | LESS: EOS - Wages & |
| LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | - | - | | 0.5 | | LESS: EOS - Professi |
| LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | 0 | - | 240,000 | | | | LESS: EOS - Elim |
| BEAVER | | | | | | | | | | |
| Wages | | | 0 | 0 | 0 | 926,870 | | | | |
| Professional Services | | | | | 0 | 0 | | | | |
| Eliminated Exp | | | 0 | 0 | 0 | 240,000 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| BEAVER | | | | | included in OCN | = to DepX |
| Reported CAPX - from the financials | 0 | 0 | 5,945 | 2,811 | 87,357 | 222,858 |

| | 2016 | 2017 | 2018 | 2019 | 2020 | Assets | Per Books | Difference |
|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | - | - | - | - | 47,000,000 | 47,000,000 | - | |
| Accumulated Depreciation | - | - | - | - | - | - | - | |
| NET PPE | - | - | - | - | 47,000,000 | 47,000,000 | - | 47,000,000 |

| WORKING NOTES | | | | | | | | WORKING N | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Total Debt | - | - | - | - | - | | | 737,900 | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Depreciation Rate | 0.00% | 0.00% | 0.00% | #DIV/0! | 1.57% | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | 737,900.00 | | | | | |

| | 2021 | 2022 | 2023 | 2024 | 2025 | | |
|---|---|---|---|---|---|---|---|
| CAPX | 0 | 0 | 0 | 0 | 0 | 0 | |

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | 51,015,515 | 51,682,701 | 52,358,612 | 53,043,363 | 53,737,069 | 54,439,848 | 55,151,818 | 55,873,099 | 56,603,813 | 57,344,083 | 58,094,035 | 58,853,795 | 59,623,490 | 60,403,252 | 61,193,211 |
| Accumulated Depreciation | 4,149,944 | 4,837,463 | 5,533,971 | 6,239,589 | 6,954,436 | 7,678,631 | 8,412,297 | 9,155,558 | 9,908,539 | 10,671,369 | 11,444,176 | 12,227,089 | 13,020,240 | 13,823,764 | 14,637,798 |
| NET PPE | 46,865,571 | 46,845,238 | 46,824,641 | 46,803,774 | 46,782,633 | 46,761,217 | 46,739,521 | 46,717,541 | 46,695,274 | 46,672,714 | 46,649,859 | 46,626,706 | 46,603,250 | 46,579,488 | 46,555,413 |
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation / GROSS PPE | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% |
| | 774,792 | 784,925 | 795,190 | 805,590 | 816,125 | 826,799 | 837,612 | 848,566 | 859,664 | 870,906 | 882,296 | 893,835 | 905,524 | 917,367 | 929,364 |
| | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% |
| | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% |
| | 6,082 | 6,162 | 6,242 | 6,324 | 6,407 | 6,490 | 6,575 | 6,661 | 6,748 | 6,837 | 6,926 | 7,017 | 7,108 | 7,201 | 7,296 |
| | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | 116,219 | 117,739 | 119,279 | 120,839 | 122,419 | 124,020 | 125,642 | 127,285 | 128,950 | 130,636 | 132,344 | 134,075 | 135,829 | 137,605 | 139,405 |
| | 1,825 | 1,849 | 1,873 | 1,897 | 1,922 | 1,947 | 1,973 | 1,998 | 2,025 | 2,051 | 2,078 | 2,105 | 2,133 | 2,160 | 2,189 |
| | 790,604 | 800,944 | 811,418 | 822,030 | 832,781 | 843,672 | 854,706 | 865,884 | 877,208 | 888,680 | 900,302 | 912,076 | 924,005 | 936,089 | 948,331 |
| | 794,861 | 805,257 | 815,788 | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |

BEAVER

Depreciation Expense

| | 6<br>2027 | 7<br>2028 | 8<br>2029 | 9<br>2030 | 10<br>2031 | 11<br>2032 | 12<br>2033 | 13<br>2034 | 14<br>2035 | 15<br>2036 | 16<br>2037 | 17<br>2038 | 18<br>2039 | 19<br>2040 | 20<br>2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | 56 | | | | | | | | | | | | | | |
| | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 |
| Sewer Rental Charges | | | | | | | | | | | | | | | |
| EDUs | 5143 | 5158 | 5173 | 5188 | 5203 | 5218 | 5233 | 5248 | 5263 | 5278 | 5293 | 5308 | 5323 | 5338 | 5353 |
| | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |

BEAVER

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% |
| | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| BEAVER | 3,282 | 3,291 | 3,301 | 3,311 | 3,320 | 3,330 | 3,339 | 3,349 | 3,359 | 3,369 | 3,378 | 3,388 | 3,398 | 3,408 | 3,418 |
| | 4,924,891 | 4,939,173 | 4,953,497 | 5,191,416 | 5,206,471 | 5,221,570 | 5,472,364 | 5,488,234 | 5,504,150 | 5,757,477 | 5,774,173 | 5,999,392 | 6,016,790 | 6,257,505 | 6,275,652 |
| | | 100.00% | | | | | | | | | | | | | |
| | 1,500.60 | 1,500.60 | 1,500.60 | 1,568.12 | 1,568.12 | 1,568.12 | 1,638.69 | 1,638.69 | 1,638.69 | 1,709.15 | 1,709.15 | 1,770.68 | 1,770.68 | 1,836.20 | 1,836.20 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 957.59 | 957.58 | 957.57 | 1,000.66 | 1,000.67 | 1,000.68 | 1,045.74 | 1,045.78 | 1,045.82 | 1,090.84 | 1,090.91 | 1,130.25 | 1,130.34 | 1,172.26 | 1,172.36 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

!OTES

| | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4,553,491 | 4,932,032 | 4,946,335 | 4,960,680 | 5,198,944 | 5,214,020 | 5,229,141 | 5,480,299 | 5,496,192 | 5,512,131 | 5,765,825 | 5,782,546 | 6,008,091 | 6,025,514 | 6,266,578 |

| | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 4.5% | | | 4.5% | | | 4.3% | | 3.6% | | 3.7% | | 3.5% |
| | $ 1,502.77 | $ 1,502.77 | $ 1,570.40 | $ 1,570.40 | $ 1,570.40 | $ 1,641.06 | $ 1,641.06 | $ 1,641.06 | $ 1,711.63 | $ 1,711.63 | $ 1,773.25 | $ 1,773.25 | $ 1,838.86 | $ 1,838.86 | $ 1,902.30 |
| | $ - | $ - | $ 67.62 | $ - | $ - | $ 70.67 | $ - | $ - | $ 70.57 | $ - | $ 61.62 | $ - | $ 65.61 | $ - | $ 63.44 |
| | 6,593 | 7,141 | 7,162 | 7,183 | 7,528 | 7,549 | 7,571 | 7,935 | 7,958 | 7,981 | 8,348 | 8,373 | 8,699 | 8,724 | 9,073 |
| | 4,924,891 | 4,939,173 | 4,953,497 | 5,191,416 | 5,206,471 | 5,221,570 | 5,472,364 | 5,488,234 | 5,504,150 | 5,757,477 | 5,774,173 | 5,999,392 | 6,016,790 | 6,257,505 | 6,275,652 |
| | - | - | 222,907 | - | - | 234,971 | - | - | 236,678 | - | 207,870 | - | 222,621 | - | 216,510 |
| | 67,140 | 67,111 | 67,082 | 67,053 | 67,023 | 66,993 | 66,962 | 66,931 | 66,900 | 66,868 | 66,835 | 66,803 | 66,769 | 66,736 | 66,702 |
| | 27,954 | 28,035 | 28,117 | 29,467 | 29,552 | 29,638 | 31,061 | 31,151 | 31,241 | 32,678 | 32,773 | 34,051 | 34,149 | 35,515 | 35,618 |
| | 95,094 | 95,146 | 95,199 | 96,520 | 96,575 | 96,631 | 98,023 | 98,082 | 98,141 | 99,546 | 99,608 | 100,854 | 100,918 | 102,251 | 102,320 |

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| | | | | |
|---|---|---|---|---|
| LESS: EOS - Wages & Benefits | Wages & Benefits | 15% savings | 15% | 0.15 |
| LESS: EOS - Professional Services | Net Professional Services | 50% savings | 50% | 0.5 |
| LESS: EOS - Eliminated Expenses | Line Rentals | 10% savings | 100% | 1 |

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation Rate | | | | | | | | | | | | | | | |
| Depreciation Expense | | | | | | | | | | | | | | | |
| CAPX | | | | | | | | | | | | | | | |

KROLL

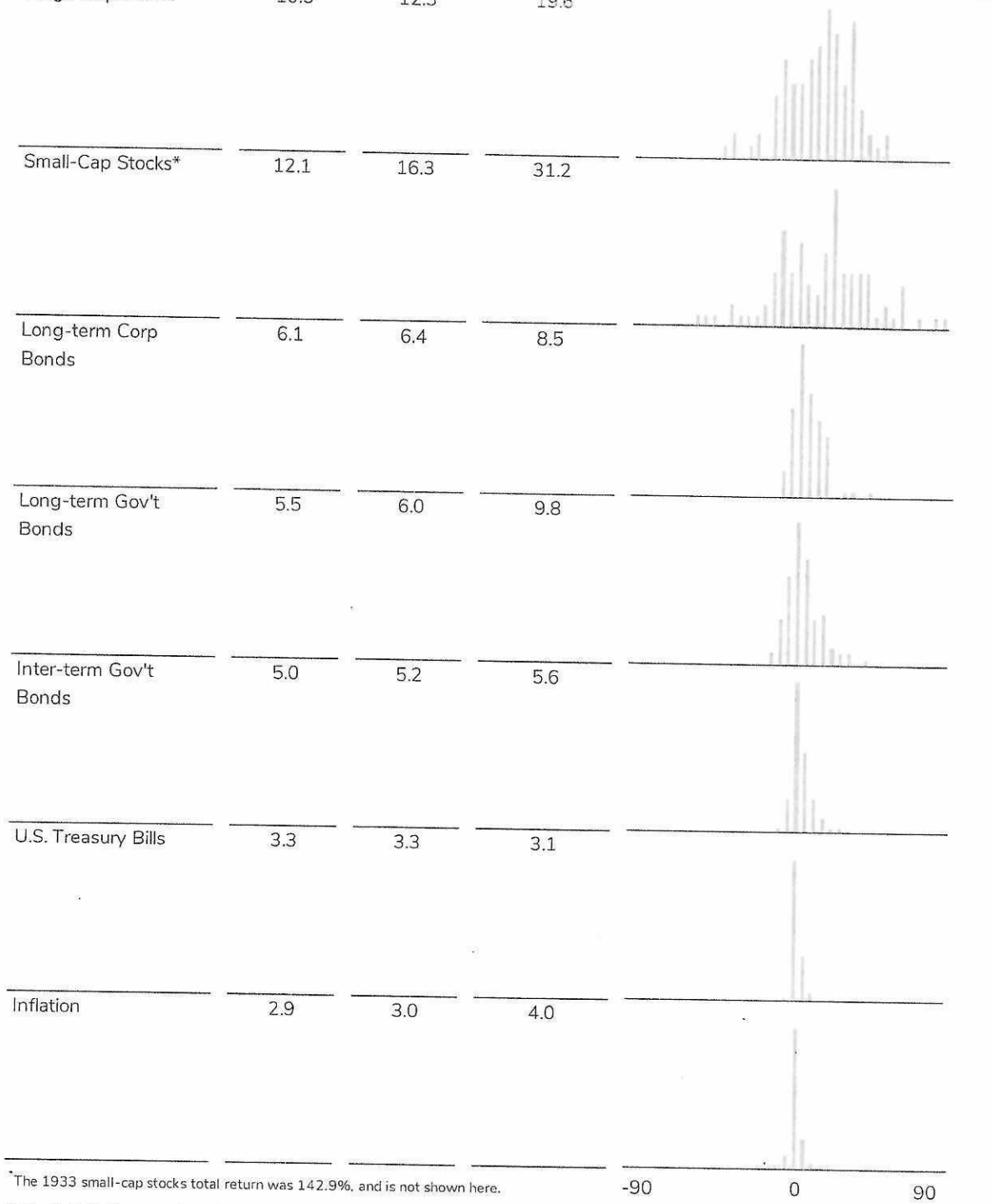
# 2022 SBBI® Yearbook

## Stocks, Bonds, Bills, and Inflation®

U.S. Capital Markets Performance by
Asset Class 1926–2021

**Exhibit 2.3:** Basic Series, Summary Statistics of Annual Total Returns (%)
1926–2021

| Series | Geometric Mean (%) | Arithmetic Mean (%) | Standard Deviation (%) | Distribution (%) |
|---|---|---|---|---|
| Large-Cap Stocks | 10.5 | 12.3 | 19.6 | |
| Small-Cap Stocks* | 12.1 | 16.3 | 31.2 | |
| Long-term Corp Bonds | 6.1 | 6.4 | 8.5 | |
| Long-term Gov't Bonds | 5.5 | 6.0 | 9.8 | |
| Inter-term Gov't Bonds | 5.0 | 5.2 | 5.6 | |
| U.S. Treasury Bills | 3.3 | 3.3 | 3.1 | |
| Inflation | 2.9 | 3.0 | 4.0 | |




*The 1933 small-cap stocks total return was 142.9%, and is not shown here.

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**Exhibit 6.8:** Total Returns, Income Returns, and Capital Appreciation Returns of the SBBI® Asset Classes; Summary Statistics of Annual Returns (%)
1926–2021

| | Geometric Mean (%) | Arithmetic Mean (%) | Standard Deviation (%) | Serial Correlation |
|---|---|---|---|---|
| **Large-Cap Stocks** | | | | |
| Total Return | 10.5 | 12.3 | 19.6 | 0.01 |
| Income | 3.9 | 3.9 | 1.6 | 0.92 |
| Capital Appreciation | 6.4 | 8.2 | 19.0 | 0.01 |
| **Small-Cap Stocks (TR)** | 12.1 | 16.3 | 31.2 | 0.05 |
| **Long-term Corp Bonds (TR)** | 6.1 | 6.4 | 8.5 | 0.01 |
| **Long-term Gov't Bonds** | | | | |
| Total Return | 5.5 | 6.0 | 9.8 | -0.16 |
| Income | 4.8 | 4.9 | 2.6 | 0.96 |
| Capital Appreciation | 0.5 | 0.9 | 8.9 | -0.25 |
| **Inter-term Gov't Bonds** | | | | |
| Total Return | 5.0 | 5.2 | 5.6 | 0.14 |
| Income | 4.3 | 4.3 | 2.9 | 0.96 |
| Capital Appreciation | 0.6 | 0.7 | 4.4 | -0.17 |
| **U.S. Treasury Bills (TR)** | 3.3 | 3.3 | 3.1 | 0.92 |
| **Inflation** | 2.9 | 3.0 | 4.0 | 0.62 |

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In general, risk is rewarded by a higher return over the long term. For example, Exhibit 6.8 shows that over the 1926–2021 time horizon small-cap stocks were the riskiest asset class with a standard deviation of 31.2%, but also provided the greatest rewards to long-term investors, with an arithmetic mean annual return of 16.3%. Comparably, the risk (as measured by standard deviation) of large-cap stocks was significantly lower at 19.6%, and the reward (as measured by arithmetic average annual return) of large-cap stocks was correspondently lower at 12.3%.

U.S. Treasury bills, with a standard deviation of 3.1%, were nearly riskless and had the lowest arithmetic mean annual return at 3.3%.

## Inflation-Adjusted Series Summary Statistics

Inflation-adjusted basic series summary statistics are presented in Exhibit 6.9. Note that the real rate of interest is close to zero (0.4%) on average. For the 96-year period, the geometric and arithmetic means are lower by the amount of inflation than those of the nominal series.

Note that this increased return comes at a price: risk (as measured by standard deviation) increased from 19.6% for large-cap stocks to 31.2% for small-cap stocks. The relationship between risk and return is a fundamental principle of finance. History tells us that small companies are riskier than large companies. Investors are compensated for taking on this additional risk by the higher returns provided by small companies.

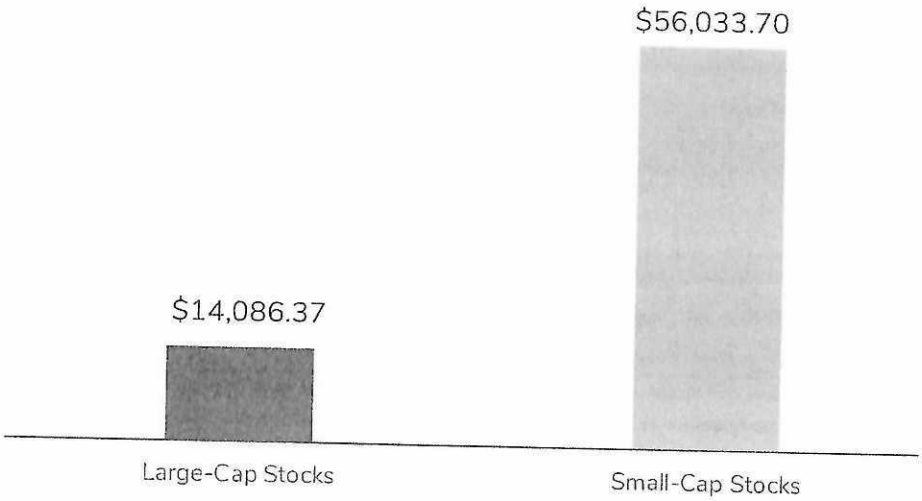
**Exhibit 7.1:** Summary Statistics of Large-Cap Stocks and Small-Cap Stocks (%)
1926–2021

| | Geometric Mean (%) | Arithmetic Mean (%) | Standard Deviation (%) |
|---|---|---|---|
| Large-Cap Stocks | 10.5 | 12.3 | 19.6 |
| Small-Cap Stocks | 12.1 | 16.3 | 31.2 |

**Source of underlying data:** Morningstar, Inc. Used with permission. All rights reserved. Calculations by Kroll. © Kroll, LLC. Series used: (i) "IA SBBI® US Large Stock TR USD Ext" series. The "IA SBBI® US Large Stock TR USD Ext" return series is essentially the S&P 500 index. (ii) IA SBBI® US Small Stock TR USD series. For detailed information about these series, see Chapter 3, "Description of the Basic Series".

The differences in the performance of large-cap stocks and small-cap stocks can have important implications for investors. Exhibit 7.2 is a graphical depiction of the value of $1 invested at the end of 1925 in large-cap and small-cap stocks and held through December 31, 2021 (a total of 96 years).

**Exhibit 7.2:** The Value of $1 Invested in Large-Cap and Small-Cap Stocks, 1926–2021
Index (Year-end 1925 = $1.00)




**Source of underlying data:** Morningstar, Inc. Used with permission. All rights reserved. Calculations by Kroll. © Kroll, LLC. Series used: (i) "IA SBBI® US Large Stock TR USD Ext" series. The "IA SBBI® US Large Stock TR USD Ext" return series is essentially the S&P 500 index. (ii) IA SBBI® US Small Stock TR USD series. For detailed information about these series, see Chapter 3, "Description of the Basic Series".

120 months (10-years), to 240 months (20-years) and finally to 360 months (30-years), small stocks increasingly outperform large stocks (55%, 66%, 88%, and 96% of the time, respectively).

This same pattern of increasing outperformance of small stocks as the holding period is increased can also be seen in the three "Post Banz" periods.

## Long-term Returns in Excess of Systematic Risk

The capital asset pricing model, or CAPM, does not fully account for the higher returns of small-cap stocks. The textbook CAPM can be expressed as follows:

$$k_e = R_f + \beta \times (RP_m)$$

Where:

| | | |
|---|---|---|
| $k_e$ | = | Cost of equity capital |
| $R_f$ | = | Risk-free rate |
| $\beta$ | = | Beta |
| $RP_m$ | = | Equity risk premium (also referred as ERP) |

According to the CAPM, the expected return on a security should consist of the riskless rate plus an additional return to compensate for the systematic risk of the security. The return in excess of the riskless rate is estimated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is the return that compensates investors for taking on risk equal to the risk of the market as a whole (systematic risk). Beta measures the extent to which a security or portfolio is exposed to systematic risk.

The beta of each decile indicates the degree to which the decile's return moves with that of the overall market. A beta greater than one indicates that the security or portfolio has greater systematic risk than the market; according to the CAPM equation, investors are compensated for taking on this additional risk.

CAPM is an attempt to predict *future* returns. CAPM can be used to see how well it would have done predicting returns that we *already know* (i.e., historical returns; returns that have already occurred). This is called "back-testing". If what "actually happened" is greater than "what CAPM would have predicted", then CAPM fell short of explaining what actually happened.

Smaller companies tend to have returns that are not fully explained by their higher betas, so return in excess of that predicted by CAPM tends to *increase* as one moves from the largest companies to the smallest companies. This size related phenomenon prompted a revision to the CAPM to include a size premium. A size premium (as used in the CAPM equation) is thus a measure of "what actually happened" minus "what textbook CAPM predicted":

Size Premium = Actual Excess Return – Excess Return Predicted by CAPM

A size premium is a common adjustment that analysts make to the textbook CAPM when developing cost of equity capital estimates.[189] [190] This is sometimes referred to as the "modified" CAPM:

$$k_e = R_f + \beta \times (RP_m) + RPs$$

Where:

| | | |
|---|---|---|
| $k_e$ | = | Cost of equity capital |
| $R_f$ | = | Risk-free rate |
| $\beta$ | = | Beta |
| $RP_m$ | = | Equity risk premium (also referred as ERP) |
| RPs | = | Size Premium |

The size effect is not without controversy, nor is this controversy something new. Traditionally, small companies are believed to have greater required rates of return than large companies because small companies are inherently riskier. It is not clear, however, whether this is due to size itself, or to other factors closely related to or correlated with size (e.g., liquidity).[191]

189 The CRSP Deciles Size Study and Risk Premium Report Study, both of which provide size premia and other risk premia based upon data licensed from the Center for Research in Security Prices (CRSP) at the University of Chicago Booth School of Business, are fully available in the Kroll Cost of Capital Navigator platform at kroll.com/costofcapitalnavigator (subscription required). CRSP® is a registered trademark and service mark of Center for Research in Security Prices, LLC and has been licensed for use by Kroll, LLC. The Kroll publications and services are not sponsored, sold or promoted by CRSP®, its affiliates or its parent company. To learn more about CRSP, visit www.crsp.org.

190 A detailed discussion of company size and return (and size premia) based upon CRSP deciles 1-10 and the 10th decile split (10a, 10b, 10w, 10x, 10y, and 10z) is available in the Resources Library of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. (subscription required).

191 For more information, see the Resources section of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. A comprehensive discussion of the size effect is in the Cost of Capital Navigator "U.S. Cost of Capital Module's" Resources Library.

**Exhibit 10.8**: Equity Risk Premium Calculated Using the S&P 500 and the Income Return on Three Government Bonds of Different Horizons (%)
1926–2021

| | Long-horizon | Intermediate-horizon | Short-horizon |
|---|---|---|---|
| S&P 500 | 7.46 | 8.04 | 9.03 |

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The equity risk premium is calculated by subtracting the arithmetic mean of the government bond income return from the arithmetic mean of the stock market total return. Exhibit 10.9 demonstrates this calculation for the long-horizon equity risk premium, the intermediate-horizon equity risk premium, and the short-horizon equity risk premium.

**Exhibit 10.9**: Calculation of the Long-Horizon Equity Risk Premium, the Intermediate-Horizon Equity Risk Premium, and the Short-Horizon Equity Risk Premium (%)
1926–2021

| | Arithmetic Annual Mean | | | |
|---|---|---|---|---|
| | S&P 500 (the "Market") | Risk-free Rate | | Equity Risk Premium |
| S&P 500 | 12.33 | 4.87 | = | 7.46 |
| Intermediate-horizon | 12.33 | 4.29 | = | 8.04 |
| Short-horizon | 12.33 | 3.30 | = | 9.03 |

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## The Market Benchmark and Firm Size

Although not restricted to the 500 largest companies, the S&P 500 is considered a large-cap index. The returns of the S&P 500 are market-cap-weighted. The larger companies in the index therefore receive the majority of the weight. If using a large-cap index to calculate the equity risk premium, an adjustment is usually needed to account for the different risk and return characteristics of small stocks. This was discussed in Chapter 7 on the size premium.

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# Cost of Capital Professional

## Screen & Export

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Specify search criteria

Company Name
Gannett Fleming

Valuation Date
12/31/2020

Returns Reference – Start Year
EARLIEST YEAR

Returns Reference – End Year
2020

Returns Calculation - Mean
Arithmetic
Geometric

ERP Size Premium IRP CoE WACC Summary

| | Firms | | | Portfolio | | Size Premium | |
|---|---|---|---|---|---|---|---|
| Decile | Count | Min size ('000) | Max Size ('000) | Annual Return | Beta | S&P 500 | Beta Adjusted |
| 1 - Largest | 199 | $29,075,803 | $1,966,078,882 | 11.06% | 0.92 | (0.75%) | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 186 | $13,178,743 | $28,808,073 | 12.82% | 1.04 | 1.01% |
| 3 | 210 | $6,743,361 | $13,177,828 | 13.66% | 1.11 | 1.85% |
| 4 | 218 | $3,861,858 | $6,710,676 | 13.67% | 1.13 | 1.86% |
| 5 | 255 | $2,445,693 | $3,836,536 | 14.49% | 1.17 | 2.68% |
| 6 | 246 | $1,591,865 | $2,444,745 | 14.82% | 1.18 | 3.01% |
| 7 | 306 | $911,586 | $1,591,765 | 15.63% | 1.26 | 3.82% |
| 8 | 365 | $451,955 | $911,103 | 15.91% | 1.31 | 4.10% |
| 9 | 412 | $190,019 | $451,800 | 16.69% | 1.34 | 4.88% |
| 10 - Smallest | 569 | $2,194 | $189,831 | 19.64% | 1.40 | 7.83% |
| 1 through 2 | 385 | $13,178,743 | $1,966,078,882 | 11.32% | 0.94 | (0.48%) |
| 3 through 5 | 683 | $2,445,693 | $13,177,828 | 13.80% | 1.13 | 1.99% |
| 6 through 8 | 917 | $451,955 | $2,444,745 | 15.27% | 1.23 | 3.46% |
| 9 through 10 | 981 | $2,194 | $451,800 | 17.53% | 1.35 | 5.72% |
| 1 through 5 | 1,068 | $2,445,693 | $1,966,078,882 | 11.64% | 0.96 | (0.17%) |
| 6 through 10 | 1,898 | $2,194 | $2,444,745 | 15.49% | 1.24 | 3.68% |

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

Please note: this license is for your exclusive and individual use. For information on firm-wide pricing please contact BVR at 503-479-8200 ext. 2 or sales@bvresources.com
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| | WORKING NOTES | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| GROSS Property, plant and equipment | - | - | - | | 47,000,000 | 47,189,429 | 47,806,577 | 48,431,796 | 49,065,192 | 49,706,871 | 50,356,942 |
| Accumulated Depreciation | - | - | - | | - | 207,261 | 843,216 | 1,487,488 | 2,140,187 | 2,801,420 | 3,471,302 |
| NET PPE | - | - | - | | 47,000,000 | 46,982,168 | 46,963,361 | 46,944,308 | 46,925,005 | 46,905,451 | 46,885,640 |
| Total Debt | - | - | - | - | - | - | | | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | 8,146,961 | - | | | | |
| Depreciation / GROSS PPE | #DIV/0! | #DIV/0! | #DIV/0! | 0.00% | 0.00% | 1.57% | | | | 0 | 0 |
| | | | | Muni CAPX | 0 | 222,858 | 0 | 0 | 0 | 0 | 0 |
| | | | IOU savings | 0% | | | 100% | 100% | 100% | 100% | 100% |
| | | | | CAPX/Prior Yr. GROSS PPE | | | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% |
| | | | | CAPX | 87,357 | 222,858 | 726,057 | 735,552 | 745,172 | 754,917 | 764,790 |
| | | | | Dep rate | 0.00% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% |
| | | | | Half yr. Dep | 0.00% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% |
| | | | | Dep on CAPX | - | 1,749 | 5,700 | 5,774 | 5,850 | 5,926 | 6,004 |
| | | | | Rate of retirement | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | | | | Retired property | 13,104 | 33,429 | 108,909 | 110,333 | 111,776 | 113,238 | 114,719 |
| | | | | Dep on Retired property | - | 525 | 1,710 | 1,732 | 1,755 | 1,778 | 1,801 |
| | | | | Dep on Prior yr. GROSS | 243,460 | 239,466 | 740,874 | 750,563 | 760,379 | 770,324 | 780,398 |
| | | | | Total Dep | 243,460 | 240,690 | 744,864 | 754,605 | 764,474 | 774,472 | 784,601 |
| BEAVER | | | | | | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | | | | | | |
| | | | | part of OCN | | | | | | | |
| | | | | NET PPE | | | PURTA | 0.001527765 | | | |
| | | | | Rev | | | Reg Assessment Fee | 0.005652534 | | | |
| | | | | | 2020 | 2021 | 1<br>2022 | 2<br>2023 | 3<br>2024 | 4<br>2025 | 5<br>2026 |
| BEAVER | | | | | | | | | | | |
| | FIX CIP | | | CIP | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | | | | | part of OCN | = to DepX | | | | | |
| | | | | | 87,357 | 222,858 | | | | | |
| | | | | | | | | | 191 | 71 | 72 |
| | | | | | 2020 | 2021 | | | | | |
| | | | | | | - | - | 4,750.00 | 9,500.00 | 14,250.00 | 71,250.00 |
| Sewer Rental Charges | 0 | 0 | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 2,349,450 | 2,350,140 | 2,351,290 | |
| EDUs | 0 | 0 | 0 | 0 | 5,107 | 5,107 | 5107 | 5108 | 5110 | 5113 | 5128 |
| | | | | | 0 | 0 | 0 | 1 | 2 | 3 | 15 |
| | | 0 | 0 | 0 | 2553.5 | 5107 | 5107 | 5107.5 | 5109 | 5111.5 | |
| | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 591.9651459 | | | | | | |
| | | | | | | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | $ 460.00 | |
| | | #DIV/0! | #DIV/0! | #DIV/0! | 1183.930292 | 591.9651459 | | | | | |
| BEAVER | | | | | C | 3,259 | 9 | | | | |
| | | | | | E | 5,107 | 15 | | | | |
| | | | | | | 0.64 | | | | | |
| | | | | 1742000 | | | | | | | |
| | Customer Growth | | | | | 0 | 0 | 1 | 1 | 2 | 0.29% |
| | Delivered to Customer | | - | 18.41 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| BEAVER | Customers | | 3,259 | 3,259 | 3,259 | 3,259 | 3,259 | 3,260 | 3,261 | 3,263 | 3,272 |
| | Total Revenue (Less TAP) | | 3,054,418 | 3,147,364 | 3,023,166 | 3,023,166 | 3,023,166 | 3,023,630 | 6,956,482 | 6,959,682 | 6,971,911 |
| | | | | | | | | | | 99.98% | |
| | avg CUST rev | | 937.23 | 965.75 | 927.64 | 927.64 | 927.64 | 927.49 | 2,133.24 | 2,132.91 | 2,130.48 |
| | avg CUST flow | | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | avg EDU rev | | #DIV/0! | #DIV/0! | 591.97 | 591.97 | 591.97 | 591.94 | 1,361.35 | 1,361.17 | 1,359.58 |
| | avg EDU flow | | #DIV/0! | #DIV/0! | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| WORKING NOTES | | | | | | | | | | | WORKING N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| | | Rev Calculated | | | | 3,023,166 | 3,023,166 | 3,023,630 | 3,024,094 | 6,958,615 | 6,969,774 |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|
| | Change | | 130.0% | | | 4.0% |
| | $ 927.64 | $ 927.64 | $ 927.64 | $ 2,133.56 | $ 2,133.56 | $ 2,133.56 | $ 2,218.91 |
| | | | | $ 1,205.93 | $ - | $ - | $ 85.34 |
| | - | - | 464 | 6,956,482 | 2,133 | 10,092 |
| | 3,023,166 | 3,023,166 | 3,023,630 | 6,956,482 | 6,959,682 | 6,971,911 |
| | - | - | 3,930,719 | - | - | 278,876 |

| Prior yr | | | | | | | |
|---|---|---|---|---|---|---|---|
| NET PURTA | 0.1432% | | | 67,278 | 67,252 | 67,224 | 67,197 | 67,169 |
| REV Reg Assessment | 0.5690% | | | 17,215 | 17,215 | 39,583 | 39,595 | 39,613 |
| | | | | 84,493 | 84,467 | 106,807 | 106,792 | 106,782 |

| City of Beaver Falls Wastewater System Assets | |
|---|---|
| Investor Provided ( | 8,146,961 |
| Gross PP&E | 47,000,000 |
| Net PP&E | 47,000,000 |
| Revenues | 3,025,415 |
| EBITDA | 773,752 |
| EBIT | 533,061 |
| Customers | 3,259 |
| Population | 15,580 |

| | | | | | |
|---|---|---|---|---|---|
| G PPE | - | - | 47,000,000 | 47,189,429 | |
| NPPE | - | - | 47,000,000 | 46,982,168 | |
| Cust | 3,259 | 3,259 | 3,259 | 3,259 | |

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BEAVER | | | | | | | | | | |
| LESS: EOS - Wages & Benefits | 0 | - | - | - | - | 926,870 | | 0.15 | | LESS: EOS - Wages & |
| LESS: EOS - Professional Services | 0 | 0 | 0 | 0 | - | - | | 0.5 | | LESS: EOS - Professi |
| LESS: EOS - Eliminated Expenses | 0 | 0 | 0 | 0 | - | 240,000 | | | | LESS: EOS - Elim |
| BEAVER | | | | | | | | | | |
| Wages | | | 0 | 0 | 0 | 926,870 | | | | |
| Professional Services | | | | | 0 | 0 | | | | |
| Eliminated Exp | | | 0 | 0 | 0 | 240,000 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| BEAVER | | | | | included in OCN | = to DepX |
| Reported CAPX - from the financials | 0 | 0 | 5,945 | 2,811 | 87,357 | 222,858 |

| | 2016 | 2017 | 2018 | 2019 | 2020 | | Assets | Per Books | Difference |
|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | - | - | - | - | 47,000,000 | | 47,000,000 | - | |
| Accumulated Depreciation | - | - | - | - | - | | - | - | |
| NET PPE | - | - | - | - | 47,000,000 | | 47,000,000 | - | 47,000,000 |

| WORKING NOTES | | | | | | | | | WORKING N | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| Total Debt | - | - | - | - | - | | | 737,900 | | | |
| Net Equity | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Investor Provided Capital | - | - | - | 8,146,961 | 8,146,961 | | | | | | |
| Depreciation Rate | 0.00% | 0.00% | 0.00% | #DIV/0! | 1.57% | | | | | | |
| Depreciation Expense | - | - | 246,236 | 243,460 | 239,466 | 737,900.00 | | | | | |

| | 2021 | 2022 | 2023 | 2024 | 2025 | | |
|---|---|---|---|---|---|---|---|
| CAPX | 0 | 0 | 0 | 0 | 0 | 0 | |

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROSS Property, plant and equipment | 51,015,515 | 51,682,701 | 52,358,612 | 53,043,363 | 53,737,069 | 54,439,848 | 55,151,818 | 55,873,099 | 56,603,813 | 57,344,083 | 58,094,035 | 58,853,795 | 59,623,490 | 60,403,252 | 61,193,211 |
| Accumulated Depreciation | 4,149,944 | 4,837,463 | 5,533,971 | 6,239,589 | 6,954,436 | 7,678,631 | 8,412,297 | 9,155,558 | 9,908,539 | 10,671,369 | 11,444,176 | 12,227,089 | 13,020,240 | 13,823,764 | 14,637,798 |
| NET PPE | 46,865,571 | 46,845,238 | 46,824,641 | 46,803,774 | 46,782,633 | 46,761,217 | 46,739,521 | 46,717,541 | 46,695,274 | 46,672,714 | 46,649,859 | 46,626,706 | 46,603,250 | 46,579,488 | 46,555,413 |
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation / GROSS PPE | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% | 1.54% |
| | 774,792 | 784,925 | 795,190 | 805,590 | 816,125 | 826,799 | 837,612 | 848,566 | 859,664 | 870,906 | 882,296 | 893,835 | 905,524 | 917,367 | 929,364 |
| | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% | 1.57% |
| | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% | 0.79% |
| | 6,082 | 6,162 | 6,242 | 6,324 | 6,407 | 6,490 | 6,575 | 6,661 | 6,748 | 6,837 | 6,926 | 7,017 | 7,108 | 7,201 | 7,296 |
| | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| | 116,219 | 117,739 | 119,279 | 120,839 | 122,419 | 124,020 | 125,642 | 127,285 | 128,950 | 130,636 | 132,344 | 134,075 | 135,829 | 137,605 | 139,405 |
| | 1,825 | 1,849 | 1,873 | 1,897 | 1,922 | 1,947 | 1,973 | 1,998 | 2,025 | 2,051 | 2,078 | 2,105 | 2,133 | 2,160 | 2,189 |
| | 790,604 | 800,944 | 811,418 | 822,030 | 832,781 | 843,672 | 854,706 | 865,884 | 877,208 | 888,680 | 900,302 | 912,076 | 924,005 | 936,089 | 948,331 |
| | 794,861 | 805,257 | 815,788 | 826,457 | 837,266 | 848,215 | 859,308 | 870,546 | 881,931 | 893,466 | 905,150 | 916,988 | 928,980 | 941,129 | 953,438 |



BEAVER

Depreciation Expense

| | 6<br>2027 | 7<br>2028 | 8<br>2029 | 9<br>2030 | 10<br>2031 | 11<br>2032 | 12<br>2033 | 13<br>2034 | 14<br>2035 | 15<br>2036 | 16<br>2037 | 17<br>2038 | 18<br>2039 | 19<br>2040 | 20<br>2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | 56 | | | | | | | | | | | | | | |
| | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 | 71,250.00 |
| Sewer Rental Charges | | | | | | | | | | | | | | | |
| EDUs | 5143 | 5158 | 5173 | 5188 | 5203 | 5218 | 5233 | 5248 | 5263 | 5278 | 5293 | 5308 | 5323 | 5338 | 5353 |
| | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |



BEAVER

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% | 0.29% |
| | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| BEAVER | 3,282 | 3,291 | 3,301 | 3,311 | 3,320 | 3,330 | 3,339 | 3,349 | 3,359 | 3,369 | 3,378 | 3,388 | 3,398 | 3,408 | 3,418 |
| | 7,271,814 | 7,292,903 | 7,314,052 | 7,555,321 | 7,577,231 | 7,599,205 | 7,849,880 | 7,872,645 | 7,895,475 | 8,155,923 | 8,179,576 | 8,383,769 | 8,408,082 | 8,634,844 | 8,659,886 |
| | | 100.00% | | | | | | | | | | | | | |
| | 2,215.70 | 2,215.70 | 2,215.70 | 2,282.17 | 2,282.17 | 2,282.17 | 2,350.63 | 2,350.63 | 2,350.63 | 2,421.15 | 2,421.15 | 2,474.42 | 2,474.42 | 2,533.80 | 2,533.80 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1,413.92 | 1,413.90 | 1,413.89 | 1,456.31 | 1,456.32 | 1,456.34 | 1,500.07 | 1,500.12 | 1,500.19 | 1,545.27 | 1,545.36 | 1,579.46 | 1,579.58 | 1,617.62 | 1,617.76 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| !OTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6,982,020 | 7,282,358 | 7,303,478 | 7,324,657 | 7,566,276 | 7,588,218 | 7,610,224 | 7,861,262 | 7,884,060 | 7,906,923 | 8,167,749 | 8,191,436 | 8,395,925 | 8,420,274 | 8,647,365 |

| | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 3.0% | | | 3.0% | | | 3.0% | | 2.2% | | 2.4% | | 2.5% |
| | $ 2,218.91 | $ 2,218.91 | $ 2,285.47 | $ 2,285.47 | $ 2,285.47 | $ 2,354.04 | $ 2,354.04 | $ 2,354.04 | $ 2,424.66 | $ 2,424.66 | $ 2,478.00 | $ 2,478.00 | $ 2,537.47 | $ 2,537.47 | $ 2,600.91 |
| | $ - | $ - | $ 66.57 | $ - | $ - | $ 68.56 | $ - | $ - | $ 70.62 | $ - | $ 53.34 | $ - | $ 59.47 | $ - | $ 63.44 |
| | 10,109 | 10,544 | 10,575 | 10,605 | 10,955 | 10,987 | 11,019 | 11,382 | 11,415 | 11,448 | 11,826 | 11,860 | 12,156 | 12,192 | 12,521 |
| | 7,271,814 | 7,292,903 | 7,314,052 | 7,555,321 | 7,577,231 | 7,599,205 | 7,849,880 | 7,872,645 | 7,895,475 | 8,155,923 | 8,179,576 | 8,383,769 | 8,408,082 | 8,634,844 | 8,659,886 |
| | - | - | 219,422 | - | - | 227,976 | - | - | 236,864 | - | 179,951 | - | 201,794 | - | 216,497 |
| | 67,140 | 67,111 | 67,082 | 67,053 | 67,023 | 66,993 | 66,962 | 66,931 | 66,900 | 66,868 | 66,835 | 66,803 | 66,769 | 66,736 | 66,702 |
| | 41,270 | 41,389 | 41,509 | 42,878 | 43,003 | 43,127 | 44,549 | 44,679 | 44,808 | 46,286 | 46,420 | 47,579 | 47,716 | 49,003 | 49,145 |
| | 108,410 | 108,500 | 108,591 | 109,931 | 110,026 | 110,120 | 111,511 | 111,610 | 111,708 | 113,154 | 113,255 | 114,382 | 114,485 | 115,739 | 115,847 |

BEAVER

| | | | | |
|---|---|---|---|---|
| LESS: EOS - Wages & Benefits | Wages & Benefits | 15% savings | 15% | 0.15 |
| LESS: EOS - Professional Services | Net Professional Services | 50% savings | 50% | 0.5 |
| LESS: EOS - Eliminated Expenses | Line Rentals | 10% savings | 100% | 1 |

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

| NOTES | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Debt | | | | | | | | | | | | | | | |
| Net Equity | | | | | | | | | | | | | | | |
| Investor Provided Capital | | | | | | | | | | | | | | | |
| Depreciation Rate | | | | | | | | | | | | | | | |
| Depreciation Expense | | | | | | | | | | | | | | | |
| CAPX | | | | | | | | | | | | | | | |

**City of Beaver Falls Wastewater System Assets**

| | | | |
|---|---|---|---|
| Total Debt | 0 | 0 | 0 |
| Purchase of Capital Assets | 87357 | 2811 | 5945 |

| | 2020 | 2019 | 2018 |
|---|---|---|---|
| Income (Loss) Before Transfers | 155255 | 284990 | 585660 |
| Interest paid | 0 | 0 | 0 |
| Depreciation | 239466 | 243460 | 246236 |
| Total Source | $394,721 | $528,450 | $831,896 |
| Income tax | 0 | 0 | 0 |
| Principal | 0 | 0 | 0 |
| Interest paid | 0 | 0 | 0 |
| Total Use | $0 | $0 | $0 |

**W/Out Trans**

| | | | |
|---|---|---|---|
| Debt Service Coverage | #DIV/0! | #DIV/0! | #DIV/0! |
| Pre-Tax Interest Coverage - Including AFC(3)(x) | #DIV/0! | #DIV/0! | #DIV/0! |
| Post-Tax Interest Coverage - Including AFC(3)(x) | #DIV/0! | #DIV/0! | #DIV/0! |
| GCF / Interest Coverage(4)(x) | #DIV/0! | #DIV/0! | #DIV/0! |
| GCF / Tot. Debt(7)(%) | #DIV/0! | #DIV/0! | #DIV/0! |
| GCF / Construction(6)(%) | 451.85 | 18799.36 | 13993.20 |

**Comparable Group**

Debt Service Coverage - As Reported

| Comparable Group | 2020 | 2019 | 2018 |
|---|---|---|---|
| AMERICAN STATES WATER COMPANY | 1.6 | 2.2 | 5.4 |
| AMERICAN WATER WORKS COMPANY, INC. | 2.3 | 1.8 | 1.7 |
| ARTESIAN RESOURCES CORPORATION | 3.8 | 3.7 | 4.1 |
| CALIFORNIA WATER SERVICE GROUP | 3.6 | 0.4 | 3.4 |
| ESSENTIAL UTILITIES, INC. | 0.4 | 0.4 | 0.5 |
| MIDDLESEX WATER COMPANY | 4.5 | 4.0 | 4.0 |
| SJW GROUP | 2.5 | 3.7 | 4.9 |
| THE YORK WATER COMPANY | 0.7 | 0.3 | 0.8 |
| Median | 2.4 | 2.0 | 3.7 |

| Company Name | 2020 DEPRECIATION | 2019 DEPRECIATION | 2018 DEPRECIATION | 2020 TOTAL INTERST EXPENSE | 2019 TOTAL INTERST EXPENSE | 2018 TOTAL INTERST EXPENSE |
|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMPANY | 37.204 | 35.713 | 40.663 | 22.531 | 24.586 | 23.433 |
| AMERICAN WATER WORKS COMPANY, INC. | 604.000 | 582.000 | 545.000 | 397.000 | 386.000 | 350.000 |
| ARTESIAN RESOURCES CORPORATION | 11.143 | 10.803 | 10.288 | 7.619 | 7.024 | 6.252 |
| CALIFORNIA WATER SERVICE GROUP | 100.935 | 91.288 | 85.707 | 45.047 | 44.891 | 39.917 |
| ESSENTIAL UTILITIES, INC. | 257.059 | 156.476 | 146.673 | 188.435 | 149.125 | 158.833 |
| MIDDLESEX WATER COMPANY | 20.838 | 17.232 | 15.780 | 7.493 | 7.264 | 6.758 |
| SJW GROUP | 91.622 | 68.489 | 56.907 | 54.255 | 31.796 | 24.332 |
| THE YORK WATER COMPANY | 8.177 | 7.688 | 7.010 | 4.707 | 5.124 | 5.509 |

| | 2020 INCOME TO PREF+COMM | 2019 INCOME TO PREF+COMM | 2018 INCOME TO PREF+COMM | 2020 REPAY LT DEBT | 2019 REPAY LT DEBT | 2018 REPAY LT DEBT |
|---|---|---|---|---|---|---|
| AMERICAN STATES WATER COMPANY | 86.425 | 84.342 | 63.871 | 71.136 | 40.325 | 0.326 |
| AMERICAN WATER WORKS COMPANY, INC. | 709.000 | 621.000 | 567.000 | 342.000 | 495.000 | 526.000 |
| ARTESIAN RESOURCES CORPORATION | 16.817 | 14.925 | 14.278 | 1.772 | 1.725 | 1.344 |
| CALIFORNIA WATER SERVICE GROUP | 96.831 | 63.116 | 65.584 | 22.141 | 405.568 | 16.532 |
| ESSENTIAL UTILITIES, INC. | 284.849 | 224.543 | 191.988 | 1,820.571 | 1,073.708 | 914.125 |
| MIDDLESEX WATER COMPANY | 38.425 | 33.888 | 32.452 | 7.472 | 7.343 | 7.024 |
| SJW GROUP | 61.515 | 23.403 | 38.767 | 28.931 | 1.400 | 0.000 |
| THE YORK WATER COMPANY | 16.598 | 14.402 | 13.376 | 39.628 | 85.906 | 25.691 |

| Company Name | Pretax Operating Income | | | Interest expense | | | Net Income | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| AMERICAN STATES WATER CO | 137.153 | 133.598 | 105.321 | 22.531 | 24.586 | 23.433 | 86.425 | 84.342 | 63.871 |
| AMERICAN WATER WORKS CO INC | 1,321.000 | 1,219.000 | 1,139.000 | 397.000 | 386.000 | 350.000 | 709.000 | 621.000 | 567.000 |
| ARTESIAN RESOURCES -CL A | 30.120 | 27.130 | 25.521 | 7.619 | 7.024 | 6.252 | 16.817 | 14.925 | 14.278 |
| CALIFORNIA WATER SERVICE GP | 153.896 | 125.678 | 121.373 | 45.047 | 44.891 | 39.917 | 96.831 | 63.116 | 65.584 |
| ESSENTIAL UTILITIES, INC. | 453.406 | 360.651 | 337.152 | 188.435 | 149.125 | 158.833 | 284.849 | 224.543 | 191.988 |
| MIDDLESEX WATER CO | 41.799 | 38.012 | 40.134 | 7.493 | 7.264 | 6.758 | 38.425 | 33.888 | 32.452 |
| SJW GROUP | 124.150 | 63.653 | 73.164 | 54.255 | 31.796 | 24.332 | 61.515 | 23.403 | 38.767 |
| YORK WATER CO | 23.323 | 21.766 | 21.376 | 4.707 | 5.124 | 5.509 | 16.598 | 14.402 | 13.376 |

| Company Name | Gross Cash Flow | | | Total debt | | | CAPX | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| AMERICAN STATES WATER CO | 125.872 | 126.678 | 98.761 | 586.555 | 499.928 | 416.907 | 130.423 | 151.940 | 126.561 |
| AMERICAN WATER WORKS CO INC | 1,507.000 | 1,398.000 | 1,294.000 | 11,025.000 | 9,547.000 | 8,625.000 | 1,822.000 | 1,654.000 | 1,586.000 |
| ARTESIAN RESOURCES -CL A | 24.401 | 21.079 | 24.763 | 171.460 | 153.846 | 133.646 | 34.277 | 40.677 | 49.053 |
| CALIFORNIA WATER SERVICE GP | 206.596 | 168.402 | 165.097 | 1,171.852 | 998.102 | 880.038 | 298.651 | 273.770 | 271.707 |
| ESSENTIAL UTILITIES, INC. | 511.439 | 354.411 | 310.688 | 5,777.606 | 3,097.913 | 2,627.187 | 835.642 | 550.273 | 495.737 |
| MIDDLESEX WATER CO | 52.811 | 46.410 | 45.909 | 287.541 | 263.687 | 208.694 | 105.619 | 89.125 | 72.094 |
| SJW GROUP | 143.507 | 86.320 | 83.332 | 1,538.915 | 1,423.078 | 531.424 | 195.323 | 164.325 | 135.973 |
| YORK WATER CO | 24.333 | 22.365 | 20.215 | 126.304 | 103.282 | 96.173 | 33.299 | 20.537 | 16.882 |

| Company Name | Pretax Interest Coverage | | | Posttax Interest Coverage | | | GCF Interest Coverage | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| AMERICAN STATES WATER CO | 6.1 | 5.4 | 4.5 | 4.8 | 4.4 | 3.7 | 6.6 | 6.2 | 5.2 |
| AMERICAN WATER WORKS CO INC | 3.3 | 3.2 | 3.3 | 2.8 | 2.6 | 2.6 | 4.8 | 4.6 | 4.7 |
| ARTESIAN RESOURCES -CL A | 4.0 | 3.9 | 4.1 | 3.2 | 3.1 | 3.3 | 4.2 | 4.0 | 5.0 |
| CALIFORNIA WATER SERVICE GP | 3.4 | 2.8 | 3.0 | 3.1 | 2.4 | 2.6 | 5.6 | 4.8 | 5.1 |
| ESSENTIAL UTILITIES, INC. | 2.4 | 2.4 | 2.1 | 2.5 | 2.5 | 2.2 | 3.7 | 3.4 | 3.0 |
| MIDDLESEX WATER CO | 5.6 | 5.2 | 5.9 | 6.1 | 5.7 | 5.8 | 8.0 | 7.4 | 7.8 |
| SJW GROUP | 2.3 | 2.0 | 3.0 | 2.1 | 1.7 | 2.6 | 3.6 | 3.7 | 4.4 |
| YORK WATER CO | 5.0 | 4.2 | 3.9 | 4.5 | 3.8 | 3.4 | 6.2 | 5.4 | 4.7 |
| Median | 3.7 | 3.6 | 3.6 | 3.2 | 2.9 | 3.0 | 5.2 | 4.7 | 4.9 |

| Company Name | GCF To Debt | | | GCF To CAPX | | |
|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2020 | 2019 | 2018 |
| AMERICAN STATES WATER CO | 21.5 | 25.3 | 23.7 | 96.5 | 83.4 | 78.0 |
| AMERICAN WATER WORKS CO INC | 13.7 | 14.6 | 15.0 | 82.7 | 84.5 | 81.6 |
| ARTESIAN RESOURCES -CL A | 14.2 | 13.7 | 18.5 | 71.2 | 51.8 | 50.5 |
| CALIFORNIA WATER SERVICE GP | 17.6 | 16.9 | 18.8 | 69.2 | 61.5 | 60.8 |
| ESSENTIAL UTILITIES, INC. | 8.9 | 11.4 | 11.8 | 61.2 | 64.4 | 62.7 |
| MIDDLESEX WATER CO | 18.4 | 17.6 | 22.0 | 50.0 | 52.1 | 63.7 |
| SJW GROUP | 9.3 | 6.1 | 15.7 | 73.5 | 52.5 | 61.3 |
| YORK WATER CO | 19.3 | 21.7 | 21.0 | 73.1 | 108.9 | 119.7 |
| Median | 15.9 | 15.8 | 18.7 | 72.2 | 63.0 | 63.2 |

| | 2020 | 2019 | 2018 |
|---|---|---|---|
| Pre-Tax Interest Coverage - Including AFC(3)(x) | 3.7 | 3.6 | 3.6 |
| Post-Tax Interest Coverage - Including AFC(3)(x) | 3.2 | 2.9 | 3.0 |
| GCF / Interest Coverage(4)(x) | 5.2 | 4.7 | 4.9 |
| GCF / Tot. Debt(7)(%) | 15.9 | 15.8 | 18.7 |
| GCF / Construction(6)(%) | 72.2 | 63.0 | 63.2 |

*Bulletin No. 195*

*1912 to January 1, 2022*

# The Handy-Whitman Index® of Public Utility Construction Costs™

## *Trends of Construction Costs*

COMPILED & PUBLISHED BY
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# TABLE OF CONTENTS

## TRENDS OF PUBLIC UTILITY CONSTRUCTION COSTS

TABLE OF CONTENTS i
GEOGRAPHIC REGIONS ii
FOREWORD iii
Methods of Preparation of Indexes iii
Geographic Regions iv
Use of Index Numbers iv
Value of Index Numbers iv
Comments iv

### COST TRENDS OF BUILDING CONSTRUCTION

| Cost Trend Tables - 1912 to January 1, 2022 | Table | Page |
|---|---|---|
| North Atlantic Region | B-1 | B-1-1 |
| South Atlantic Region | B-2 | B-2-1 |
| North Central Region | B-3 | B-3-1 |
| South Central Region | B-4 | B-4-1 |
| Plateau Region | B-5 | B-5-1 |
| Pacific Region | B-6 | B-6-1 |
| Utility Materials | M-1 | B-M-1 |

### COST TRENDS OF ELECTRIC UTILITY CONSTRUCTION

| Cost Trend Tables - 1912 to January 1, 2022 | | |
|---|---|---|
| North Atlantic Region | E-1 | E-1-1 |
| South Atlantic Region | E-2 | E-2-1 |
| North Central Region | E-3 | E-3-1 |
| South Central Region | E-4 | E-4-1 |
| Plateau Region | E-5 | E-5-1 |
| Pacific Region | E-6 | E-6-1 |

### COST TRENDS OF GAS UTILITY CONSTRUCTION

| Cost Trend Tables - 1912 to January 1, 2022 | | |
|---|---|---|
| North Atlantic Region | G-1 | G-1-1 |
| South Atlantic Region | G-2 | G-2-1 |
| North Central Region | G-3 | G-3-1 |
| South Central Region | G-4 | G-4-1 |
| Plateau Region | G-5 | G-5-1 |
| Pacific Region | G-6 | G-6-1 |

### COST TRENDS OF WATER UTILITY CONSTRUCTION

| Cost Trend Tables - 1912 to January 1, 2022 | | |
|---|---|---|
| North Atlantic Region | W-1 | W-1-1 |
| South Atlantic Region | W-2 | W-2-1 |
| North Central Region | W-3 | W-3-1 |
| South Central Region | W-4 | W-4-1 |
| Plateau Region | W-5 | W-5-1 |
| Pacific Region | W-6 | W-6-1 |

# TRENDS OF PUBLIC UTILITY CONSTRUCTION COSTS

## GEOGRAPHIC REGIONS



| Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman |
|---|---|---|---|---|---|
| Line # | Line # | Line # | Line # | Line # | Line # |
| **8** | **9** | **16** | **34** | **39** | **40** |
| 1912 | **0** | **0** | **0** | **9** | **6** | **0** |
| 1913 | **0** | **0** | **0** | **10** | **6** | **0** |
| 1914 | **0** | **0** | **0** | **8** | **5** | **0** |
| 1915 | **0** | **0** | **0** | **9** | **6** | **0** |
| 1916 | **0** | **0** | **0** | **11** | **6** | **0** |
| 1917 | **0** | **0** | **0** | **16** | **9** | **0** |
| 1918 | **0** | **0** | **0** | **19** | **10** | **0** |
| 1919 | **0** | **0** | **0** | **20** | **11** | **0** |
| 1920 | **0** | **0** | **0** | **22** | **12** | **0** |
| 1921 | **0** | **0** | **0** | **22** | **13** | **0** |
| 1922 | **0** | **0** | **0** | **20** | **12** | **0** |
| 1923 | **0** | **0** | **0** | **21** | **12** | **0** |
| 1924 | **0** | **0** | **0** | **22** | **13** | **0** |
| **1925** | **18** | **0** | **20** | **21** | **13** | **0** |
| 1926 | **19** | **0** | **0** | **21** | **13** | **0** |
| 1927 | **18** | **0** | **0** | **21** | **13** | **0** |
| **1928** | **18** | **0** | **0** | **20** | **13** | **0** |
| 1929 | **18** | **0** | **0** | **20** | **14** | **0** |
| 1930 | **17** | **0** | **0** | **20** | **14** | **0** |
| 1931 | **16** | **0** | **0** | **20** | **14** | **0** |
| **1932** | **15** | **0** | **0** | **18** | **13** | **0** |
| 1933 | **15** | **0** | **0** | **18** | **11** | **0** |
| 1934 | **16** | **0** | **0** | **19** | **12** | **0** |
| 1935 | **16** | **0** | **0** | **19** | **13** | **0** |
| 1936 | **16** | **0** | **0** | **20** | **13** | **0** |
| 1937 | **18** | **0** | **0** | **21** | **14** | **0** |
| 1938 | **18** | **0** | **0** | **22** | **14** | **0** |

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

| | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman |
|---|---|---|---|---|---|---|
| | Line # | Line # | Line # | Line # | Line # | Line # |
| | **8** | **9** | **16** | **34** | **39** | **40** |
| **1939** | **18** | **0** | **20** | **22** | **14** | **0** |
| 1940 | **20** | **0** | **0** | **24** | **14** | **0** |
| 1941 | **0** | **0** | **0** | **0** | **15** | **0** |
| **1942** | **0** | **0** | **0** | **0** | **16** | **0** |
| 1943 | **0** | **0** | **0** | **0** | **16** | **0** |
| **1944** | **21** | **0** | **0** | **25** | **17** | **0** |
| 1945 | **22** | **0** | **0** | **26** | **17** | **0** |
| 1946 | **24** | **0** | **0** | **29** | **19** | **0** |
| **1947** | **28** | **0** | **32** | **35** | **22** | **0** |
| **1948** | **32** | **0** | **35** | **41** | **25** | **0** |
| 1949 | **35** | **0** | **36** | **42** | **27** | **52** |
| **1950** | **36** | **0** | **38** | **43** | **28** | **59** |
| 1951 | **38** | **0** | **40** | **45** | **29** | **61** |
| **1952** | **38** | **0** | **41** | **47** | **31** | **61** |
| **1953** | **39** | **0** | **42** | **48** | **33** | **65** |
| **1954** | **41** | **0** | **0** | **48** | **0** | **67** |
| **1955** | **43** | **0** | **0** | **53** | **36** | **70** |
| **1956** | **46** | **0** | **0** | **57** | **0** | **77** |
| **1957** | **49** | **0** | **0** | **60** | **41** | **78** |
| **1958** | **50** | **0** | **0** | **63** | **44** | **78** |
| **1959** | **52** | **74** | **54** | **65** | **46** | **78** |
| **1960** | **53** | **74** | **55** | **68** | **48** | **78** |
| **1961** | **53** | **71** | **56** | **69** | **50** | **78** |
| **1962** | **54** | **71** | **58** | **71** | **51** | **84** |
| **1963** | **55** | **71** | **59** | **72** | **53** | **87** |
| **1964** | **56** | **73** | **60** | **73** | **55** | **87** |
| **1965** | **57** | **74** | **62** | **74** | **58** | **93** |
| **1966** | **56** | **78** | **64** | **75** | **60** | **101** |
| **1967** | **61** | **81** | **67** | **76** | **63** | **101** |
| **1968** | **64** | **81** | **69** | **77** | **66** | **101** |
| **1969** | **69** | **84** | **73** | **80** | **72** | **106** |

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

| Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman |
|---|---|---|---|---|---|
| Line # | Line # | Line # | Line # | Line # | Line # |
| **8** | **9** | **16** | **34** | **39** | **40** |
| **1970** | **75** | **89** | **79** | **84** | **79** | **108** |
| **1971** | **84** | **93** | **89** | **94** | **89** | **108** |
| **1972** | **92** | **96** | **96** | **98** | **96** | **106** |
| **1973** | **100** | **100** | **100** | **100** | **100** | **100** |
| **1974** | **117** | **122** | **118** | **110** | **115** | **93** |
| **1975** | **127** | **155** | **134** | **146** | **123** | **93** |
| **1976** | **130** | **174** | **144** | **154** | **130** | **98** |
| **1977** | **137** | **184** | **152** | **162** | **139** | **101** |
| **1978** | **148** | **192** | **162** | **173** | **145** | **105** |
| **1979** | **163** | **205** | **175** | **185** | **160** | **108** |
| **1980** | **181** | **222** | **191** | **202** | **175** | **122** |
| **1981** | **191** | **245** | **208** | **219** | **184** | **127** |
| **1982** | **198** | **260** | **227** | **231** | **198** | **128** |
| **1983** | **206** | **271** | **242** | **239** | **207** | **141** |
| **1984** | **218** | **277** | **251** | **244** | **215** | **148** |
| **1985** | **225** | **282** | **262** | **254** | **221** | **135** |
| **1986** | **233** | **284** | **269** | **255** | **226** | **135** |
| **1987** | **239** | **299** | **276** | **263** | **230** | **137** |
| **1988** | **251** | **311** | **286** | **280** | **245** | **140** |
| **1989** | **265** | **330** | **301** | **295** | **258** | **150** |
| **1990** | **271** | **349** | **313** | **301** | **262** | **159** |
| **1991** | **274** | **355** | **322** | **307** | **272** | **162** |
| **1992** | **281** | **368** | **332** | **311** | **283** | **196** |
| **1993** | **294** | **386** | **342** | **321** | **292** | **195** |
| **1994** | **308** | **428** | **348** | **327** | **300** | **175** |
| **1995** | **316** | **442** | **357** | **332** | **307** | **200** |
| **1996** | **321** | **450** | **367** | **339** | **321** | **207** |
| **1997** | **331** | **473** | **380** | **347** | **323** | **197** |
| **1998** | **337** | **489** | **391** | **355** | **330** | **197** |

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

| Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman | Handy-Whitman |
|---|---|---|---|---|---|
| Line # | Line # | Line # | Line # | Line # | Line # |
| **8** | **9** | **16** | **34** | **39** | **40** |
| **1999** | **343** | **505** | **401** | **361** | **334** | **198** |
| **2000** | **362** | **530** | **413** | **377** | **348** | **205** |
| **2001** | **378** | **527** | **428** | **391** | **354** | **206** |
| **2002** | **389** | **529** | **443** | **404** | **360** | **207** |
| **2003** | **394** | **543** | **452** | **407** | **368** | **207** |
| **2004** | **421** | **572** | **466** | **432** | **388** | **207** |
| **2005** | **448** | **612** | **486** | **469** | **410** | **214** |
| **2006** | **466** | **624** | **504** | **499** | **454** | **248** |
| **2007** | **496** | **634** | **537** | **530** | **485** | **289** |
| **2008** | **538** | **663** | **586** | **588** | **514** | **373** |
| **2009** | **544** | **691** | **619** | **614** | **537** | **373** |
| **2010** | **560** | **704** | **637** | **624** | **555** | **376** |
| **2011** | **584** | **752** | **654** | **648** | **576** | **379** |
| **2012** | **604** | **788** | **680** | **687** | **598** | **379** |
| **2013** | **614** | **836** | **699** | **701** | **602** | **381** |
| **2014** | **631** | **896** | **725** | **731** | **608** | **386** |
| **2015** | **647** | **945** | **741** | **740** | **618** | **402** |
| **2016** | **661** | **1017** | **761** | **755** | **624** | **403** |
| **2017** | **675** | **1117** | **785** | **777** | **650** | **419** |
| **2018** | **704** | **1210** | **813** | **803** | **668** | **436** |
| **2019** | **716** | **1332** | **847** | **830** | **688** | **447** |
| **2020** | **735** | **1430** | **893** | **858** | **705** | **466** |
| **2021** | **818** | **1490** | **957** | **922** | **743** | **565** |
| **SPOT** | **881** | **1593** | **1012** | **984** | **782** | **803** |

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

| | |
|---|---|
| **2003** | 100.000 |
| **2004** | 105.142 |
| **2005** | 111.458 |
| **2006** | 113.817 |
| **2007** | 116.675 |
| **2008** | 121.225 |
| **2009** | 124.625 |
| **2010** | 125.642 |
| **2011** | 128.900 |
| **2012** | 131.367 |
| **2013** | 132.208 |
| **2014** | 135.617 |
| **2015** | 136.658 |
| **2016** | 137.150 |
| **2017** | 139.367 |
| **2018** | 145.058 |
| **2019** | 151.150 |
| **2020** | 155.075 |
| **2021** | 166.692 |
| **SPOT** | 174.243 |

Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

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**1932**
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Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

**1939**
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**1942**
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**1944**
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**1947**
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**1950**
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**1952**
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**1962**
**1963**
**1964**
**1965**
**1966**
**1967**
**1968**
**1969**

| | Series Id: PCU33411-33411- | Series Id: PCU336110336110 | Series Id: PCU337215337215 | Series Id: PCU333112333112 |
|---|---|---|---|---|
| | Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted | Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted | Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted | Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted |
| | Industry: Computer & peripheral equipment mfg | Industry: Automobile, light truck and utility vehicle mfg | Industry: Showcases, partitions, shelving, and lockers mfg | Industry: Lawn and garden equipment mfg |
| | Product: Computer & peripheral equipment mfg | Product: Automobile, light truck and utility vehicle mfg | Product: Showcases, partitions, shelving, and lockers mfg | Product: Lawn and garden equipment mfg |
| | Base Date: 200612 | Base Date: 198206 | Base Date: 200312 | Base Date: 198212 |
| **1970** | | | | |
| **1971** | | | | |
| **1972** | | | | |
| **1973** | | | | |
| **1974** | | | | |
| **1975** | | **1975** 62.900 | | |
| **1976** | | **1976** 64.025 | | |
| **1977** | | **1977** 68.192 | | |
| **1978** | | **1978** 72.892 | | |
| **1979** | | **1979** 78.667 | | |
| **1980** | | **1980** 85.983 | | |
| **1981** | | **1981** 94.533 | | |
| **1982** | | **1982** 99.567 | | **1982** 100.000 |
| **1983** | | **1983** 102.108 | | **1983** 102.067 |
| **1984** | | **1984** 104.625 | | **1984** 102.408 |
| **1985** | | **1985** 107.208 | | **1985** 103.458 |
| **1986** | | **1986** 111.008 | | **1986** 104.708 |
| **1987** | | **1987** 112.967 | | **1987** 105.625 |
| **1988** | | **1988** 114.117 | | **1988** 108.192 |
| **1989** | | **1989** 117.358 | | **1989** 113.275 |
| **1990** | | **1990** 119.850 | | **1990** 116.592 |
| **1991** | | **1991** 125.292 | | **1991** 118.800 |
| **1992** | | **1992** 129.108 | | **1992** 119.675 |
| **1993** | | **1993** 133.167 | | **1993** 120.600 |
| **1994** | | **1994** 137.950 | | **1994** 122.608 |
| **1995** | **1995** 276.983 | **1995** 139.100 | | **1995** 124.158 |
| **1996** | **1996** 249.050 | **1996** 140.433 | 100.000 | **1996** 125.867 |
| **1997** | **1997** 219.583 | **1997** 138.700 | 100.000 | **1997** 125.983 |
| **1998** | **1998** 191.717 | **1998** 136.842 | 100.000 | **1998** 124.892 |

Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

| | | |
|---|---|---|
| 1999 | 1999 | 172.783 |
| 2000 | 2000 | 162.158 |
| 2001 | 2001 | 153.075 |
| 2002 | 2002 | 139.533 |
| 2003 | 2003 | 123.950 |
| 2004 | 2004 | 115.350 |
| 2005 | 2005 | 107.775 |
| 2006 | 2006 | 102.067 |
| 2007 | 2007 | 94.450 |
| 2008 | 2008 | 86.425 |
| 2009 | 2009 | 81.092 |
| 2010 | 2010 | 76.475 |
| 2011 | 2011 | 73.408 |
| 2012 | 2012 | 70.658 |
| 2013 | 2013 | 67.642 |
| 2014 | 2014 | 66.392 |
| 2015 | 2015 | 63.208 |
| 2016 | 2016 | 59.858 |
| 2017 | 2017 | 58.775 |
| 2018 | 2018 | 58.483 |
| 2019 | 2019 | 56.308 |
| 2020 | 2020 | 54.950 |
| 2021 | 2021 | 55.315 |
| SPOT | SPOT | 56.274 |

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

| | | |
|---|---|---|
| 1999 | 1999 | 137.642 |
| 2000 | 2000 | 138.767 |
| 2001 | 2001 | 137.542 |
| 2002 | 2002 | 134.892 |
| 2003 | 2003 | 135.083 |
| 2004 | 2004 | 136.475 |
| 2005 | 2005 | 135.067 |
| 2006 | 2006 | 130.817 |
| 2007 | 2007 | 131.117 |
| 2008 | 2008 | 132.892 |
| 2009 | 2009 | 136.742 |
| 2010 | 2010 | 136.783 |
| 2011 | 2011 | 137.683 |
| 2012 | 2012 | 141.250 |
| 2013 | 2013 | 142.733 |
| 2014 | 2014 | 145.333 |
| 2015 | 2015 | 148.883 |
| 2016 | 2016 | 150.108 |
| 2017 | 2017 | 152.067 |
| 2018 | 2018 | 153.250 |
| 2019 | 2019 | 153.592 |
| 2020 | 2020 | 153.108 |
| 2021 | 2021 | 157.532 |
| SPOT | SPOT | 159.847 |

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

| | | |
|---|---|---|
| | | 100.000 |
| | | 100.000 |
| | | 100.000 |
| | | 100.000 |
| 2003 | 2003 | 100.000 |
| 2004 | 2004 | 110.708 |
| 2005 | 2005 | 118.792 |
| 2006 | 2006 | 119.442 |
| 2007 | 2007 | 120.875 |
| 2008 | 2008 | 125.950 |
| 2009 | 2009 | 128.725 |
| 2010 | 2010 | 129.350 |
| 2011 | 2011 | 133.467 |
| 2012 | 2012 | 136.242 |
| 2013 | 2013 | 137.158 |
| 2014 | 2014 | 138.667 |
| 2015 | 2015 | 140.100 |
| 2016 | 2016 | 140.425 |
| 2017 | 2017 | 142.400 |
| 2018 | 2018 | 150.242 |
| 2019 | 2019 | 157.433 |
| 2020 | 2020 | 158.917 |
| 2021 | 2021 | 183.701 |
| SPOT | SPOT | 200.445 |

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

| | | |
|---|---|---|
| 1999 | 1999 | 124.517 |
| 2000 | 2000 | 124.642 |
| 2001 | 2001 | 125.167 |
| 2002 | 2002 | 125.925 |
| 2003 | 2003 | 125.883 |
| 2004 | 2004 | 126.575 |
| 2005 | 2005 | 126.617 |
| 2006 | 2006 | 127.625 |
| 2007 | 2007 | 129.558 |
| 2008 | 2008 | 132.750 |
| 2009 | 2009 | 134.583 |
| 2010 | 2010 | 134.158 |
| 2011 | 2011 | 133.217 |
| 2012 | 2012 | 135.425 |
| 2013 | 2013 | 135.525 |
| 2014 | 2014 | 136.225 |
| 2015 | 2015 | 136.342 |
| 2016 | 2016 | 136.267 |
| 2017 | 2017 | 136.742 |
| 2018 | 2018 | 138.500 |
| 2019 | 2019 | 140.458 |
| 2020 | 2020 | 141.825 |
| 2021 | 2021 | 145.765 |
| SPOT | SPOT | 150.494 |

Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

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**1932**
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Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

**1939**
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**1942**
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**1944**
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**1947**
**1948**
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**1950**
1951
**1952**
**1953**
**1954**
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**1960**
**1961**
**1962**
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**1965**
**1966**
**1967**
**1968**
**1969**

| | Series Id: PCU334516334516<br>Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted<br>Industry: Analytical laboratory instrument mfg<br>Product: Analytical laboratory instrument mfg<br>Base Date: 198512 | Series Id: PCU333120333120<br>Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted<br>Industry: Construction machinery mfg<br>Product: Construction machinery mfg<br>Base Date: 198012 | Series Id: PCU334220334220<br>Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted<br>Industry: Broadcast and wireless communications equipment mfg<br>Product: Broadcast and wireless communications equipment mfg<br>Base Date: 199112 | Series Id: PCU33431-33431-<br>Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted<br>Industry: Audio and video equipment mfg<br>Product: Audio and video equipment mfg<br>Base Date: 200312 |
|---|---|---|---|---|
| **1970** | | | | |
| **1971** | | | | |
| **1972** | | | | |
| **1973** | | | | |
| **1974** | | | | |
| **1975** | | | | |
| **1976** | | **1976** 67.800 | | |
| **1977** | | **1977** 70.867 | | |
| **1978** | | **1978** 77.317 | | |
| **1979** | | **1979** 84.833 | | |
| **1980** | | **1980** 95.700 | | |
| **1981** | | **1981** 106.333 | | |
| **1982** | | **1982** 112.133 | | |
| **1983** | | **1983** 114.383 | | |
| **1984** | | **1984** 116.750 | | |
| **1985** | **1985** 100.000 | **1985** 119.450 | | |
| **1986** | **1986** 99.967 | **1986** 120.792 | | |
| **1987** | **1987** 100.800 | **1987** 122.642 | | |
| **1988** | **1988** 103.242 | **1988** 125.767 | | |
| **1989** | **1989** 105.742 | **1989** 132.408 | | |
| **1990** | **1990** 107.650 | **1990** 137.642 | | |
| **1991** | **1991** 108.867 | **1991** 141.983 | **1991** 100.000 | |
| **1992** | **1992** 110.867 | **1992** 146.950 | **1992** 101.583 | |
| **1993** | **1993** 112.192 | **1993** 151.250 | **1993** 102.908 | |
| **1994** | **1994** 113.075 | **1994** 153.767 | **1994** 103.900 | |
| **1995** | **1995** 114.608 | **1995** 157.250 | **1995** 103.517 | |
| **1996** | **1996** 115.867 | **1996** 161.583 | **1996** 104.225 | |
| **1997** | **1997** 117.508 | **1997** 164.392 | **1997** 105.758 | |
| **1998** | **1998** 118.325 | **1998** 167.775 | **1998** 105.525 | |

Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

| | | |
|---|---|---|
| 1999 | 1999 | 116.933 |
| 2000 | 2000 | 119.217 |
| 2001 | 2001 | 121.583 |
| 2002 | 2002 | 124.017 |
| 2003 | 2003 | 126.208 |
| 2004 | 2004 | 128.217 |
| 2005 | 2005 | 129.683 |
| 2006 | 2006 | 132.208 |
| 2007 | 2007 | 133.142 |
| 2008 | 2008 | 136.225 |
| 2009 | 2009 | 137.945 |
| 2010 | 2010 | 138.708 |
| 2011 | 2011 | 139.625 |
| 2012 | 2012 | 140.383 |
| 2013 | 2013 | 142.258 |
| 2014 | 2014 | 144.417 |
| 2015 | 2015 | 147.000 |
| 2016 | 2016 | 149.358 |
| 2017 | 2017 | 153.350 |
| 2018 | 2018 | 155.183 |
| 2019 | 2019 | 159.258 |
| 2020 | 2020 | 161.408 |
| 2021 | 2021 | 164.466 |
| SPOT | SPOT | 165.640 |

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

| | |
|---|---|
| 1999 | 170.833 |
| 2000 | 172.708 |
| 2001 | 173.517 |
| 2002 | 175.942 |
| 2003 | 178.358 |
| 2004 | 183.933 |
| 2005 | 192.367 |
| 2006 | 201.058 |
| 2007 | 206.817 |
| 2008 | 213.375 |
| 2009 | 221.125 |
| 2010 | 220.475 |
| 2011 | 227.800 |
| 2012 | 235.408 |
| 2013 | 239.167 |
| 2014 | 242.375 |
| 2015 | 245.258 |
| 2016 | 247.083 |
| 2017 | 248.408 |
| 2018 | 250.850 |
| 2019 | 262.108 |
| 2020 | 266.758 |
| 2021 | 278.793 |
| SPOT | 292.563 |

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

| | |
|---|---|
| 1999 | 104.125 |
| 2000 | 101.475 |
| 2001 | 101.717 |
| 2002 | 98.258 |
| 2003 | 95.100 |
| 2004 | 93.267 |
| 2005 | 92.617 |
| 2006 | 92.117 |
| 2007 | 92.483 |
| 2008 | 94.083 |
| 2009 | 94.558 |
| 2010 | 94.808 |
| 2011 | 94.408 |
| 2012 | 93.042 |
| 2013 | 92.400 |
| 2014 | 92.817 |
| 2015 | 93.358 |
| 2016 | 92.508 |
| 2017 | 90.367 |
| 2018 | 89.642 |
| 2019 | 89.767 |
| 2020 | 90.317 |
| 2021 | 90.584 |
| SPOT | 91.307 |

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

| | |
|---|---|
| 2003 | 100.000 |
| 2004 | 98.092 |
| 2005 | 95.608 |
| 2006 | 93.683 |
| 2007 | 90.850 |
| 2008 | 89.350 |
| 2009 | 85.467 |
| 2010 | 84.367 |
| 2011 | 84.158 |
| 2012 | 84.308 |
| 2013 | 82.583 |
| 2014 | 82.717 |
| 2015 | 82.892 |
| 2016 | 83.067 |
| 2017 | 83.083 |
| 2018 | 82.733 |
| 2019 | 83.767 |
| 2020 | 85.883 |
| 2021 | 89.366 |
| SPOT | 94.023 |

| OCN | OCNLD | RCN | | RCNLD | |
|---|---|---|---|---|---|
| $8,469 | $6,266 | $25,285 | | $12,248 | |
| $15,115 | $10,338 | $33,537 | | $17,894 | |
| $11,721 | $8,522 | $23,038 | 10% | $15,895 | |
| $7,985 | $5,839 | $20,970 | 20% | $9,677 | 5% |
| $7,614 | $4,750 | $24,910 | 1% | $13,009 | |
| $10,413 | $6,688 | $28,568 | | $16,688 | |
| $4,804 | $3,417 | $27,247 | | $8,305 | 22% |
| $11,339 | $8,418 | $34,491 | | $17,239 | |
| | | | | | |
| $3,958 | $2,409 | $25,249 | | $10,124 | |
| $1,838 | $1,118 | $11,723 | | $4,701 | |

**OFFICE FURNITURE AND EQUIPMENT**

**Series Id:** PCU3372--3372--
**Series Tit** PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted
**Industry:** Office furniture (including fixtures) mfg
**Product:** Office furniture (including fixtures) mfg
**Base Dat** 200312

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2003** | | | | | | | | | | | | 100 |
| **2004** | 99.7 | 101.3 | 101.6 | 102.9 | 105.2 | 105.6 | 105.8 | 107.1 | 107 | 108 | 108.4 | 109.1 |
| **2005** | 109.6 | 110.1 | 109.8 | 110.5 | 111.6 | 111.8 | 112.2 | 111.8 | 112.4 | 113 | 112.2 | 112.5 |
| **2006** | 112.6 | 112.6 | 112.8 | 112.5 | 113.6 | 113.7 | 114.3 | 114.3 | 114.6 | 114.8 | 115.1 | 114.9 |
| **2007** | 116.1 | 116.7 | 116.4 | 116.8 | 116.9 | 116.7 | 116.4 | 116.5 | 116.4 | 116.6 | 117.4 | 117.2 |
| **2008** | 117.5 | 117.7 | 117.6 | 119.3 | 119.3 | 120.6 | 121.8 | 123 | 123.7 | 124.9 | 124.5 | 124.8 |
| **2009** | 125 | 125 | 124.9 | 124.5 | 124.1 | 124.1 | 124.1 | 124.2 | 124.9 | 125 | 125 | 124.7 |
| **2010** | 124.6 | 124.2 | 124.7 | 126 | 125.5 | 126 | 126.4 | 126.1 | 126.1 | 126 | 126.2 | 125.9 |
| **2011** | 126.9 | 127.8 | 128.5 | 128.7 | 128.7 | 128.8 | 129.6 | 129.1 | 129.2 | 129.4 | 129.8 | 130.3 |
| **2012** | 131 | 131.6 | 130.9 | 131.2 | 131.2 | 130.9 | 131.3 | 131.6 | 131.7 | 132.3 | 131.8 | 130.9 |
| **2013** | 131.7 | 130.8 | 130.6 | 131.6 | 132.4 | 132.3 | 132.4 | 132.5 | 133.2 | 133.1 | 133.3 | 132.6 |
| **2014** | 133.6 | 133.6 | 133.9 | 133.9 | 135.6 | 136.3 | 137 | 137.2 | 137.2 | 137.1 | 135.8 | 136.2 |
| **2015** | 136.7 | 136.5 | 136.4 | 136.4 | 136.2 | 136.7 | 136.7 | 136.8 | 137.1 | 136.9 | 136.8 | 136.7 |
| **2016** | 137.3 | 137.1 | 137 | 136.8 | 136.7 | 136.8 | 137 | 138 | 137.6 | 136.8 | 137.2 | 137.5 |
| **2017** | 137.5 | 139 | 138.5 | 138.9 | 139.4 | 138.9 | 139.9 | 140.1 | 140.3 | 139.6 | 139.9 | 140.4 |
| **2018** | 141 | 141.3 | 141.4 | 142.6 | 143.5 | 146 | 145.1 | 146.1 | 147.5 | 148 | 148.5 | 149.7 |
| **2019** | 150.1 | 149.6 | 149.8 | 149.1 | 151.1 | 150.9 | 152.1 | 151.8 | 151.9 | 152.2 | 152.4 | 152.8 |
| **2020** | 152.5 | 153.6 | 155.3 | 155.1 | 155.6 | 154.8 | 156 | 154.7 | 155.9 | 156 | 155.4 | 156 |
| **2021** | 156.5 | 158.9 | 159.7 | 161.7 | 164.4 | 168.6 | 169.426 | 168.977 | 171.921 | 172.699 | 173.241 | 174.243 |
| **2022** | 177.734 | 180.764 | 83.439(P) | 83.342(P) | 84.958(P) | 89.475(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**COMPUTERS**

**Series Id:** PCU33411-33411-
**Series Tit** PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted
**Industry:** Computer & peripheral equipment mfg
**Product:** Computer & peripheral equipment mfg
**Base Dat** 200612

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1995** | 286.5 | 284.5 | 282.9 | 282.2 | 279.9 | 277.8 | 277 | 273.4 | 271.7 | 270.5 | 269.1 | 268.3 |
| **1996** | 265.5 | 260.9 | 258.4 | 253.3 | 252 | 249.8 | 245.8 | 244.9 | 243.7 | 240.5 | 238.2 | 235.6 |
| **1997** | 234.4 | 232 | 230.5 | 228.8 | 221.2 | 218.1 | 216.1 | 213.8 | 212.3 | 210.5 | 209.1 | 208.2 |
| **1998** | 204.4 | 201.3 | 199.1 | 195.2 | 193.5 | 192.5 | 190.9 | 187.5 | 186.8 | 184.7 | 183.6 | 181.1 |
| **1999** | 178.6 | 177.9 | 177.2 | 175.3 | 175.1 | 174.8 | 171.2 | 169.8 | 169.5 | 168.6 | 168.2 | 167.2 |
| **2000** | 165.4 | 165 | 164.3 | 163 | 162.1 | 161.6 | 161.8 | 161 | 160.9 | 160.9 | 160.5 | 159.4 |
| **2001** | 158.4 | 157 | 155.7 | 155.6 | 154.9 | 153.9 | 153.3 | 150.5 | 150.4 | 149.8 | 149 | 148.4 |
| **2002** | 146.4 | 144.7 | 143.8 | 143.2 | 142.8 | 141.6 | 139.2 | 136.9 | 136.1 | 134.7 | 132.9 | 132.1 |
| **2003** | 130.3 | 127.8 | 126.3 | 126.1 | 125 | 124.5 | 123.5 | 122.5 | 122.4 | 120.7 | 119.7 | 118.6 |
| **2004** | 118.2 | 117.8 | 117.4 | 117.2 | 116.8 | 115.7 | 115.5 | 114.7 | 113.9 | 113.6 | 111.7 | 111.7 |
| **2005** | 110.5 | 110.2 | 109.5 | 109.2 | 108.3 | 108 | 107.5 | 107.3 | 106.4 | 105.9 | 105.6 | 104.9 |
| **2006** | 104.7 | 104.2 | 104 | 103.2 | 102.8 | 102.1 | 101.7 | 101.1 | 100.6 | 100.3 | 100.1 | 100 |
| **2007** | 99.2 | 98.7 | 97.9 | 97.5 | 96.2 | 95.1 | 93.9 | 92.3 | 91.7 | 91 | 90.2 | 89.7 |
| **2008** | 88.8 | 88.4 | 87.3 | 86.9 | 86.9 | 86.8 | 86.5 | 86 | 85.5 | 84.9 | 84.6 | 84.5 |
| **2009** | 84.4 | 83.2 | 83 | 82.4 | 82.3 | 81.5 | 81.1 | 81.3 | 79.1 | 79.1 | 78 | 77.7 |
| **2010** | 77.8 | 77.6 | 77.8 | 77.2 | 77 | 76.6 | 76.2 | 76 | 75.6 | 75.4 | 75.4 | 75.1 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2011** | 75 | 74.7 | 74.3 | 74.6 | 74.3 | 74.1 | 72.7 | 72.1 | 72 | 72.1 | 72.4 | 72.6 |
| **2012** | 72.7 | 72.5 | 71.5 | 71.4 | 71.4 | 70.7 | 70.6 | 70.3 | 69.4 | 69.7 | 69 | 68.7 |
| **2013** | 68.6 | 68.6 | 68.5 | 68.3 | 67.8 | 67.3 | 67.4 | 67.1 | 67.3 | 66.9 | 67 | 66.9 |
| **2014** | 66.8 | 66.7 | 66.5 | 66.7 | 66.6 | 66.7 | 66.4 | 66.3 | 66.2 | 66.2 | 65.8 | 65.8 |
| **2015** | 66 | 64.2 | 63.5 | 63.3 | 63.1 | 62.6 | 62.9 | 63 | 62.9 | 62.5 | 62.2 | 62.3 |
| **2016** | 62.4 | 62 | 59.5 | 59.8 | 60 | 60 | 59.5 | 59.2 | 59.2 | 58.8 | 58.9 | 59 |
| **2017** | 58.4 | 58.5 | 58.5 | 59.2 | 59.1 | 59 | 58.9 | 58.7 | 58.9 | 58.8 | 58.7 | 58.6 |
| **2018** | 58.5 | 58.2 | 58.4 | 58.3 | 58.7 | 58.7 | 58.6 | 58.8 | 58.6 | 58.8 | 58.5 | 57.7 |
| **2019** | 57.7 | 57.9 | 57.3 | 57.2 | 56.2 | 55.8 | 55.7 | 55.9 | 54.4 | 55.8 | 55.8 | 56 |
| **2020** | 55.1 | 55.1 | 55 | 55.1 | 55.2 | 54.7 | 55.1 | 55.1 | 54.8 | 54.9 | 54.9 | 54.4 |
| **2021** | 54.7 | 54.9 | 54.5 | 55 | 55.1 | 55.1 | 55.391 | 55.618 | 55.474 | 55.733 | 55.991 | 56.274 |
| **2022** | 57.485 | 57.998 | 58.417(P) | 58.433(P) | 58.812(P) | 58.694(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**TRANSPORTATION EQUIPMENT**

**Series Id:** PCU336110336110
**Series Tit** PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted
**Industry:** Automobile, light truck and utility vehicle mfg
**Product:** Automobile, light truck and utility vehicle mfg
**Base Dat** 198206

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1975** | | | | | | | | | | | | 62.9 |
| **1976** | 63 | 62.9 | 63 | 63.1 | 62.9 | 63 | 63 | 63.3 | 63.4 | 66.9 | 66.9 | 66.9 |
| **1977** | 66.8 | 66.8 | 66.9 | 67.1 | 67.2 | 67.3 | 67.3 | 67.4 | 67.4 | 71.4 | 71.3 | 71.4 |
| **1978** | 71.4 | 71.4 | 71.4 | 71.4 | 72.5 | 72.7 | 72.5 | 72.5 | 72.5 | 75.4 | 75.4 | 75.6 |
| **1979** | 76.7 | 76.9 | 77 | 78.3 | 78.4 | 78.5 | 78.7 | 76.8 | 77 | 81.9 | 81.8 | 82 |
| **1980** | 83.5 | 82.8 | 82.9 | 85.2 | 84.6 | 84.6 | 86.3 | 86.7 | 82.7 | 90.9 | 91 | 90.6 |
| **1981** | 91.4 | 91.6 | 90.7 | 93.3 | 94.1 | 94.5 | 94.6 | 94.4 | 90.2 | 99.7 | 99.8 | 100.1 |
| **1982** | 100.5 | 97.5 | 97.5 | 97.4 | 98.8 | 100 | 100.1 | 100.4 | 94.9 | 102.5 | 102.5 | 102.7 |
| **1983** | 102.2 | 101.8 | 101.4 | 101.6 | 101.7 | 101.8 | 102 | 102.3 | 97.8 | 104.2 | 104.2 | 104.3 |
| **1984** | 104.5 | 104.5 | 104.6 | 104.9 | 104.6 | 104.4 | 104.7 | 104.4 | 101 | 106.1 | 106.3 | 105.5 |
| **1985** | 106.7 | 106.8 | 106.5 | 106.5 | 107 | 107.3 | 107.3 | 107.2 | 100.2 | 110.4 | 110.4 | 110.2 |
| **1986** | 109 | 109.3 | 108.7 | 110.3 | 110 | 110.2 | 110.3 | 109.7 | 105.6 | 116.9 | 116.7 | 115.4 |
| **1987** | 115.3 | 112.6 | 111.9 | 113.7 | 112.9 | 112.5 | 112.4 | 111.4 | 108.4 | 116.5 | 115.2 | 112.8 |
| **1988** | 113 | 113 | 112.5 | 112.6 | 113 | 113.1 | 113.2 | 113.3 | 110.2 | 119.5 | 118.1 | 117.9 |
| **1989** | 117.8 | 118.1 | 116.4 | 115.4 | 116.6 | 116.9 | 114.7 | 114.6 | 113.3 | 122.5 | 121.2 | 120.8 |
| **1990** | 118.4 | 118.5 | 118 | 117.8 | 117.3 | 119 | 119.2 | 118.2 | 117.2 | 125 | 124.8 | 124.8 |
| **1991** | 125.1 | 125.9 | 125.5 | 124.4 | 123.2 | 122.9 | 122.8 | 122.6 | 120.3 | 131 | 130.3 | 129.5 |
| **1992** | 129.2 | 129 | 129.3 | 129.2 | 128.9 | 128.3 | 128.4 | 127.5 | 123.5 | 132.1 | 132.1 | 131.8 |
| **1993** | 132.1 | 132.9 | 133 | 132.9 | 132.6 | 132.8 | 132.9 | 132.6 | 128 | 135.7 | 136.2 | 136.3 |
| **1994** | 137.3 | 137.5 | 137.4 | 137.4 | 138.3 | 138.1 | 138.2 | 138.2 | 133.9 | 140 | 139.3 | 139.8 |
| **1995** | 140.1 | 139.9 | 139.3 | 139.1 | 138.7 | 137.8 | 137.7 | 137.2 | 132.9 | 141.7 | 142.4 | 142.4 |
| **1996** | 141.2 | 141.1 | 141.1 | 140.5 | 140.6 | 140.7 | 139.5 | 139.2 | 135.6 | 142.2 | 141.9 | 141.6 |
| **1997** | 141.7 | 141.5 | 141.2 | 140.3 | 138.4 | 138 | 135.9 | 135.9 | 133.7 | 140.6 | 139.4 | 137.8 |
| **1998** | 137.8 | 138 | 137.8 | 137.2 | 135.4 | 134.3 | 134.8 | 133.9 | 132.7 | 140.6 | 140.4 | 139.2 |
| **1999** | 138.2 | 138.7 | 137.7 | 138 | 137.2 | 136 | 134.7 | 134.4 | 133.4 | 142.1 | 140.8 | 140.5 |
| **2000** | 139.9 | 139.4 | 139 | 138.9 | 138.9 | 137.4 | 136.8 | 135.8 | 135.5 | 141.2 | 141.3 | 141.1 |
| **2001** | 140.3 | 137.7 | 138.1 | 138.9 | 136.9 | 135.9 | 136.5 | 136 | 135.8 | 138.3 | 137.8 | 138.3 |
| **2002** | 136.8 | 137.7 | 136.4 | 136 | 134.9 | 134.4 | 131.3 | 130.3 | 130.4 | 139 | 136.5 | 135 |
| **2003** | 135.7 | 135.8 | 138.5 | 134 | 133.6 | 132 | 131.6 | 132 | 130.5 | 140.7 | 139 | 137.6 |
| **2004** | 137.4 | 136.8 | 137.1 | 135.9 | 136.2 | 136.2 | 132.8 | 132.4 | 131.5 | 142 | 139.9 | 139.5 |
| **2005** | 139.8 | 137.4 | 136.8 | 136.5 | 135.8 | 132.6 | 132.8 | 131.7 | 131.9 | 137.8 | 134.8 | 132.9 |
| **2006** | 133.7 | 133.7 | 133.4 | 132.3 | 132 | 130.6 | 123.7 | 125.7 | 126.5 | 129.4 | 135 | 133.8 |
| **2007** | 132.8 | 132.5 | 131.9 | 130.5 | 130.1 | 129.8 | 129.2 | 128.2 | 126.6 | 134.1 | 134.8 | 132.9 |
| **2008** | 133.6 | 133.5 | 132.1 | 133.1 | 132.2 | 129.5 | 128.2 | 129.1 | 128.7 | 139.4 | 137.7 | 137.6 |
| **2009** | 137 | 136.8 | 136 | 136.7 | 136.1 | 137.9 | 134.6 | 136.1 | 133.8 | 138.3 | 139.5 | 138.1 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2010** | 139.3 | 139 | 137.8 | 137.2 | 137.3 | 135.4 | 134.8 | 135 | 134.5 | 137.7 | 137 | 136.4 |
| **2011** | 137 | 137 | 136.7 | 137.4 | 136.7 | 136.9 | 136.7 | 136.5 | 135.7 | 140.6 | 140.7 | 140.3 |
| **2012** | 141 | 140.4 | 140.3 | 140.6 | 139.7 | 140.1 | 140.9 | 140.8 | 139.6 | 143.9 | 144.1 | 143.6 |
| **2013** | 143.4 | 143.3 | 142.6 | 142.4 | 141.7 | 141.3 | 140.7 | 140.4 | 140.2 | 144.8 | 145.6 | 146.4 |
| **2014** | 146.8 | 146.6 | 145.5 | 145.2 | 144.4 | 143.8 | 143.6 | 143.4 | 142.6 | 148 | 147.8 | 146.3 |
| **2015** | 147.8 | 149.4 | 149.2 | 148.7 | 148.5 | 148.1 | 148.5 | 147.4 | 147.2 | 150.7 | 150.6 | 150.5 |
| **2016** | 149.9 | 150.2 | 149.8 | 149.6 | 149.7 | 149.8 | 148.5 | 147.7 | 147.6 | 152.7 | 152.4 | 153.4 |
| **2017** | 152.6 | 152.3 | 152.9 | 152.8 | 151.2 | 151.2 | 150.1 | 149.8 | 149.8 | 153.5 | 154.3 | 154.3 |
| **2018** | 153.3 | 152.9 | 152.9 | 152.5 | 152.5 | 152.7 | 152.2 | 152.1 | 152.4 | 155.3 | 155.2 | 155 |
| **2019** | 154.8 | 154.5 | 153.7 | 153.4 | 153.2 | 153 | 152.6 | 152 | 151.7 | 154.6 | 155.1 | 154.5 |
| **2020** | 152.9 | 153.6 | 152 | 153 | 152.4 | 152 | 152.1 | 152.3 | 152.3 | 154.3 | 154.9 | 155.5 |
| **2021** | 156 | 155.8 | 155.4 | 155.7 | 156.7 | 157.5 | 157.86 | 158.19 | 158.147 | 159.507 | 159.73 | 159.847 |
| **2022** | 160.201 | 161.186 | 61.190(P) | 62.809(P) | 63.481(P) | 64.069(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**STORES EQUIPMENT**

**Series Id:** PCU337215337215
**Series Tit** PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted
**Industry:** Showcases, partitions, shelving, and lockers mfg
**Product:** Showcases, partitions, shelving, and lockers mfg
**Base Dat** 200312

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2003** | | | | | | | | | | | | 100 |
| **2004** | 100.2 | 103.4 | 104 | 106.5 | 112.3 | 112.6 | 113.2 | 113.5 | 113.5 | 115.6 | 116.5 | 117.2 |
| **2005** | 117.8 | 117.7 | 118 | 117.9 | 119.1 | 119.1 | 119.1 | 119.1 | 119.2 | 119.6 | 119.4 | 119.5 |
| **2006** | 119.2 | 119.2 | 119.1 | 119.1 | 119.1 | 119.1 | 119.3 | 119.3 | 119.6 | 119.7 | 120.2 | 120.4 |
| **2007** | 121.2 | 120.9 | 121.1 | 121.1 | 121 | 121 | 121 | 120.8 | 120.8 | 120.6 | 120.6 | 120.4 |
| **2008** | 120.9 | 120.9 | 121.2 | 122.5 | 123.1 | 124.9 | 127.3 | 129 | 129.9 | 130.4 | 130.6 | 130.7 |
| **2009** | 129.7 | 129.8 | 129.8 | 129 | 128.7 | 128.3 | 128.3 | 128.5 | 128.3 | 128.3 | 128.3 | 127.7 |
| **2010** | 127.7 | 127.8 | 128.3 | 129.2 | 129.5 | 129.8 | 130 | 129.9 | 129.9 | 130.3 | 129.4 | 130.4 |
| **2011** | 130.3 | 132 | 133.2 | 133.9 | 133.8 | 133.5 | 134 | 134 | 133.8 | 134.4 | 134.2 | 134.5 |
| **2012** | 135.9 | 136.3 | 136.4 | 136.6 | 135.9 | 135.9 | 136.2 | 136.3 | 136.2 | 136.4 | 136.5 | 136.3 |
| **2013** | 136.4 | 137.1 | 137.2 | 137.1 | 137.1 | 137.1 | 137.1 | 137 | 137 | 137.6 | 137.6 | 137.6 |
| **2014** | 137.6 | 137.6 | 137.7 | 137.8 | 138.3 | 138.3 | 139.7 | 140.1 | 139.4 | 139 | 139 | 139.5 |
| **2015** | 140.1 | 139.8 | 140.2 | 140.3 | 139.7 | 139.6 | 140.3 | 139.9 | 140.5 | 140.6 | 140.2 | 140 |
| **2016** | 140.5 | 140.6 | 138.9 | 139.7 | 140 | 139.3 | 139.9 | 142.2 | 141 | 140.2 | 140.9 | 141.9 |
| **2017** | 142.1 | 144.1 | 143.3 | 142.3 | 142.1 | 141 | 142.6 | 142.6 | 142.7 | 142 | 141.4 | 142.6 |
| **2018** | 142.3 | 142.9 | 143.1 | 145.9 | 150.2 | 150.6 | 150.8 | 152.9 | 155.6 | 155.5 | 156.3 | 156.8 |
| **2019** | 159.5 | 155.5 | 157.8 | 157.1 | 157.6 | 156.2 | 156.7 | 155.8 | 156.2 | 158.3 | 159.3 | 159.2 |
| **2020** | 158.4 | 159.8 | 158.6 | 158.7 | 159.5 | 159 | 158.6 | 156.7 | 159.4 | 159.5 | 158.4 | 160.4 |
| **2021** | 162.4 | 167.2 | 167.1 | 173.4 | 176.6 | 186.9 | 190.22 | 188.835 | 195.561 | 198.508 | 197.241 | 200.445 |
| **2022** | 200.101 | 205.213 | 06.612(P) | 11.514(P) | 09.913(P) | 12.293(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**TOOLS, SHOP AND GARAGE EQUIPMENT**

**Series Id:** PCU333112333112
**Series Tit** PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted
**Industry:** Lawn and garden equipment mfg
**Product:** Lawn and garden equipment mfg
**Base Dat** 198212

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1982 | | | | | | | | | | | | 100 |
| 1983 | 101.4 | 101.5 | 102.2 | 102.5 | 102.6 | 102.7 | 101.9 | 101 | 102.3 | 102.6 | 103 | 101.1 |
| 1984 | 101.3 | 101.6 | 101.7 | 102.1 | 102.6 | 102.4 | 102.5 | 103.3 | 102.6 | 102.8 | 103 | 103 |
| 1985 | 103.2 | 103 | 103.1 | 103.4 | 103.5 | 103.7 | 103.8 | 103.7 | 103.3 | 103.5 | 103.7 | 103.6 |
| 1986 | 104.1 | 104.2 | 104.2 | 104.8 | 104.9 | 105.1 | 105.5 | 105.5 | 104.5 | 104.6 | 104.6 | 104.5 |
| 1987 | 104.5 | 104.6 | 104.8 | 105.4 | 105.5 | 105.8 | 106.1 | 106.2 | 105.9 | 105.7 | 106.5 | 106.5 |
| 1988 | 106.8 | 106.6 | 106.8 | 106.8 | 106.9 | 107 | 106.9 | 108.7 | 109.6 | 110.4 | 110.6 | 111.2 |
| 1989 | 111.4 | 111.4 | 111.8 | 111.8 | 112.1 | 112.6 | 112.6 | 114.3 | 115 | 115.3 | 115.5 | 115.5 |
| 1990 | 115.7 | 115.7 | 115.9 | 116 | 116 | 116 | 116.2 | 117.1 | 117.4 | 117.8 | 117.6 | 117.7 |
| 1991 | 118.2 | 118.2 | 118.4 | 118.6 | 119.1 | 118.7 | 118.8 | 119 | 119 | 119.2 | 119.2 | 119.2 |
| 1992 | 119.3 | 119.3 | 119.7 | 119.7 | 119.7 | 119.5 | 119.3 | 119.8 | 120.5 | 119.7 | 119.8 | 119.8 |
| 1993 | 120.1 | 120.1 | 120.1 | 120.2 | 120.2 | 120.1 | 120 | 120.8 | 121.3 | 121.2 | 121.4 | 121.7 |
| 1994 | 121.6 | 122 | 122.1 | 122.1 | 122.5 | 122.5 | 122.5 | 122.8 | 123.1 | 123.3 | 123.3 | 123.5 |
| 1995 | 123.6 | 123.6 | 123.6 | 123.8 | 123.8 | 123.8 | 124 | 124 | 124.3 | 124.6 | 125.4 | 125.4 |
| 1996 | 125.7 | 125.8 | 126 | 125.5 | 125.7 | 125.7 | 125.8 | 125.8 | 125.9 | 125.9 | 125.9 | 126.7 |
| 1997 | 127.5 | 127.3 | 126.3 | 126.3 | 126.3 | 126.3 | 125.8 | 126.1 | 124.9 | 124.9 | 125 | 125.1 |
| 1998 | 125.1 | 125.2 | 125.4 | 125.5 | 125.5 | 125.5 | 124 | 124.2 | 124.5 | 124.6 | 124.6 | 124.6 |
| 1999 | 124.7 | 124.7 | 124.7 | 124.7 | 124.6 | 124.3 | 124.3 | 124.4 | 124.5 | 124.4 | 124.4 | 124.5 |
| 2000 | 124.7 | 124.7 | 124.7 | 124.5 | 124.2 | 124.2 | 124.3 | 124.3 | 125 | 125.1 | 125 | 125 |
| 2001 | 125.3 | 125.3 | 125.2 | 125 | 125.1 | 125.1 | 125 | 125.2 | 125.1 | 125.1 | 125.2 | 125.4 |
| 2002 | 126 | 125.6 | 125.9 | 126 | 126 | 126 | 125.9 | 125.9 | 125.9 | 125.9 | 126 | 126 |
| 2003 | 126 | 125.9 | 125.9 | 125.9 | 125.9 | 126 | 126.3 | 125.2 | 125.2 | 125.7 | 126.3 | 126.3 |
| 2004 | 126.2 | 126.1 | 126.4 | 126.3 | 126.3 | 126.6 | 126.7 | 126.9 | 127 | 126.6 | 127.1 | 126.7 |
| 2005 | 126.7 | 126.9 | 126.9 | 126.7 | 127 | 126.3 | 126.3 | 126.4 | 126.5 | 126.7 | 126.5 | 126.5 |
| 2006 | 126.8 | 126.9 | 127.1 | 127.2 | 127.2 | 127.2 | 127.9 | 128 | 127.9 | 128.4 | 128.4 | 128.5 |
| 2007 | 129.5 | 129.1 | 129.1 | 129.1 | 129.1 | 128.8 | 128.8 | 128.8 | 129.2 | 130 | 131.6 | 131.6 |
| 2008 | 132.2 | 132.2 | 132.2 | 132 | 132 | 132.1 | 132.8 | 132.6 | 132.8 | 132.9 | 134.5 | 134.7 |
| 2009 | 134.6 | 134.7 | 135.2 | 135.2 | 134.5 | 134.4 | 134.5 | 134.4 | 134.4 | 134.5 | 134.3 | 134.3 |
| 2010 | 134.6 | 134.5 | 134.5 | 134.4 | 134.4 | 134.3 | 134.4 | 134.4 | 133.8 | 134.2 | 134.2 | 132.2 |
| 2011 | 132.2 | 132.3 | 132.3 | 132.4 | 132.9 | 133.4 | 133.4 | 133.4 | 133.5 | 134.2 | 134.3 | 134.3 |
| 2012 | 136.3 | 136.3 | 136.3 | 134.6 | 134.9 | 135 | 135.1 | 135.2 | 135.2 | 135.4 | 135.4 | 135.4 |
| 2013 | 135.3 | 135.3 | 135.3 | 135.3 | 135.2 | 135.2 | 135 | 135.1 | 136.2 | 136.2 | 136.2 | 136 |
| 2014 | 135.9 | 136 | 136.5 | 136.3 | 136.3 | 136.3 | 136.2 | 136.2 | 136.2 | 136.3 | 136.3 | 136.2 |
| 2015 | 136.4 | 136.4 | 136.4 | 136.3 | 136.3 | 136.3 | 136.3 | 136.3 | 136.3 | 136.3 | 136.4 | 136.4 |
| 2016 | 136.3 | 135.5 | 135.5 | 135.7 | 135.8 | 136.6 | 136.6 | 136.6 | 136.6 | 136.6 | 136.7 | 136.7 |
| 2017 | 136.7 | 136.7 | 136.7 | 136.7 | 136.7 | 136.7 | 136.7 | 136.7 | 136.7 | 136.8 | 136.9 | 136.9 |
| 2018 | 137.8 | 137.8 | 137.8 | 137.8 | 137.9 | 137.9 | 138.1 | 138.4 | 138.6 | 139.4 | 140.2 | 140.3 |
| 2019 | 140.2 | 140.1 | 140.1 | 140.1 | 140.6 | 140.5 | 140.2 | 140.2 | 140.2 | 140.8 | 141 | 141.5 |
| 2020 | 141.5 | 141.5 | 141.4 | 141.5 | 141.5 | 141.6 | 141.6 | 141.9 | 142 | 142.2 | 142.6 | 142.6 |
| 2021 | 142.7 | 142.9 | 143.1 | 143.4 | 144.3 | 144.8 | 146.118 | 146.802 | 147.146 | 148.367 | 149.056 | 150.494 |
| 2022 | 151.29 | 153.818 | 53.998(P) | 57.201(P) | 59.556(P) | 61.500(P) | | | | | | |

P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.

**LABORATORY EQUIPMENT**

**Series Id:** PCU334516334516
**Series Tit** PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted
**Industry:** Analytical laboratory instrument mfg
**Product:** Analytical laboratory instrument mfg
**Base Dat** 198512

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | | | | | | | | | | | | 100 |
| 1986 | 100.1 | 99.8 | 99.5 | 99.4 | 99.5 | 99.7 | 99.9 | 100 | 100.3 | 100.3 | 100.5 | 100.6 |
| 1987 | 101.2 | 101.3 | 101.3 | 101.3 | 101.4 | 99.7 | 99.9 | 99.9 | 100.7 | 100.8 | 100.7 | 101.4 |
| 1988 | 102 | 103.1 | 104.6 | 102.9 | 103 | 103 | 103.2 | 103.4 | 103.5 | 103.2 | 103.4 | 103.6 |
| 1989 | 104.8 | 105.1 | 105.1 | 105.5 | 105.3 | 105.6 | 106 | 106.1 | 105.9 | 106 | 106 | 107.5 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1990** | 108.6 | 107.9 | 108.6 | 108.8 | 109.1 | 107.6 | 107.5 | 106.6 | 106.5 | 106.5 | 106.9 | 107.2 |
| **1991** | 108.9 | 108.9 | 108.9 | 109 | 109 | 109.1 | 108.8 | 108.9 | 108.7 | 108.5 | 108.7 | 109 |
| **1992** | 109.9 | 109.1 | 110 | 109.7 | 110.1 | 110.7 | 111.6 | 111.5 | 111.9 | 111.9 | 112.2 | 111.8 |
| **1993** | 112.2 | 112.5 | 112.1 | 112.2 | 112.1 | 112 | 112.1 | 112.1 | 112 | 112.3 | 112.4 | 112.3 |
| **1994** | 112.8 | 112.6 | 112.7 | 112.8 | 113 | 113.2 | 112.8 | 113.1 | 113.3 | 113.5 | 113.5 | 113.6 |
| **1995** | 113.5 | 113.8 | 114.1 | 114.3 | 114.3 | 114.6 | 115.2 | 115 | 115 | 115.4 | 115.4 | 114.7 |
| **1996** | 115.4 | 115.9 | 115.5 | 115.3 | 115.4 | 115.8 | 115.9 | 116 | 115.8 | 116.4 | 116.5 | 116.5 |
| **1997** | 116.5 | 117.1 | 117.3 | 117.1 | 117.6 | 117.4 | 117.4 | 118.1 | 118.2 | 117.8 | 117.8 | 117.8 |
| **1998** | 118.6 | 118.5 | 118.5 | 118.5 | 118.5 | 118.3 | 118.3 | 118.4 | 118.3 | 118.2 | 117.9 | 117.9 |
| **1999** | 118.7 | 118.6 | 117 | 116.5 | 116.4 | 116.3 | 116.3 | 116.3 | 116.3 | 116.8 | 116.8 | 117.2 |
| **2000** | 118.4 | 118.5 | 118.6 | 118.8 | 118.7 | 118.6 | 118.7 | 118.7 | 120.4 | 120.4 | 120.4 | 120.4 |
| **2001** | 120.5 | 121.1 | 121.3 | 121.3 | 121.3 | 121.7 | 121.7 | 121.7 | 121.7 | 121.8 | 122.4 | 122.5 |
| **2002** | 123.6 | 123.6 | 123.6 | 123.8 | 124.1 | 124.2 | 124.1 | 124.1 | 124.1 | 123.8 | 124.6 | 124.6 |
| **2003** | 125.7 | 125.8 | 125.8 | 126.2 | 126.2 | 126.3 | 126.4 | 126.4 | 126.4 | 126.4 | 126.4 | 126.5 |
| **2004** | 127.7 | 127.9 | 127.9 | 127.9 | 128 | 128.2 | 128.2 | 128.3 | 128.6 | 128.6 | 128.6 | 128.7 |
| **2005** | 129.3 | 129.5 | 129.4 | 129.5 | 129.3 | 129.3 | 129.6 | 129.6 | 129.6 | 130.3 | 130.4 | 130.4 |
| **2006** | 131.4 | 132.1 | 132.1 | 132 | 132.1 | 132.3 | 132.3 | 132.3 | 132.4 | 132.5 | 132.5 | 132.5 |
| **2007** | 133.2 | 132.5 | 132.4 | 132.4 | 132.9 | 132.9 | 133 | 133 | 133.4 | 134 | 134 | 134 |
| **2008** | 135.2 | 135.3 | 135.5 | 135.7 | 135.6 | 135.8 | 135.8 | 136.1 | 137.3 | 137.4 | 137.5 | 137.5 |
| **2009** | 137.5 | 137.6 | 137.9 | 138.2 | 138.2 | 138 | 138 | 138 | 137.7 | 138 | 138.3 | |
| **2010** | 138.6 | 138.6 | 138.6 | 138.6 | 138.7 | 138.7 | 138.6 | 138.6 | 138.7 | 138.8 | 139 | 139 |
| **2011** | 139.2 | 139.4 | 139.3 | 139.4 | 139.4 | 139.8 | 139.8 | 139.8 | 139.8 | 139.9 | 139.8 | 139.9 |
| **2012** | 140.2 | 140.3 | 140.3 | 140.3 | 140.3 | 140.3 | 140.3 | 140.4 | 140.4 | 140.4 | 140.4 | 141 |
| **2013** | 141.8 | 142.1 | 142.1 | 142.1 | 142.1 | 142.2 | 142.3 | 142.5 | 142.5 | 142.5 | 142.4 | 142.5 |
| **2014** | 143.3 | 143.4 | 144 | 144.2 | 144.2 | 144.3 | 144.5 | 144.7 | 144.7 | 145.2 | 145.2 | 145.3 |
| **2015** | 146.7 | 146.7 | 146.7 | 146.7 | 147 | 147 | 147 | 147 | 146.7 | 147.5 | 147.5 | 147.5 |
| **2016** | 148.6 | 149.2 | 149.1 | 149.4 | 149.4 | 149.4 | 149.5 | 149.5 | 149.5 | 149.5 | 149.5 | 149.7 |
| **2017** | 152.4 | 153 | 153.5 | 153.5 | 153.5 | 153.5 | 153.1 | 153.3 | 153.3 | 153.7 | 153.7 | 153.7 |
| **2018** | 155.1 | 155.1 | 155 | 155.2 | 155.2 | 155.4 | 155.2 | 155.2 | 155.2 | 155.2 | 155.2 | 155.2 |
| **2019** | 158.8 | 158.8 | 159.3 | 159.3 | 159.3 | 159.3 | 159.3 | 159.4 | 159.4 | 159.4 | 159.4 | 159.4 |
| **2020** | 161.3 | 161.3 | 161.3 | 161.3 | 161.4 | 161.4 | 161.4 | 161.5 | 161.5 | 161.5 | 161.5 | 161.5 |
| **2021** | 163.9 | 163.9 | 163.9 | 163.8 | 163.8 | 163.8 | 164.504 | 164.504 | 164.504 | 165.572 | 165.766 | 165.64 |
| **2022** | 168.224 | 172.306 | 72.102(P) | 75.349(P) | 76.471(P) | 77.025(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**POWER OPERATED EQUIPMENT**

**Series Id** PCU333120333120
**Series Title** PPI industry data for Construction machinery mfg, not seasonally adjusted
**Industry** Construction machinery mfg
**Product** Construction machinery mfg
**Base Date** 198012

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1976** | | | | | | | | | | | | 67.8 |
| **1977** | 68.6 | 69 | 69.1 | 69.7 | 70.2 | 70.4 | 71 | 71.4 | 71.4 | 72.2 | 73.4 | 74 |
| **1978** | 74.2 | 74.7 | 75 | 75.9 | 76.5 | 76.7 | 77.3 | 77.9 | 78.7 | 79.7 | 80.4 | 80.8 |
| **1979** | 81.4 | 82.1 | 82.5 | 83.4 | 84 | 84.1 | 85.1 | 85.6 | 85.8 | 87.4 | 87.8 | 88.8 |
| **1980** | 91.3 | 92 | 92.4 | 94 | 94.6 | 95.2 | 96.2 | 96.8 | 97.5 | 99 | 99.4 | 100 |
| **1981** | 101.7 | 102.7 | 103.5 | 104.7 | 105.3 | 106.4 | 107.9 | 108.2 | 108.5 | 109.2 | 109.6 | 108.3 |
| **1982** | 110.2 | 110.1 | 110.7 | 111.4 | 112.1 | 112.2 | 112.9 | 113 | 113.1 | 113.2 | 113.3 | 113.4 |
| **1983** | 113.5 | 113.5 | 114.2 | 114.3 | 114 | 114.1 | 114.2 | 114.8 | 115 | 115 | 115 | 115 |
| **1984** | 115.7 | 116 | 115.7 | 116.3 | 116.9 | 117 | 117.3 | 117.1 | 117.2 | 117.2 | 117.3 | 117.3 |
| **1985** | 118.9 | 119.1 | 118.8 | 118.8 | 118.8 | 119.7 | 119.8 | 119.8 | 119.9 | 120 | 120.1 | 119.7 |
| **1986** | 120.3 | 120.4 | 120.4 | 120.6 | 120.7 | 120.8 | 120.8 | 120.8 | 120.8 | 120.8 | 121.5 | 121.6 |
| **1987** | 122.2 | 122.3 | 122.8 | 121.7 | 122.6 | 122.6 | 122.7 | 122.8 | 122.9 | 122.9 | 123 | 123.2 |
| **1988** | 124.3 | 124.7 | 124.7 | 124.8 | 125 | 125.1 | 126 | 126.4 | 126.4 | 126.4 | 127.6 | 127.8 |
| **1989** | 129.9 | 130.1 | 130.5 | 130.8 | 131 | 132.4 | 133.1 | 134 | 134 | 134.2 | 134.4 | 134.5 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1990** | 135.5 | 136.2 | 136.3 | 136.3 | 136.5 | 137.2 | 138.4 | 138.9 | 138.8 | 138.9 | 139.2 | 139.5 |
| **1991** | 140 | 140.6 | 140.7 | 140.7 | 140.8 | 141.8 | 142.8 | 142.8 | 142.9 | 143.1 | 143.7 | 143.9 |
| **1992** | 144.2 | 144.8 | 145 | 145.7 | 145.9 | 146.8 | 148 | 148.1 | 148.3 | 148.4 | 148.8 | 149.4 |
| **1993** | 150.6 | 151.4 | 151.5 | 151.1 | 151.3 | 151.2 | 151.3 | 151.3 | 151 | 151.3 | 151.4 | 151.6 |
| **1994** | 153.2 | 153.3 | 153.4 | 153.6 | 153.5 | 153.4 | 153.6 | 153.6 | 153.9 | 154.3 | 154.6 | 154.8 |
| **1995** | 156 | 156.4 | 156.5 | 156.7 | 157.1 | 157.3 | 157.1 | 157.1 | 157.6 | 157.9 | 158.1 | 159.2 |
| **1996** | 160.3 | 160.9 | 160.9 | 161.1 | 161.3 | 161.5 | 161.8 | 161.9 | 162 | 162.3 | 162.5 | 162.5 |
| **1997** | 164.1 | 164.1 | 164 | 164.2 | 164.2 | 163.9 | 164 | 164.3 | 164.3 | 164.8 | 165.4 | 165.4 |
| **1998** | 167.2 | 167.3 | 167.4 | 167.5 | 167.8 | 167.8 | 167.8 | 168 | 168 | 168 | 168 | 168.5 |
| **1999** | 169.5 | 170 | 170 | 170.8 | 171 | 171 | 171 | 171.1 | 171.1 | 171.4 | 171.6 | 171.5 |
| **2000** | 172.3 | 172.3 | 172.4 | 172.7 | 172.6 | 172.6 | 172.8 | 172.8 | 173 | 173 | 173 | 173 |
| **2001** | 173.1 | 172.9 | 173 | 173.6 | 173.5 | 173.5 | 173.5 | 173.6 | 173.5 | 174.1 | 174.2 | 173.7 |
| **2002** | 174.2 | 174.2 | 176.2 | 176.4 | 176.3 | 176.1 | 176.1 | 176.1 | 176.3 | 176.3 | 176.5 | 176.6 |
| **2003** | 177.7 | 177.9 | 177.9 | 178.4 | 178.6 | 178.7 | 178.4 | 178.5 | 178.4 | 178.5 | 178.6 | 178.7 |
| **2004** | 180 | 181.1 | 181.4 | 182.6 | 182.6 | 183.1 | 185.3 | 186 | 186.2 | 186.5 | 186.2 | 186.2 |
| **2005** | 188.6 | 188.3 | 189.2 | 189.7 | 193.2 | 193.4 | 193.9 | 194.5 | 194.1 | 194.2 | 194.5 | 194.8 |
| **2006** | 197.8 | 199.1 | 199.9 | 199.8 | 200.3 | 201.3 | 201.3 | 201.3 | 202.3 | 202.6 | 203.5 | 203.5 |
| **2007** | 205.2 | 205.8 | 205.7 | 206.3 | 206.3 | 206.8 | 207.2 | 207.3 | 207.2 | 207.8 | 208 | 208.2 |
| **2008** | 209.5 | 210.2 | 210.9 | 211.3 | 211.7 | 212.6 | 213.9 | 214.3 | 215 | 215.5 | 218 | 217.6 |
| **2009** | 220.7 | 220.5 | 221.8 | 221.2 | 221.7 | 221.7 | 221.6 | 220.9 | 220.3 | 220.2 | 221.2 | 221.7 |
| **2010** | 221.4 | 221.1 | 221.1 | 221.7 | 220.9 | 218.5 | 218.4 | 219.8 | 220.8 | 220.4 | 220.1 | 221.5 |
| **2011** | 222.8 | 224.4 | 225.6 | 225.2 | 226.2 | 227.4 | 228.3 | 228.8 | 230.2 | 230.7 | 231.6 | 232.4 |
| **2012** | 234.1 | 235.7 | 234.4 | 234.8 | 234.6 | 234.8 | 235.3 | 235.3 | 234.7 | 235.9 | 237.4 | 237.9 |
| **2013** | 239.1 | 239.3 | 237.9 | 238.6 | 238.6 | 238.9 | 239.6 | 239.3 | 239.4 | 239.8 | 239.2 | 240.3 |
| **2014** | 242.1 | 242.1 | 241.9 | 242.7 | 242.6 | 242.7 | 242.4 | 242.5 | 242.1 | 242.2 | 242.6 | 242.6 |
| **2015** | 245.1 | 245.1 | 245 | 245.2 | 245.2 | 245.2 | 245.2 | 245.3 | 245.4 | 245.4 | 245.5 | 245.5 |
| **2016** | 246.9 | 247 | 246.7 | 246.8 | 247.1 | 247.2 | 247.3 | 247.3 | 247.2 | 247.3 | 247.1 | 247.1 |
| **2017** | 247.8 | 247.5 | 247.9 | 247.5 | 248.3 | 248.3 | 248.6 | 248.7 | 248.8 | 248.8 | 249.3 | 249.4 |
| **2018** | 245.1 | 245.4 | 245.7 | 245.9 | 246.2 | 246.7 | 247.9 | 256.6 | 257.5 | 257.5 | 257.8 | 257.9 |
| **2019** | 260.6 | 261 | 261 | 261.2 | 261.6 | 261.7 | 261.8 | 261.9 | 263.2 | 263.1 | 263.9 | 264.3 |
| **2020** | 266.2 | 266.6 | 266.6 | 266.8 | 266.8 | 266.8 | 266.7 | 266.7 | 266.7 | 266.9 | 266.9 | 267.4 |
| **2021** | 271.3 | 271.9 | 272.2 | 272.4 | 273.6 | 277 | 277.356 | 278.263 | 279.552 | 289.054 | 290.326 | 292.563 |
| **2022** | 293.518 | 293.693 | 94.221(P) | 02.832(P) | 04.699(P) | 05.271(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**COMMUNICATION EQUIPMENT**

**Series Id:** PCU334220334220
**Series Tit** PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted
**Industry:** Broadcast and wireless communications equipment mfg
**Product:** Broadcast and wireless communications equipment mfg
**Base Dat** 199112

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1991** | | | | | | | | | | | | 100 |
| **1992** | 100.9 | 101.3 | 101.6 | 101.5 | 101.5 | 101.5 | 101.3 | 101.5 | 101.7 | 101.9 | 102.1 | 102.2 |
| **1993** | 103.1 | 103.2 | 103.2 | 102.6 | 102.6 | 102.7 | 102.6 | 102.6 | 102.4 | 103.4 | 103.3 | 103.2 |
| **1994** | 103.4 | 103.6 | 104 | 104.1 | 104.1 | 104.1 | 104.1 | 104 | 104 | 103.9 | 103.7 | 103.8 |
| **1995** | 104 | 103.6 | 103.7 | 104.1 | 104 | 103.2 | 103.2 | 103.3 | 103.4 | 103.3 | 103.2 | 103.2 |
| **1996** | 104 | 103.9 | 104.1 | 104.2 | 104.1 | 104.1 | 103.9 | 104 | 104.1 | 104.3 | 105 | 105 |
| **1997** | 105.3 | 105.4 | 105.3 | 105.6 | 105.6 | 105.9 | 105.9 | 105.9 | 106.2 | 106.2 | 105.9 | 105.9 |
| **1998** | 106.2 | 106.4 | 106 | 105.3 | 105.2 | 105.2 | 105.5 | 105.3 | 105.3 | 105.3 | 105.3 | 105.3 |
| **1999** | 106 | 104.7 | 104.7 | 104.8 | 104.8 | 104.8 | 104.8 | 104.8 | 102.2 | 102.5 | 102.7 | 102.7 |
| **2000** | 103 | 102.1 | 101.7 | 101.8 | 101.1 | 101.2 | 101.2 | 101.2 | 101.1 | 101.1 | 101.1 | 101.1 |
| **2001** | 101.5 | 101.4 | 101.4 | 101.5 | 101.8 | 101.8 | 101.8 | 101.8 | 101.9 | 101.9 | 101.9 | 101.9 |
| **2002** | 101.6 | 100.3 | 100.4 | 98.8 | 98.7 | 98.4 | 96.6 | 96.9 | 97 | 97 | 97 | 96.4 |
| **2003** | 96.5 | 96.5 | 96.5 | 96.2 | 95.5 | 95.5 | 94.5 | 94.2 | 94.2 | 93.9 | 93.9 | 93.8 |
| **2004** | 93.4 | 93.4 | 93.5 | 93.5 | 93.7 | 93.8 | 93.5 | 93.2 | 92.8 | 92.7 | 92.9 | 92.8 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2005** | 93 | 92.9 | 92.5 | 92.5 | 92.4 | 91.9 | 92.1 | 92.7 | 92.7 | 92.7 | 93 | 93 |
| **2006** | 92.7 | 92.2 | 91.7 | 91.7 | 91.7 | 91.9 | 91.9 | 92.3 | 92.4 | 92.3 | 92.3 | 92.3 |
| **2007** | 92.3 | 92.4 | 92.4 | 92.6 | 93.1 | 92.5 | 92.3 | 92.3 | 92.3 | 92.5 | 92.5 | 92.6 |
| **2008** | 93.1 | 93.6 | 93.4 | 93.6 | 94.2 | 94.2 | 94.5 | 94.5 | 94.2 | 94.3 | 94.7 | 94.7 |
| **2009** | 94.5 | 94.2 | 94.2 | 94.4 | 94.5 | 94.6 | 94.7 | 94.7 | 94.6 | 94.7 | 94.8 | 94.8 |
| **2010** | 94.8 | 94.8 | 94.7 | 94.5 | 94.5 | 94.4 | 95 | 95 | 94.9 | 94.9 | 95.1 | 95.1 |
| **2011** | 94.9 | 94.9 | 95 | 94.7 | 94.8 | 94.4 | 94.6 | 94.6 | 94.5 | 93.4 | 93.6 | 93.5 |
| **2012** | 93.7 | 93.7 | 93.7 | 93.6 | 93.7 | 93.7 | 93.6 | 93.4 | 91.9 | 91.7 | 91.9 | 91.9 |
| **2013** | 92.1 | 92.2 | 92.2 | 92.5 | 92.4 | 92.5 | 92.4 | 92.5 | 92.8 | 92.2 | 92.4 | 92.6 |
| **2014** | 92.6 | 92.7 | 92.7 | 92.7 | 92.7 | 92.8 | 92.8 | 92.7 | 93 | 93.1 | 92.9 | 93.1 |
| **2015** | 93.3 | 93.3 | 93.4 | 93.4 | 93.7 | 93.9 | 93.7 | 93.5 | 92.8 | 93.1 | 93.1 | 93.1 |
| **2016** | 92.9 | 93.2 | 93 | 93.1 | 93 | 92.6 | 92.5 | 92.7 | 92.7 | 91.7 | 92 | 90.7 |
| **2017** | 91.1 | 90.7 | 91 | 90.9 | 90.6 | 90.7 | 90.7 | 90.1 | 89.5 | 89.5 | 89.9 | 89.7 |
| **2018** | 89.7 | 90 | 89.6 | 89.6 | 89.6 | 89.6 | 89.7 | 89.9 | 89.5 | 89.5 | 89.5 | 89.5 |
| **2019** | 89.9 | 89.5 | 89.5 | 89.6 | 89.5 | 89.5 | 89.7 | 89.7 | 89.6 | 90.2 | 90.2 | 90.3 |
| **2020** | 90.7 | 90.4 | 90.5 | 90.5 | 90.4 | 90.4 | 90.5 | 90.2 | 90.3 | 89.9 | 90 | 90 |
| **2021** | 90.1 | 90.3 | 90.4 | 90.5 | 90.2 | 90.2 | 90.309 | 90.429 | 90.842 | 91.237 | 91.185 | 91.307 |
| **2022** | 92.023 | 92.061 | 92.015(P) | 92.623(P) | 92.994(P) | 93.323(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

**MISCELLANEOUS EQUIPMENT**

**Series Id:** PCU33431-33431-
**Series Tit** PPI industry data for Audio and video equipment mfg, not seasonally adjusted
**Industry:** Audio and video equipment mfg
**Product:** Audio and video equipment mfg
**Base Dat** 200312

**Download:**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2003** | | | | | | | | | | | | 100 |
| **2004** | 99.9 | 100.6 | 99.8 | 98.7 | 98.7 | 98.3 | 97.3 | 97.1 | 96.8 | 96.6 | 96.6 | 96.7 |
| **2005** | 96.8 | 96.8 | 96.4 | 96 | 96.2 | 96.2 | 96.1 | 96.2 | 94.1 | 94.1 | 94.2 | 94.2 |
| **2006** | 95.5 | 95.5 | 95.4 | 95.4 | 93.4 | 93.1 | 92.5 | 92.5 | 92.5 | 92.8 | 92.8 | 92.8 |
| **2007** | 92.8 | 92.6 | 92.6 | 92.6 | 92.6 | 92.6 | 91.6 | 88.5 | 88.5 | 88.6 | 88.6 | 88.6 |
| **2008** | 88.6 | 88.6 | 88.9 | 88.8 | 88.8 | 88.9 | 90.6 | 90.6 | 90.9 | 89.7 | 89.3 | 88.5 |
| **2009** | 88.7 | 88 | 87.4 | 86.3 | 85.3 | 84.3 | 84.2 | 84.2 | 84.3 | 84.3 | 84.3 | 84.3 |
| **2010** | 84.4 | 84.4 | 84.4 | 84.4 | 84.4 | 84.3 | 84.3 | 84.3 | 84.3 | 84.5 | 84.5 | 84.2 |
| **2011** | 83.2 | 83.7 | 84.1 | 83.5 | 83.5 | 83.5 | 83.9 | 84.7 | 84.7 | 85 | 85.1 | 85 |
| **2012** | 84.4 | 84.9 | 84.9 | 84.3 | 84.2 | 84.2 | 84.3 | 84.1 | 84.1 | 84.1 | 84.1 | 84.1 |
| **2013** | 84.7 | 82.3 | 82.4 | 82.4 | 82.2 | 82.4 | 82.5 | 82.5 | 82.4 | 82.4 | 82.4 | 82.4 |
| **2014** | 82.5 | 82.6 | 82.6 | 82.7 | 82.7 | 82.7 | 82.7 | 82.8 | 82.8 | 82.8 | 82.8 | 82.9 |
| **2015** | 82.9 | 83 | 83 | 82.9 | 82.9 | 82.9 | 82.9 | 83 | 82.8 | 82.8 | 82.8 | 82.8 |
| **2016** | 82.8 | 82.9 | 82.9 | 83 | 83 | 83.1 | 83.1 | 83.2 | 83.2 | 83.2 | 83.2 | 83.2 |
| **2017** | 83.2 | 83.2 | 83.1 | 83.2 | 83.3 | 83.2 | 83.1 | 82.9 | 83 | 83 | 82.9 | 82.9 |
| **2018** | 82.9 | 82.9 | 83.2 | 82.8 | 82.7 | 82.7 | 82.8 | 82.7 | 82.5 | 82.4 | 82.6 | 82.6 |
| **2019** | 82.9 | 83 | 83 | 82.9 | 83.4 | 83.2 | 83.2 | 83.4 | 84.5 | 85.2 | 85.3 | 85.2 |
| **2020** | 85.8 | 85.8 | 85.9 | 85.7 | 85.7 | 85.7 | 86 | 86 | 86 | 86 | 86 | 86 |
| **2021** | 86 | 86 | 86 | 86 | 86.5 | 87.4 | 89.774 | 91.945 | 91.945 | 92.885 | 93.917 | 94.023 |
| **2022** | 95.075 | 95.811 | 97.101(P) | 97.117(P) | 97.273(P) | 97.617(P) | | | | | | |
| P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication. | | | | | | | | | | | | |

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DEALS AUGUST 6, 2018 / 5:11 PM / 6 MONTHS AGO

# SJW Group makes $1.1 billion all-cash offer for Connecticut Water

3 MIN READ

NEW YORK (Reuters) - SJW Group (SJW.N) and Connecticut Water Service Inc (CTWS.O) said on Monday they were changing from a merger to an acquisition agreement, with SJW offering to buy the New England utility for $1.1 billion in cash instead of combining stock.

The switch to an all-cash offer is worth $70 per Connecticut Water share, a 33 percent premium to Connecticut Water's share price prior to the original deal announced in March, according to a joint statement.

It was also higher than the implied $61.86 per share value of the Clinton, Connecticut-based firm under the merger-of-equals transaction, which would have created a combined company in which existing SJW shareholders would hold 60 percent of the stock.

SJW closed 2.3 percent lower, while Connecticut Water was 9 percent higher at $68.50.

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To pay for the acquisition, SJW will initially utilize a $975 million bridge loan from financial adviser JP Morgan Chase (JPM.N). Ultimately, the purchase would be covered by debt and between $450 million and $500 million of equity finance.

The new deal aims to conclude in the first quarter of 2019, subject to approvals from Connecticut Water's shareholders, as well as regulators in Connecticut and Maine.

The duo's original all-stock merger announcement in March triggered competing offers from Eversource Energy (ES.N) and California Water Service Group (CWT.N).

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"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

Switching to an acquisition, versus a merger structure, means that SJW shareholders will no longer be required to vote on approving the deal, the statement said.

RBS sounds alarm over Brexit

CalWater has an open tender offer to acquire SJW that runs until Sept. 28.

However, asked if the change was aimed at heading off any shareholder challenge to the deal, Thornburg told Reuters it "wasn't a consideration" and it had received nothing but support from its shareholders.

CalWater declined to comment. A spokesman for Eversource said the company was evaluating developments but, as it has made clear, it will be disciplined in pursuing this or any other transaction.

Reporting by David French in New York; Additional Reporting by Liana B. Baker; Editing by Lisa Shumaker

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**CONNECTICUT WATER SERVICE INC / CT**
**BALANCE_SHEET2**
**Form Type: 10-K**
**Period End: Dec 31, 2017**
**Date Filed: Mar 15, 2018**
Table Of Contents

CONNECTICUT WATER SERVICE, INC.

CONSOLIDATED BALANCE SHEETS

| December 31, (in thousands, except share amounts) | 2017 | 2016 |
|---|---|---|
| ASSETS | | |
| Utility Plant | $ 927,289 | $ 777,860 |
| Construction Work in Progress | 11,761 | 33,748 |
| | 939,050 | 811,608 |
| Accumulated Provision for Depreciation | (241,327) | (210,212) |
| Net Utility Plant | 697,723 | 601,396 |
| Other Property and Investments | 10,662 | 9,071 |
| Cash and Cash Equivalents | 3,618 | 1,564 |
| Accounts Receivable (Less Allowance, 2017 - $1,265; 2016 - $1,100) | 14,965 | 13,024 |
| Accrued Unbilled Revenues | 8,481 | 8,171 |
| Materials and Supplies, at Average Cost | 1,593 | 1,536 |
| Prepayments and Other Current Assets | 7,021 | 5,069 |
| Total Current Assets | 35,678 | 29,364 |
| Unrecovered Income Taxes - Regulatory Asset | 66,631 | 93,264 |
| Pension Benefits - Regulatory Asset | 11,339 | 12,266 |
| Post-Retirement Benefits Other Than Pension - Regulatory Asset | 116 | 265 |
| Goodwill | 67,016 | 30,427 |
| Deferred Charges and Other Costs | 9,618 | 8,449 |
| Total Regulatory and Other Long-Term Assets | 154,720 | 144,671 |
| Total Assets | $ 898,783 | $ 784,502 |
| CAPITALIZATION AND LIABILITIES | | |
| Common Stockholders' Equity: | | |
| Common Stock Without Par Value: Authorized - 25,000,000 Shares | | |
| Issued and Outstanding: | | |
| 2017 - 12,065,016; 2016 - 11,248,458 | $ 191,641 | $ 145,739 |
| Retained Earnings | 102,417 | 91,213 |
| Accumulated Other Comprehensive Loss | (428) | (924) |
| Common Stockholders' Equity | 293,630 | 236,028 |
| Preferred Stock | 772 | 772 |
| Long-Term Debt | 253,367 | 197,047 |
| Total Capitalization | 547,769 | 433,847 |
| Current Portion of Long-Term Debt | 6,173 | 4,859 |
| Interim Bank Loans Payable | 19,281 | 32,953 |
| Accounts Payable and Accrued Expenses | 11,319 | 13,116 |
| Accrued Interest | 1,439 | 1,012 |
| Current Portion of Refund to Customers - Regulatory Liability | 64 | 855 |
| Other Current Liabilities | 3,262 | 2,330 |
| Total Current Liabilities | 41,538 | 55,125 |
| Advances for Construction | 20,024 | 19,127 |
| Deferred Federal and State Income Taxes | 33,579 | 50,558 |
| Unfunded Future Income Taxes | 58,384 | 90,977 |
| Long-Term Compensation Arrangements | 32,649 | 33,540 |
| Unamortized Investment Tax Credits - Regulatory Liability | 1,133 | 1,189 |
| Excess Accumulated Deferred Income Tax - Regulatory Liability | 30,937 | 4,373 |
| Refund to Customers - Regulatory Liability | - | 108 |
| Other Long-Term Liabilities | 1,241 | 701 |
| Total Long-Term Liabilities | 177,947 | 200,573 |
| Contributions in Aid of Construction | 131,529 | 94,957 |
| Commitments and Contingencies | - | - |
| Total Capitalization and Liabilities | $ 898,783 | $ 784,502 |

**Created by EDGAR Online, Inc.**

**CONNECTICUT WATER SERVICE INC / CT**
**INCOME_STATEMENT2**
**Form Type: 10-K**
**Period End: Dec 31, 2017**
**Date Filed: Mar 15, 2018**
Table Of Contents

CONNECTICUT WATER SERVICE, INC.

CONSOLIDATED STATEMENTS OF INCOME

| For the Years Ended December 31, (in thousands, except per share data) | 2017 | 2016 | 2015 |
|---|---|---|---|
| Operating Revenues | $ 107,054 | $ 98,667 | $ 96,041 |
| Operating Expenses | | | |
| Operation and Maintenance | 48,017 | 44,191 | 48,052 |
| Depreciation | 16,684 | 13,905 | 12,871 |
| Income Taxes | (1,993) | 2,570 | (818) |
| Taxes Other Than Income Taxes | 10,941 | 9,796 | 9,294 |
| Total Operating Expenses | 73,649 | 70,462 | 69,399 |
| Net Operating Revenues | 33,405 | 28,205 | 26,642 |
| Other Utility Income, Net of Taxes | 824 | 744 | 797 |
| Total Utility Operating Income | 34,229 | 28,949 | 27,439 |
| Other Income (Deductions), Net of Taxes | | | |
| (Loss) Gain on Real Estate Transactions | 33 | (54) | 349 |
| Non-Water Sales Earnings | 1,167 | 1,219 | 1,394 |
| Allowance for Funds Used During Construction | 774 | 1,198 | 530 |
| Other | (2,308) | (1,009) | (214) |
| Total Other Income (Loss), Net of Taxes | (334) | 1,354 | 2,059 |
| Interest and Debt Expenses | | | |
| Interest on Long-Term Debt | 9,054 | 7,714 | 7,087 |
| Other Interest Income, Net | (359) | (922) | (458) |
| Amortization of Debt Expense and Premium, Net | 146 | 124 | 108 |
| Total Interest and Debt Expenses | 8,841 | 6,916 | 6,737 |
| Net Income | 25,054 | 23,387 | 22,761 |
| Preferred Stock Dividend Requirement | 38 | 38 | 38 |
| Total Net Income Applicable to Common Stock | $ 25,016 | $ 23,349 | $ 22,723 |
| Weighted Average Common Shares Outstanding: | | | |
| Basic | 11,540 | 11,009 | 10,958 |
| Diluted | 11,762 | 11,228 | 11,164 |
| Earnings Per Common Share: | | | |
| Basic | $ 2.17 | $ 2.12 | $ 2.07 |
| Diluted | $ 2.13 | $ 2.08 | $ 2.04 |

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

| For the Years Ended December 31, (in thousands) | 2017 | 2016 | 2015 |
|---|---|---|---|
| Net Income | $ 25,054 | $ 23,387 | $ 22,761 |
| Other Comprehensive Income (Loss), net of tax | | | |
| Adjustment to post-retirement benefit plans, net of tax benefit (expense) of $(419), $15, and $(505) in 2017, 2016, and 2015, respectively | 289 | (24) | 765 |
| Unrealized Investment gain (loss), net of tax (expense) benefit of $(13), $(22) and $62, in 2017, 2016, and 2015, respectively | 207 | 35 | (97) |
| Other Comprehensive Income, net of tax | $ 496 | $ 11 | $ 668 |
| Comprehensive Income | $ 25,550 | $ 23,398 | $ 23,429 |

## A-6 LIST OF TOWNS SERVED

List by operating divisions the towns served directly, indicating those in which franchise is for limited area by an asterisk (*) after name. Give population of the area and the number of customers.

| Line No. | Town | Population of Area | Number of Customers | Line No. | Town | Population of Area | Number of Customers |
|---|---|---|---|---|---|---|---|
| | | | | | Sub Totals Forward: | 30,120 | 725 |
| 1 | Belmont N. H. | 7,356 | 160 | 16 | | | |
| 2 | Bow, N.H. | 7,519 | 95 | 17 | | | |
| 3 | Carroll, N.H. | 763 | 409 | 18 | | | |
| 4 | Belmont, NH | 7,356 | 22 | 19 | | | |
| 5 | Gilford, NH | 7,126 | 39 | 20 | | | |
| 6 | | | | 21 | | | |
| 7 | | | | 22 | | | |
| 8 | | | | 23 | | | |
| 9 | | | | 24 | | | |
| 10 | | | | 25 | | | |
| 11 | | | | 26 | | | |
| 12 | | | | 27 | | | |
| 13 | | | | 28 | | | |
| 14 | | | | 29 | | | |
| 15 | Sub Totals Forward: | 30,120 | 725 | 30 | Total | 30,120 | 725 |

## A-7 PAYMENTS TO INDIVIDUALS

List names of all individuals, partnerships, or corporations to whom payments totaling $10,000 or more for services rendered were made or accrued during the year, and the amount paid or accrued to each. Where payments or accruals to the individual members of a partnership or firm together total $10,000 or more, list each individual and the amount paid or due each.

| Line No. | Name | Address | Amount |
|---|---|---|---|
| 1 | NESC | Plainville,, Ct. | 222,877 |
| 2 | City of Laconia | Laconia, NH | 91,004 |
| 3 | Rowell's Services | Northfield, NH | 57,242 |
| 4 | Eversource | Boston, MA | 43,226 |
| 5 | CoBank | Greenwood Village, CO | 43,000 |
| 6 | Stephen P. St. Cyr & Associates | Biddeford, Me. | 40,959 |
| 7 | NH Brown Law | Somersworth, NH | 37,206 |
| 8 | PKF O'Conner Davies | Shelton, Ct. | 36,020 |
| 9 | State of NH | Concord, NH | 16,544 |
| 10 | Fortin Construction | Londonderry, NH | 16,155 |
| 11 | Town of Carroll | Carroll, NH | 15,201 |
| 12 | Town of Belmont | Belmont, NH | 14,953 |
| 13 | Harcros Chemicals | Chicago, IL | 12,909 |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | Total | | $ 647,296 |

Page 415

CONSUMPTION INFORMATION (Dover Division)

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | | |
| 2. Estimated population reached by the distributing system | | |
| 3. Estimated population actually supplied | | 1,809 |
| 4. Total consumption during the year in gallons | | 50,866,736 |
| 5. Average daily consumption ( in gallons) | | 138,429 |
| 6. Day on which the greatest amount was pumped | | 8/13/2020 |
| 7. Gallons pumped on above day | | 368,000 |
| 8. Week during which greatest amount was pumped | 8/9/20-8/15/20 | |
| 9. Gallons pumped during above week | | 1,906,000 |
| 10. Gallons per day per service | | 218 |
| 11. Consumption metered | | 50,866,736 |
| 12. Consumption metered, | 100 percent of total consumption | |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 637 | 1 | 0 | 636 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Dover, MA | 636 |

Sixty-four of these connections represent contractual service to Town of Dover plus one master meter at town connection.

Page 415

CONSUMPTION INFORMATION (Plymouth Division)

| | |
|---|---|
| 1. Estimated total population of territory covered by franchise | 2,513 |
| 2. Estimated population reached by the distributing system | 2,513 |
| 3. Estimated population actually supplied | 2,513 |
| 4. Total consumption during the year (GALS) | 101,211,880 |
| 5. Average daily consumption | 294,414 |
| 6. Day on which the greatest amount was pumped | 7/27/2020 |
| 7. Gallons pumped on above day | 724,300 |
| 8. Week during which greatest amount was pumped | 7/26/2020-8/1/2020 |
| 9. Gallons pumped during above week | 4,544,900 |
| 10. Gallons per day per service | 219 |
| 11. Consumption metered | 101,211,880 |
| 12. Consumption metered, | 100% percent of total consumption |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 853 | 0 | 9 | 862 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Plymouth, MA | 862 |

Page 415

CONSUMPTION INFORMATION (Springdale Division)

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | | 115 |
| 2. Estimated population reached by the distributing system | | 115 |
| 3. Estimated population actually supplied | | 115 |
| 4. Total consumption during the year (GALS) | | 7,463,606 |
| 5. Average daily consumption | | 20,448 |
| 6. Day on which the greatest amount was pumped | | 6/27/2020 |
| 7. Gallons pumped on above day | | 88,000 |
| 8. Week during which greatest amount was pumped | 6/21/20-6/27/20 | |
| 9. Gallons pumped during above week | | 407,000 |
| 10. Gallons per day per service | | 418 |
| 11. Consumption metered | | 7,463,606 |
| 12. Consumption metered, | 100 percent of total consumption | |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 41 | 0 | 1 | 42 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Dover, MA | 42 |

Page 415

CONSUMPTION INFORMATION

| | | |
|---|---|---|
| 1. Estimated total population of territory covered by franchise | 1100 | |
| 2. Estimated population reached by the distributing system | 1100 | |
| 3. Estimated population actually supplied | 1100 | |
| 4. Total consumption during the year | 31,956,826 | gals. |
| 5. Average daily consumption | 87,553 | gals. |
| 6. Day on which the greatest amount was pumped | 7/20/2020 | |
| 7. Gallons pumped on above day | 173,596 | |
| 8. Week during which greatest amount was pumped | 7/16/20-7/25/20 | |
| 9. Gallons pumped during above week | 975,066 | |
| 10. Gallons per day per service | 180 | |
| 11. Consumption metered | 31,956,826 | gals. |
| 12. Consumption metered, | 100 | % of total consumption |

13. CUSTOMERS

| Number Being Supplied at Beginning of Year | Discontinued Since | Connected Since | Number Being Supplied at Close of Year |
|---|---|---|---|
| 487 | 0 | | 487 |

| Name of City, Town, or District | Number of Customers as of December 31 |
|---|---|
| Sheffield, MA | |
| *487 metered customers, 3 fixed fee customers | 490 |

425 1 tm2112545d1_425.htm 425

Filed by Eversource Energy
(Commission File No. 001-05324) pursuant
to Rule 425 under the Securities Act of 1933

Subject Company: New England Service Company

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**JOINT NEWS RELEASE**

**New England Service Company To be Acquired by Aquarion Water Company**

*Region's largest private water company expands operations in*
*Connecticut, Massachusetts and New Hampshire*

BRIDGEPORT, CONN. – April 8, 2021 – Aquarion Company (Aquarion), parent of Aquarion Water Company, and New England Service Company (NESC) (OTC Pink Sheets Trading Symbol: NESW) today announced that they have entered into a definitive agreement whereby Aquarion will acquire all outstanding shares of NESC and NESC will become a wholly-owned subsidiary of Aquarion. Aquarion is a water supply company and holding company based in Bridgeport, Connecticut, providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire. NESC is a holding company based in Plainville, Connecticut providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire.

Under the agreement, which was unanimously approved by the Boards of Directors of both Aquarion and NESC, the acquisition will be executed through a stock-for-stock transaction that is structured to be a tax-free reorganization. The agreement provides that the stockholders of NESC will receive 0.51208 shares of the common shares of Aquarion's parent, Eversource Energy (Eversource) (NYSE: ES), in exchange for each share of NESC common stock. The fixed exchange ratio implies a $44.90 per share price based on the $87.68 closing price of Eversource Energy common shares on April 6, 2021. In connection with the exchange, Eversource Energy will issue approximately 463,000 shares of ES Common Stock at closing.

The merger includes NESC's Valley Water System in Connecticut, Colonial Water Company and Mountain Water Systems in Massachusetts, and Abenaki Water Company in New Hampshire, as well as unregulated service operations throughout New England. The merger will add nearly 10,000 customers to Aquarion's existing base of 216,000 customers. Under the agreement, all NESC employees will be retained.

"This merger will create long-term benefits for customers, employees, and the communities we serve," said Donald Morrissey, President of Aquarion Water Company. "We will make investments in these water systems focused on reliability and water quality and deliver a superior customer experience. We also welcome NESC's dedicated employees to the Aquarion team. I'm confident that we share a similar passion for delivering superior water service to customers and the communities we serve and being great stewards of the environment."

---

Over the last ten years, Aquarion has integrated over 70 water systems into its operations, strengthening the company's ability to deliver high-quality water to communities throughout the region.

"I am pleased to announce the NESC and Aquarion combination and look forward to working with Aquarion's leadership team on a smooth transition for our customers and employees," said Don Vaughan, NESC Chairman. He also noted, "Aquarion is well-positioned to deliver the reliable high-quality water service that our customers expect." NESC President, Nicholas LaChance, added "The stockholders, customers and employees of NESC will benefit from this deal with Aquarion. We view this transaction with Aquarion as a win for all of our stakeholders, and we look forward to working closely with their team."

The completion of the transaction will require approval by the stockholders of NESC, and the NESC Board of Directors has resolved to recommend the adoption of the merger agreement by the stockholders. The transaction is also subject to the approval of regulatory authorities, including the Connecticut Public Utilities Regulatory Authority, Massachusetts Department of Public Utilities, and New Hampshire Public Utilities Commission, and satisfaction of several other conditions. The parties plan to file all required regulatory applications over the coming months with an anticipated closing by the end of 2021.

***Advisors and Counsel***

Ropes & Gray LLP served as counsel to Aquarion Company and Eversource Energy in the transaction. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of New England Service Company. Cranmore, FitzGerald and Meaney served as counsel to New England Service Company.

***About Aquarion Water Company:***

Aquarion Water Company is the public water supply company for more than 625,000 people in 52 cities and towns throughout Connecticut, as well as serving customers in Massachusetts and New Hampshire. It is the largest investor-owned water utility in New England and among the seven largest in the U.S. Based in Bridgeport, CT, Aquarion has been in the public water supply business since 1857. Across its operations, Aquarion strives to act as a responsible steward of the environment and to assist the communities it serves in promoting sustainable practices. Aquarion Company is a wholly-owned subsidiary of Eversource.

For more information on Aquarion Water Company, please visit www.aquarionwater.com or www.facebook.com/aquarionwater.

***About New England Service Company***

Headquartered in Plainville, Connecticut, NESC is predominantly involved in the operation, management and financing of water systems and other related activities. NESC was formed in 1997 to operate in both regulated and unregulated water markets. NESC is the sole stockholder of four regulated water companies.

For more information on New England Service Company please visit
www.NewEnglandServiceCompany.com

*This news release includes statements concerning Aquarion and Aquarion Water Company's expectations, beliefs, plans, objectives, goals, strategies, assumptions of future events, future financial performance or growth and other statements that are not historical facts, including statements regarding the planned merger with New England Service Company, the timing of such transaction and benefits anticipated from such transaction. These statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Generally, readers can identify these forward-looking statements through the use of words or phrases such as "will," "estimate," "expect," "anticipate," "intend," "plan," "project," "believe," "forecast," "should," "could" and other similar expressions. Forward-looking statements involve risks and uncertainties that may cause actual results or outcomes to differ materially from those included in the forward-looking statements. Factors that may cause actual results to differ materially from those included in the forward-looking statements include, but are not limited to: the transaction is subject to conditions to closing, including regulatory approvals, that may not be satisfied; it may take longer than anticipated to consummate the transaction; we may not realize the benefits we anticipate from the transaction; unforeseen liabilities; risks relating to integration of the acquired business; and other presently unknown or unforeseen factors.*

*Other risk factors are detailed in Eversource Energy's reports filed with the Securities and Exchange Commission (SEC) and updated as necessary, and are available on Eversource Energy's website at www.eversource.com and on the SEC's website at www.sec.gov. All such factors are difficult to predict and contain uncertainties that may materially affect Aquarion or Aquarion Water Company's actual results, many of which are beyond our control. You should not place undue reliance on the forward-looking statements; each speaks only as of the date on which such statement is made, except as required by federal securities laws, and Aquarion Water Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.*

***Additional Information***

*This communication does not constitute an offer to buy or solicitation of any offer to sell securities. This communication relates to a proposed business combination transaction between Aquarion Company and New England Service Company. In connection with the proposed business combination, Eversource Energy will file a registration statement with the SEC. This communication is not a substitute for any registration statement, prospectus/proxy statement or other document Eversource Energy, Aquarion Company and/or New England Service Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF NEW ENGLAND SERVICE COMPANY ARE URGED TO READ CAREFULLY THE REGISTRATION STATEMENT, PROSPECTUS, PROXY STATEMENT AND OTHER DOCUMENTS FILED WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT EVERSOURCE ENERGY, AQUARION COMPANY, NEW ENGLAND SERVICE COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's web site at www.sec.gov or by directing a request to Eversource's Investor Relations department at (860) 665-5154 or by email to jeffrey.kotkin@eversource.com.*

***Certain Information Regarding Participants***

*This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and New England Service Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and New England Service Company may be deemed "participants" in the solicitation of proxies from stockholders of New England Service Company in favor of the proposed merger. You can find information about Eversource's trustees and executive officers in Eversource's annual report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 17, 2021 and its proxy statement for its 2021 annual meeting filed with the SEC on March 26, 2021. Information regarding the persons who may, under the rules of the SEC, be considered participants in the solicitation of the stockholders of New England Service Company in connection with the proposed merger will be set forth in the registration statement, prospectus/proxy statement or other documents filed with the SEC if any when they become available. You may obtain these documents (when they become available) free of charge at the SEC's web site at www.sec.gov and from Investor Relations at Eversource as described above.*

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###

## NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

| | December 31, 2020 | December 31, 2019 |
|---|---|---|
| **ASSETS** | | |
| Utility plant, at cost | $ 52,176,919 | $ 50,866,999 |
| Less accumulated depreciation and amortization | (17,108,971) | (16,242,563) |
| Net Utility Plant | 35,067,948 | 34,624,436 |
| | | |
| Non-utility property, plant and equipment | 2,340,344 | 2,229,441 |
| Less: accumulated depreciation | (841,502) | (736,994) |
| Net Non-Utility Property, Plant and Equipment | 1,498,842 | 1,492,447 |
| | | |
| Current Assets | | |
| Cash and cash equivalents | 1,217,863 | 781,095 |
| Marketable securities | 387,294 | 456,385 |
| Accounts receivable | 682,735 | 728,725 |
| Accrued unbilled revenues | 391,450 | 369,136 |
| Regulatory asset - revenue adjustment mechanism, current portion | 83,303 | 218,322 |
| Income taxes receivable | - | 5,286 |
| Materials and supplies inventory | 105,343 | 99,032 |
| Prepaid expenses | 51,811 | 52,968 |
| | | |
| Total Current Assets | 2,919,799 | 2,710,949 |
| | | |
| Other Assets | | |
| Investment in cooperative capital plan | 28,473 | 21,500 |
| Deferred charges and other regulatory assets | 2,243,524 | 1,750,628 |
| Regulatory asset - revenue adjustment mechanism, net of current portion | 10,426 | 48,847 |
| Preliminary survey and investigation | 5,111 | 4,883 |
| Regulatory asset - income taxes recoverable | 4,263,900 | 4,238,900 |
| Total Other Assets | 6,551,434 | 6,064,758 |
| | | |
| Total Assets | $ 46,038,023 | $ 44,892,590 |

See Notes to Consolidated Financial Statements

## NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets *(continued)*

| | December 31, 2020 | December 31, 2019 |
|---|---|---|
| **STOCKHOLDERS' EQUITY AND LIABILITIES** | | |
| Stockholders' Equity | | |
| Common stock, no par; 3,000,000 shares authorized; 906,418 shares issued, 903,325 and 900,850 shares outstanding at December 31, 2020 and 2019 | $ 3,784,217 | $ 3,784,217 |
| Additional paid in capital | 297,426 | 297,426 |
| Treasury stock, at cost, 3,093 and 5,568 shares at December 31, 2020 and 2019 | (72,974) | (128,758) |
| Retained earnings | 12,776,934 | 12,511,864 |
| Total Stockholders' Equity | 16,785,603 | 16,464,749 |
| Long-term debt, net of current portion | 9,148,153 | 9,349,951 |
| Current Liabilities | | |
| Note payable, bank | 122,000 | 70,500 |
| Current portion of long-term debt | 678,831 | 570,170 |
| Accounts payable and accrued expenses | 765,365 | 544,412 |
| Accrued property and other taxes | 234,396 | 215,792 |
| Deferred revenues | 117,927 | 76,874 |
| Total Current Liabilities | 1,918,519 | 1,477,748 |
| Other Liabilities | | |
| Deferred income taxes | 5,739,210 | 5,443,590 |
| Regulatory - excess deferred income taxes | 762,275 | 763,669 |
| Regulatory - excess income taxes | 293,643 | 195,762 |
| Security deposits and other deferred credits | 105,525 | 109,249 |
| Customer advances for construction | 97,586 | 42,738 |
| Contributions in aid of construction | 9,519,329 | 9,431,954 |
| Amortized contributions in aid of construction | 1,668,180 | 1,614,180 |
| Total Other Liabilities | 18,185,748 | 17,601,142 |
| Total Stockholder's Equity and Liabilities | $ 46,038,023 | $ 44,893,590 |

See Notes to Consolidated Financial Statements

## NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Statements of Income

| | Year Ended December 31, 2020 | 2019 |
|---|---|---|
| **OPERATING REVENUES** | | |
| Contracts with customers | | |
| Utility revenues | $ 6,531,154 | $ 6,047,244 |
| Contracting and jobbing | 1,519,110 | 1,497,323 |
| Total Contracts with Customers | 8,050,264 | 7,544,567 |
| Alternative revenue programs | (56,176) | 97,506 |
| Total Operating Revenues | 7,994,088 | 7,642,073 |
| **OPERATING EXPENSES** | | |
| Operation expenses | 3,399,314 | 3,292,866 |
| Maintenance expenses | 369,749 | 322,583 |
| Cost of contracting and jobbing | 737,715 | 804,274 |
| Depreciation and amortization | 1,170,093 | 1,129,426 |
| Taxes other than income taxes | 757,357 | 743,266 |
| Interest charges | 347,298 | 350,372 |
| Total Operating Expenses | 6,781,526 | 6,642,787 |
| Income from Operations | 1,212,562 | 999,286 |
| **OTHER INCOME AND (DEDUCTIONS)** | | |
| Rental income and other | 2,000 | 3,114 |
| Investment income | 21,350 | 70,550 |
| Allowance for funds used during construction | 10,771 | 5,275 |
| Non-operating expense | (3,454) | (2,676) |
| Total Other Income | 30,667 | 76,263 |
| Income Before Income Taxes | 1,243,229 | 1,075,549 |
| Income tax expense | 310,230 | 289,200 |
| Net Income | $ 932,999 | $ 786,349 |
| **PER SHARE AMOUNTS** | | |
| Weighted average shares outstanding | 902,454 | 897,030 |
| Net income | $ 1.03 | $ 0.88 |
| Dividends | $ 0.74 | $ 0.70 |
| Book value | $ 18.60 | $ 18.35 |

See Notes to Consolidated Financial Statements

**VALLEY WATER SYSTEMS, INC.**

Notes to Financial Statements
Years Ended December 31, 2020 and 2019

## 1. Description of the Company

Valley Water Systems, Inc. (the "Company"), a wholly owned subsidiary of New England Service Company ("NESC"), is a public utility distributing water to approximately 6,760 customers in the towns of Plainville, Farmington, and Southington, Connecticut area. As a public utility operating in Connecticut, the Company functions under rules and regulations prescribed by the State of Connecticut Public Utilities Regulatory Authority ("PURA").

## 2. Summary of Significant Accounting Policies

### *Basis of Presentation*

The Company maintains its accounts in accordance with the PURA Uniform System of Accounts as prescribed for Water Utilities Class A. The Company prepares its financial statements in accordance with accounting principles generally accepted in the United States of America which include the provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 980, *Regulated Operations* ("ASC 980"). Under ASC 980, regulated companies defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that those costs and credits will be recognized in the rate setting process in a period different from the period in which they would have been reflected in income by an unregulated company. These deferred regulatory assets and liabilities are then reflected in the income statement in the period in which the same amounts are reflected in rates charged for service.

### *Use of Estimates*

The preparation of financial statements require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Accordingly, actual results could differ from these estimates.

### *Cash and Cash Equivalents*

Cash and cash equivalents includes cash balances held in bank accounts and highly liquid debt instruments with maturities of three months or less at the time of purchase.

From time to time, the Company had on deposit at financial institutions cash and cash equivalents which exceed current federal deposit insurance limitations. The Company had not experienced any losses in such accounts to date and believes it is not exposed to any significant credit risk on cash and cash equivalents.

### *Accounts Receivable*

Accounts receivable are stated at the amount management expects to collect from outstanding balances. The Company continuously monitors the creditworthiness of customers and establishes, when necessary, an allowance for amounts that may become uncollectible in the future based on current economic trends, historical payment and bad debt write-off experience.

subsidiary water companies, serving approximately 200,000 customers in 52 towns and cities with a population of approximately 674,000 throughout Connecticut's seven counties.[2] A map showing AWC-CT's current service area is attached to the Joint Application as Exhibit I. AWC-CT has provided water and water services to Connecticut residents and customers continuously since 1857. AWC-CT is well known to PURA and well respected by the water industry in Connecticut, and nationally. AWC-CT had over $1.68 billion of utility plant assets as of December 31, 2020 and operating revenues of $189.6 million in 2020.

**Q. Please describe New England Service Company.**

**A.** NESC is a Connecticut stock corporation. NESC was formed in 1996 as a holding company to operate in both regulated and unregulated water utility markets. NESC has one regulated water distribution operating subsidiary in Connecticut. VWS, a utility established in 1884 as the Plainville Water Company, delivers water to over 6,800 customers or a population of approximately 18,000 in Plainville, Southington, and Farmington, Connecticut. A map showing VWS' current service area is attached to the Joint Application as Exhibit I.

In addition to owning VWS, NESC is also the sole stockholder of Colonial Water Company, a utility that provides water to about 1,530 customers in Dover and Plymouth, Massachusetts; Mountain Water Systems, a utility that provides water to about 490 customers in Sheffield, Massachusetts; and Abenaki Water Company, a combination of

[2] AWC-CT has acquired and integrated 16 new water systems since its last general rate proceeding in September 2013 via the acquisitions of the assets of the Indian Fields, West Service Corp. (2 systems), Bedrock, East Derby, Litchfield Hills, Southeastern CT Water Authority Lantern Hill Division, Hickory Hills Corporation, Arlington Acres, Pleasure Valley, Hillside Water Corporation, Town of Marlborough, and Town of New Fairfield systems, in addition to the transfer of the Laurel Ridge, West Shore Owners Association and Interlaken Water System assets.

**The Water Utility Industry consists of seven companies that provide water services to residential, commercial, and industrial customers. The group is now ranked 46th for relative year-ahead performance, which is near the middle of the pack of the 97 industries followed by *Value Line*.**

**Many investors are drawn to the water utility group for its well-defined earnings and dividend growth prospects. The stocks also have low Beta coefficients.**

**Every company here is in the midst of a large construction program. This is due to the nation's water infrastructure being in poor shape. Capital budgets should remain meaningful for years to come, which will require external financing.**

**The role of regulators cannot be overstated. Fortunately, relations between the water companies and authorities has been constructive.**

**Stocks in the Water Utility Industry do not come cheap. Indeed, they trade at high price/ earnings multiples. Scarcity is one of the reasons. The market capitalization of the entire industry is small compared to others, on a relative basis.**

**INDUSTRY TIMELINESS: 46 (of 97)**

### COVID-19 Update

Since the pandemic began, water utilities' earnings and revenues have been not been affected. Demand for water is very inelastic when it is priced reasonably, as is the case in most of the country. The biggest change was just the cessation of shutoffs for nonpayment. This has never been a major issue in this industry, as water is essential and is often one of the first bill paid by consumers. Going forward, even if more deviant types of the coronavirus emerge, the impact on these companies' bottom line ought to be marginal.

### Fragmented Industry

An overwhelming majority of water districts in the United States are small and operated by local municipalities or states. Indeed, there are easily more than 50,000 separate water entities operating throughout the country. As a result, it is a very inefficient market. *American Water Works* has been the most active acquirer of these smaller districts. With the average age of a typical domestic pipeline being well over 50 years (more below), many operators do not have the needed funds to modernize their assets. We expect consolidation to remain a trend.

### Aging Infrastructure

For decades, there was too little investment made in replacing pipes, valves and other assets associated with the collection and distribution of water. Customers bills were also kept artificially low. This caused the water infrastructure to become old and badly in need of repair. In addition, as the nation's population grew, water usage increased significantly. As water supplies came under more pressure, especially in the Southwest, the amount of water lost while being transported because of broken pipes took on more importance.

### Large Building Programs

Investment in infrastructure has increased significantly over the past decade, as the industry is now trying to upgrade its water systems. Every company in this group is now undertaking a strategy of spending heavily to address the problem. To finance the new construction, water bills have had to be raised. Regions of the country where water is not plentiful even had to raise the price to consumers to reduce excess consumption. In one of the spending bills now before Congress, the federal government would allocate $111 billion toward helping the water industry. The aid would be meant mostly for the many different water authorities that are owned by cities and states, however.

### Financial Strength And Regulation

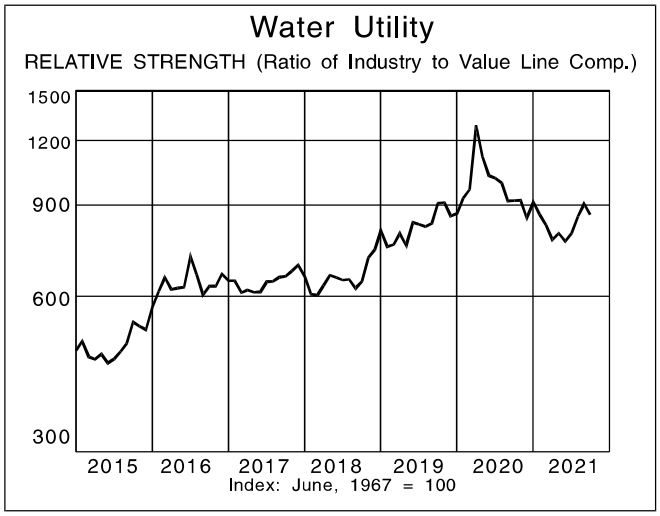
These construction projects forced utilities to issue debt to finance a healthy part of the expenditures. Thus, balance sheets in the group, are just in average condition. We expect them to become slightly more leveraged in the future, as borrowing increases.

As we stated earlier, the role played by state water authorities in the process is critical. They establish the rate of return that water utilities can earn on their equity. Should regulation be too restrictive, utilities will be less inclined to spend money. Regulators have to find that fine line between where water customers aren't being overcharged, but their monthly bill are high enough so that these companies can make a profit. Unlike gas and electric utilities, where there can discord between the parties involved, the water industry has generally been harmonious. This has enabled large sums to be spent by companies to better maintain and refurbish their existing assets.

### Conclusion

In the Water Utility Industry, *California Water* is the only stock that is ranked favorably for year-ahead price performance. Investors typically have to pay a premium to own these stocks. Also, because the stocks in the group have performed so well over the past five years, almost all of them have well-below average total return prospects over the pull to 2024-2026. As always, we recommend that subscribers read each individual report before making commitments.

*James A. Flood*

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# AMER. STATES WATER NYSE-AWR

RECENT PRICE 86.71 | P/E RATIO 35.7 (Trailing: 34.7 Median: 24.0) | RELATIVE P/E RATIO 1.89 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Raised 3/5/21
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 10/8/21
BETA .65 (1.00 = Market)

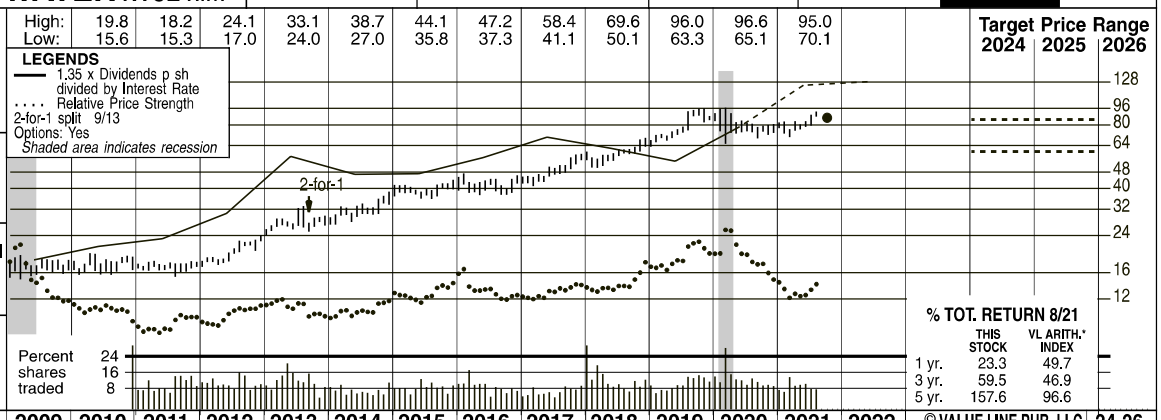
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$75-$118 $97 (10%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 85 | (Nil) | 2% |
| Low | 60 | (-30%) | -6% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 121 | 120 | 126 |
| to Sell | 142 | 128 | 117 |
| Hld's(000) | 25483 | 25737 | 25636 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.03 | 7.88 | 8.75 | 9.21 | 9.74 | 10.71 | 11.12 | 12.12 | 12.19 | 12.17 | 12.56 | 11.92 | 12.01 | 11.88 | 12.86 | 13.24 | *13.55* | *13.75* | Revenues per sh | *17.20* |
| 1.32 | 1.45 | 1.65 | 1.69 | 1.70 | 2.11 | 2.13 | 2.48 | 2.65 | 2.67 | 2.81 | 2.70 | 2.96 | 2.84 | 3.26 | 3.34 | *3.50* | *3.75* | "Cash Flow" per sh | *4.80* |
| .66 | .67 | .81 | .78 | .81 | 1.11 | 1.12 | 1.41 | 1.61 | 1.57 | 1.61 | 1.62 | 1.88 | 1.72 | 2.28 | 2.33 | *2.45* | *2.60* | Earnings per sh [A] | *3.05* |
| .45 | .46 | .48 | .50 | .51 | .52 | .55 | .64 | .76 | .83 | .87 | .91 | .99 | 1.06 | 1.16 | 1.28 | *1.40* | *1.52* | Div'd Decl'd per sh [B■] | *2.00* |
| 2.12 | 1.95 | 1.45 | 2.23 | 2.09 | 2.12 | 2.13 | 1.77 | 2.52 | 1.89 | 2.39 | 3.55 | 3.08 | 3.44 | 4.12 | 3.54 | *4.05* | *4.20* | Cap'l Spending per sh | *4.25* |
| 7.86 | 8.32 | 8.77 | 8.97 | 9.70 | 10.13 | 10.84 | 11.80 | 12.72 | 13.24 | 12.77 | 13.52 | 14.45 | 15.19 | 16.33 | 17.39 | *17.45* | *20.00* | Book Value per sh [D] | *23.20* |
| 33.60 | 34.10 | 34.46 | 34.60 | 37.06 | 37.26 | 37.70 | 38.53 | 38.72 | 38.29 | 36.50 | 36.57 | 36.68 | 36.76 | 36.85 | 36.89 | *37.25* | *37.50* | Common Shs Outst'g [C] | *37.50* |
| 21.9 | 27.7 | 24.0 | 22.6 | 21.2 | 15.7 | 15.4 | 14.3 | 17.2 | 20.1 | 24.6 | 25.6 | 25.7 | 34.0 | 34.4 | 34.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *24.0* |
| 1.17 | 1.50 | 1.27 | 1.36 | 1.41 | 1.00 | .97 | .91 | .97 | 1.06 | 1.24 | 1.34 | 1.29 | 1.84 | 1.83 | 1.78 | | | Relative P/E Ratio | *1.35* |
| 3.1% | 2.5% | 2.5% | 2.9% | 2.9% | 3.0% | 3.2% | 3.1% | 2.7% | 2.6% | 2.2% | 2.2% | 2.0% | 1.8% | 1.5% | 1.6% | | | Avg Ann'l Div'd Yield | *2.8%* |
| 419.3 | 466.9 | 472.1 | 465.8 | 458.6 | 436.1 | 440.6 | 436.8 | 473.9 | 488.2 | *510* | *525* | Revenues ($mill) | *645* |
| 42.0 | 54.1 | 62.7 | 61.1 | 60.5 | 59.7 | 69.4 | 63.9 | 84.3 | 86.4 | *90.0* | *95.0* | Net Profit ($mill) | *115* |
| 41.7% | 39.9% | 36.3% | 38.4% | 38.4% | 36.8% | 36.0% | 22.0% | 22.6% | 24.6% | *23.5%* | *24.0%* | Income Tax Rate | *23.0%* |
| 2.0% | 2.5% | -- | -- | -- | -- | -- | -- | 2.5% | -- | *1.0%* | *1.0%* | AFUDC % to Net Profit | *1.0%* |
| 45.4% | 42.2% | 39.8% | 39.1% | 41.1% | 39.4% | 38.0% | 40.5% | 44.4% | 47.2% | *45.5%* | *48.5%* | Long-Term Debt Ratio | *53.5%* |
| 54.6% | 57.8% | 60.2% | 60.9% | 58.9% | 60.6% | 62.0% | 59.5% | 55.6% | 52.8% | *54.5%* | *51.5%* | Common Equity Ratio | *46.5%* |
| 749.1 | 787.0 | 818.4 | 832.6 | 791.5 | 815.3 | 854.9 | 938.4 | 1082.5 | 1216.2 | *1260* | *1390* | Total Capital ($mill) | *1620* |
| 896.5 | 917.8 | 981.5 | 1003.5 | 1060.8 | 1150.9 | 1205.0 | 1296.3 | 1415.7 | 1512.0 | *1600* | *1700* | Net Plant ($mill) | *1925* |
| 7.1% | 8.3% | 8.9% | 8.6% | 9.0% | 8.6% | 9.3% | 7.9% | 8.9% | 8.0% | *8.0%* | *8.0%* | Return on Total Cap'l | *8.5%* |
| 10.3% | 11.9% | 12.7% | 12.0% | 13.0% | 12.1% | 13.1% | 11.4% | 14.0% | 13.5% | *13.5%* | *13.5%* | Return on Shr. Equity | *13.0%* |
| 10.3% | 11.9% | 12.7% | 12.0% | 13.0% | 12.1% | 13.1% | 11.4% | 14.0% | 13.5% | *13.5%* | *13.5%* | Return on Com Equity | *13.0%* |
| 5.3% | 6.6% | 6.8% | 5.7% | 6.0% | 5.3% | 6.2% | 4.5% | 6.9% | 6.1% | *6.0%* | *5.5%* | Retained to Com Eq | *4.5%* |
| 49% | 45% | 47% | 53% | 54% | 56% | 52% | 61% | 51% | 55% | *57%* | *60%* | All Div'ds to Net Prof | *66%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $412.7 mill. **Due in 5 Yrs** $136.0 mill.
**LT Debt** $412.3mill. **LT Interest** $24.0 mill. (38% of Cap'l)

**Leases, Uncapitalized:** Annual rentals $2.6 mill.
**Pension Assets-12/20** $213.1 mill. **Oblig.** $272.8 mill.
**Pfd Stock** None

**Common Stock** 36,931,771 shs. as of 7/30/21

**MARKET CAP: $3.2 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 1.3 | 36.7 | 5.4 |
| Accts Receivable | 20.9 | 29.2 | 28.5 |
| Other | 100.3 | 91.2 | 33.9 |
| Current Assets | 122.5 | 157.1 | 136.3 |
| Accts Payable | 55.6 | 63.8 | 66.0 |
| Debt Due | 5.3 | .4 | .4 |
| Other | 55.1 | 54.4 | 45.0 |
| Current Liab. | 116.0 | 118.6 | 111.4 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.5% | .5% | *5.0%* |
| "Cash Flow" | 5.5% | 3.0% | *7.0%* |
| Earnings | 9.0% | 5.5% | *6.5%* |
| Dividends | 8.5% | 7.5% | *9.5%* |
| Book Value | 5.5% | 5.0% | *5.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 94.7 | 106.9 | 124.2 | 111.0 | 436.8 |
| 2019 | 101.7 | 124.7 | 134.5 | 113.0 | 473.9 |
| 2020 | 109.1 | 121.3 | 133.6 | 124.2 | 488.2 |
| 2021 | 117.1 | 128.4 | *139* | *125.5* | *510* |
| 2022 | *120* | *130* | *145* | *130* | *525* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .29 | .44 | .62 | .37 | 1.72 |
| 2019 | .35 | .72 | .76 | .45 | 2.28 |
| 2020 | .38 | .69 | .72 | .54 | 2.33 |
| 2021 | .52 | .72 | *.75* | *.46* | *2.45* |
| 2022 | *.50* | *.75* | *.78* | *.57* | *2.60* |

| Calendar | QUARTERLY DIVIDENDS PAID [B■] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .242 | .242 | .255 | .255 | .99 |
| 2018 | .255 | .255 | .275 | .275 | 1.06 |
| 2019 | .275 | .275 | .305 | .305 | 1.16 |
| 2020 | .305 | .305 | .335 | .335 | 1.28 |
| 2021 | .335 | .335 | .365 | | |

**BUSINESS:** American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 261,976 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,545 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 841. BlackRock, Inc. owns 16.4% of out. shares; Vanguard, 12.0%; off. & dir., 1.0% (4/21 Proxy). Chairman: Lloyd Ross. Pres. & CEO: Robert Sprowls. Inc: CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel.: 909-394-3600. Internet: www.aswater.com.

**American States Water has raised its dividend.** In the September interim, the quarterly share payout was increased from $0.335 to $0.365. This 9% hike was well above the average growth rate compared to the other water utilities that make up this group.

**The company is on track for a decent showing in 2021.** Thanks to a better-than-expected first half, we think that earnings per share could well rise 5% this year. This is not bad, considering that utilities often do not perform well when operating in the final year of a three-year-old rate case.

**Earnings from 2022 will be heavily influenced by a pending regulatory case.** In California, utilities petition state authorities for permission to charge higher fees triennially. American States filed for rate relief for the 2022 to 2024 period several years ago, and a ruling by the California Public Utility Commission should be made early next year. (Any rate hike would be retroactive to January 1st.) Management has been in discussions, and it's possible that a settlement can be reached earlier. In any case, the decision on the previous request for higher rates was relatively constructive.

**Inflation may stall some of the expected growth in the nonregulated segment.** Through its ASUS subsidiary, the company provides water services to military installations in the United States. The armed forces are in the midst of privatizing these operations, and ASUS has done well winning its fair share of the contracts. In the second quarter, shares earnings were off here about 8% due to a spike in the price of commodities and other costs. Unlike its water operations, profitability in this business is not controlled. Hence, there is greater risk, as well as a chance to make more income from investments. Should inflation not be transitory, it would not be helpful because the company operates on 50-year contracts.

**Theses shares are only expected to perform in line with the broader market averages in the year ahead.** Looking further out to 2024-2026, AWR total return prospects are well below the *Value Line* median, which is the case for most stocks in this industry.

*James A. Flood* *October 8, 2021*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early November.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. As of 6/30/20; $1.1 million/$0.03 a share.

| | |
|---|---|
| Company's Financial Strength | A |
| Stock's Price Stability | 100 |
| Price Growth Persistence | 85 |
| Earnings Predictability | 90 |

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# AMERICAN WATER NYSE-AWK

RECENT PRICE 170.71 | P/E RATIO 39.5 (Trailing: 41.3 Median: 24.0) | RELATIVE P/E RATIO 2.09 | DIV'D YLD 1.4% | VALUE LINE

TIMELINESS 3 Lowered 6/25/21
SAFETY 3 New 7/25/08
TECHNICAL 2 Raised 10/8/21
BETA .90 (1.00 = Market)

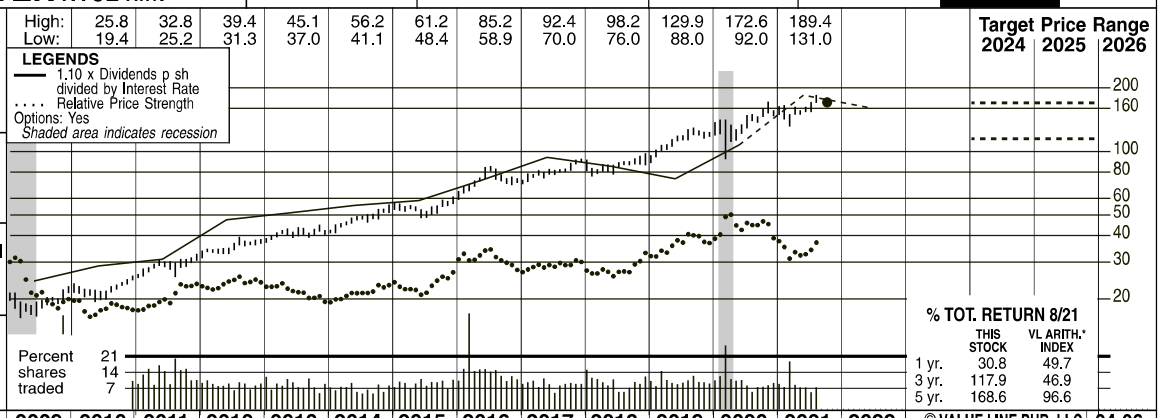
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$120-$279 $200 (15%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 170 | (Nil) | 2% |
| Low | 115 | (-35%) | -7% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 449 | 434 | 444 |
| to Sell | 344 | 388 | 377 |
| Hld's(000) | 148917 | 148561 | 150291 |




| 2005 | 2006E | 2007E | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -- | 13.08 | 13.84 | 14.61 | 13.98 | 15.49 | 15.18 | 16.25 | 16.28 | 16.78 | 17.72 | 18.54 | 18.81 | 19.04 | 19.97 | 20.83 | *22.10* | *23.30* | Revenues per sh | *25.80* |
| -- | .65 | d.47 | 2.87 | 2.89 | 3.56 | 3.73 | 4.27 | 4.36 | 4.75 | 5.13 | 5.26 | 5.14 | 6.15 | 6.65 | 7.24 | *7.70* | *8.25* | "Cash Flow" per sh | *9.70* |
| -- | d.97 | d2.14 | 1.10 | 1.25 | 1.53 | 1.72 | 2.11 | 2.06 | 2.39 | 2.64 | 2.62 | 2.38 | 3.15 | 3.43 | 3.91 | *4.25* | *4.60* | Earnings per sh A | *5.50* |
| -- | -- | -- | .40 | .82 | .86 | .90 | 1.21 | .84 | 1.21 | 1.33 | 1.47 | 1.62 | 1.78 | 1.96 | 2.15 | *2.36* | *2.57* | Div'd Decl'd per sh B■ | *3.10* |
| -- | 4.31 | 4.74 | 6.31 | 4.50 | 4.38 | 5.27 | 5.25 | 5.50 | 5.33 | 6.51 | 7.36 | 8.04 | 8.78 | 9.15 | 10.05 | *10.60* | *12.60* | Cap'l Spending per sh | *11.75* |
| -- | 23.86 | 28.39 | 25.64 | 22.91 | 23.59 | 24.11 | 25.11 | 26.52 | 27.39 | 28.25 | 29.24 | 30.13 | 32.42 | 33.83 | 35.58 | *37.95* | *40.20* | Book Value per sh D | *50.00* |
| -- | 160.00 | 160.00 | 160.00 | 174.63 | 175.00 | 175.66 | 176.99 | 178.25 | 179.46 | 178.28 | 178.10 | 178.44 | 180.68 | 180.81 | 181.30 | *181.50* | *182.00* | Common Shs Outst'g C | *190.00* |
| -- | -- | -- | 18.9 | 15.6 | 14.6 | 16.8 | 16.7 | 19.9 | 20.0 | 20.5 | 27.7 | 33.8 | 27.3 | 32.9 | 35.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *26.0* |
| -- | -- | -- | 1.14 | 1.04 | .93 | 1.05 | 1.06 | 1.12 | 1.05 | 1.03 | 1.45 | 1.70 | 1.47 | 1.75 | 1.83 | | | Relative P/E Ratio | *1.45* |
| -- | -- | -- | 1.9% | 4.2% | 3.8% | 3.1% | 3.4% | 2.0% | 2.5% | 2.5% | 2.0% | 2.0% | 2.1% | 1.7% | 1.6% | | | Avg Ann'l Div'd Yield | *2.2%* |
| | | | | | | 2666.2 | 2876.9 | 2901.9 | 3011.3 | 3159.0 | 3302.0 | 3357.0 | 3440.0 | 3610.0 | 3777.0 | *4025* | *4240* | Revenues ($mill) | *4900* |
| | | | | | | 304.9 | 374.3 | 369.3 | 429.8 | 476.0 | 468.0 | 426.0 | 567.0 | 621.0 | 709.0 | *770* | *835* | Net Profit ($mill) | *1045* |
| | | | | | | 39.5% | 40.7% | 39.1% | 39.4% | 39.1% | 39.2% | 53.3% | 28.2% | 25.5% | 23.3% | *19.5%* | *23.5%* | Income Tax Rate | *24.0%* |
| | | | | | | -- | 6.2% | 5.1% | -- | -- | -- | -- | -- | 5.1% | 4.0% | *4.5%* | *5.0%* | AFUDC % to Net Profit | *5.0%* |
| | | | | | | 55.7% | 53.9% | 52.4% | 52.4% | 53.7% | 52.4% | 54.7% | 56.3% | 58.5% | 59.1% | *59.0%* | *61.5%* | Long-Term Debt Ratio | *61.0%* |
| | | | | | | 44.2% | 46.1% | 47.6% | 47.4% | 46.2% | 47.5% | 45.3% | 43.6% | 41.4% | 40.9% | *41.0%* | *39.5%* | Common Equity Ratio | *39.0%* |
| | | | | | | 9580.3 | 9635.5 | 9940.7 | 10364 | 10911 | 10967 | 11875 | 13433 | 14760 | 15787 | *16900* | *18700* | Total Capital ($mill) | *20000* |
| | | | | | | 11021 | 11739 | 12391 | 12900 | 13933 | 14992 | 16246 | 17409 | 18232 | 19710 | *20750* | *22150* | Net Plant ($mill) | *24500* |
| | | | | | | 4.8% | 5.4% | 5.1% | 5.5% | 5.7% | 5.6% | 4.9% | 5.4% | 5.4% | 5.7% | *5.5%* | *5.5%* | Return on Total Cap'l | *6.0%* |
| | | | | | | 7.2% | 8.4% | 7.8% | 8.7% | 9.4% | 9.0% | 7.9% | 9.7% | 10.1% | 11.0% | *11.0%* | *11.5%* | Return on Shr. Equity | *11.0%* |
| | | | | | | 7.2% | 8.4% | 7.8% | 8.7% | 9.4% | 9.0% | 7.9% | 9.7% | 10.1% | 11.0% | *11.0%* | *11.5%* | Return on Com Equity | *11.0%* |
| | | | | | | 3.5% | 3.6% | 4.7% | 4.3% | 4.7% | 4.0% | 2.5% | 4.2% | 4.4% | 5.0% | *5.0%* | *5.5%* | Retained to Com Eq | *4.5%* |
| | | | | | | 52% | 57% | 40% | 50% | 50% | 56% | 68% | 56% | 57% | 55% | *56%* | *56%* | All Div'ds to Net Prof | *56%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $10998 mil. **Due in 5 Yrs** $2867 mil.
**LT Debt** $10343 mil. **LT Interest** $384 mil. (61% of Cap'l)

**Leases, Uncapitalized:** Annual rentals $13.0 mill.
**Pension Assets 12/20** $1990.0 mill
**Oblig.** $2386.0 mill.
**Pfd Stock** $3.0 mill. **Pfd Div'd** $.2 mill

**Common Stock** 181,495,720 shares as of 7/27/21

**MARKET CAP: $31.0 billion (Large Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 91 | 576 | 104 |
| Accts Receivable | 294 | 321 | 311 |
| Other | 900 | 1009 | 1155 |
| Current Assets | 1285 | 1906 | 1570 |
| Accts Payable | 203 | 189 | 146 |
| Debt Due | 814 | 1611 | 655 |
| Other | 1028 | 1081 | 909 |
| Current Liab. | 2045 | 2881 | 1710 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 3.5% | *4.5%* |
| "Cash Flow" | 8.0% | 7.0% | *6.5%* |
| Earnings | 10.5% | 8.0% | *8.5%* |
| Dividends | 11.0% | 11.5% | *8.5%* |
| Book Value | 3.5% | 4.5% | *5.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 761 | 853 | 976 | 850 | 3440 |
| 2019 | 813 | 882 | 1013 | 902 | 3610 |
| 2020 | 844 | 931 | 1079 | 923 | 3777 |
| 2021 | 888 | 999 | *1160* | *975* | *4025* |
| 2022 | *935* | *1055* | *1200* | *1050* | *4240* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .59 | .91 | 1.03 | .62 | 3.15 |
| 2019 | .62 | .94 | 1.33 | .54 | 3.43 |
| 2020 | .68 | .97 | 1.46 | .80 | 3.91 |
| 2021 | .73 | 1.14 | *1.53* | *.85* | *4.25* |
| 2022 | *.80* | *1.15* | *1.70* | *.95* | *4.60* |

| Calendar | QUARTERLY DIVIDENDS PAID B■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .375 | .415 | .415 | .415 | 1.62 |
| 2018 | .415 | .455 | .455 | .455 | 1.78 |
| 2019 | .455 | .50 | .50 | .50 | 1.96 |
| 2020 | .50 | .55 | .55 | .55 | 2.15 |
| 2021 | .55 | .6025 | .6025 | | |

**BUSINESS:** American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 15 million people in 46 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 86% of 2020 revenues. New Jersey is its largest market accounting for 24.5% of regulated revenues; Pennsylvania, 22.5%; Missouri, 10.6%. Has 6,800 employees. The Vanguard Grp, owns 11.7% of outstanding shares; BlackRock, Inc., 8.1%; officers & directors, less than 1.0%. (3/21 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

**American Water Works' earning prospects are among the best in the water utility industry.** The company got off to a strong start in 2021, as share earnings were up 13% in the first half. For the full year, our share-net estimate remains at $4.25, which would represent a 9% gain over 2020's record showing. We think this will be followed in 2022 by an 8% increase to $4.60 a share. What's more, the bottom line ought to grow 7%-10% through mid-decade.

**The company's strategy is very straightforward.** By far, it is the largest publicly traded water utility in the United States. Thus, it has the financial wherewithal and widespread distribution to better take advantage of a very inefficient fractured industry. American Water is able to buy a number of small municipally owned water districts each year and absorb them into its operations. Moreover, because there are such redundancies in this group, substantial cost savings are able to be realized. American is also able to expand its plant base, upon which is earns a return.

**The building budget is massive.** The country's water pipelines, valves, and treatment plants are outdated and in urgent need of replacement and repair. With it sprawling operations, American Water plans on spending almost $2 billion this year alone. The level of annual outlays ought to remain elevated, as the company believes that once this decade is completed, its capital expenditures budget will have been between $22 billion-$25 billion.

**Regulatory treatment remains a key factor in the company's performance.** As a regulated utility, American Water and its subsidiaries must file rate cases in the states where they operate. In the past, most authorities have had a constructive relationship with water companies because there is general agreement that underinvestment in the past was the reason for the poor state of the country's water infrastructure. Should the relationship become more adversarial, earnings growth would be hurt.

**These shares do not stand out at this juncture.** In addition to a 3 (Average) Timeliness rank, AWK's long-term total return potential is subpar.

*James A. Flood* *October 8, 2021*

(A) Diluted earnings. Excludes nonrecur. losses: '08, $4.62; '09, $2.63; '11, $0.07. Disc. oper.: '06, ($0.04); '11, $0.03; '12, ($0.10); '13,($0.01). GAAP used as of 2014. Next earnings report due early November. (B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available. (C) In millions. (D) Includes intangibles. On 6/30/21: $1.561 billion, $8.60/share. (E) Pro forma numbers for '06 & '07.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 100 |
| Earnings Predictability | 90 |

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# CALIFORNIA WATER NYSE-CWT

RECENT PRICE 58.99 | P/E RATIO 26.7 (Trailing: 20.1 Median: 24.0) | RELATIVE P/E RATIO 1.41 | DIV'D YLD 1.6% | VALUE LINE

TIMELINESS 2 Raised 10/1/21
SAFETY 3 Lowered 7/27/07
TECHNICAL 2 Raised 9/24/21
BETA .70 (1.00 = Market)

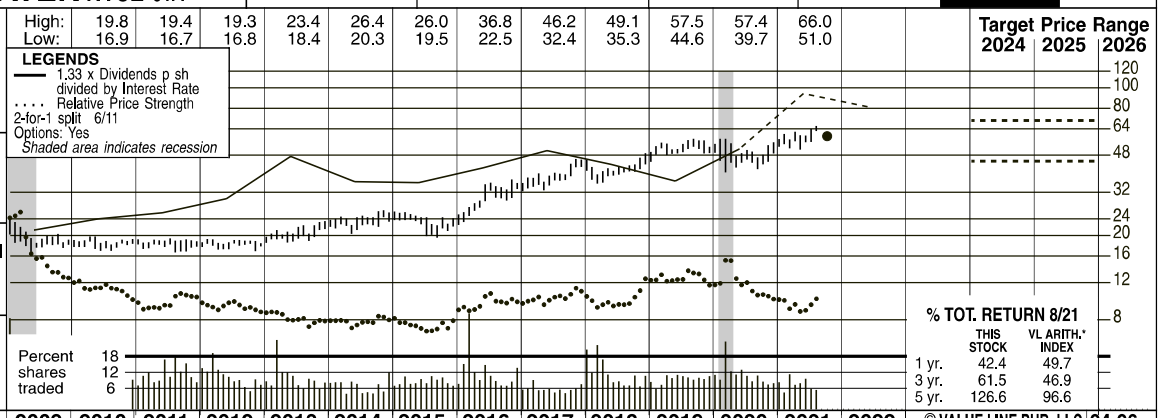
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$49-$81 $65 (10%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 70 | (+20%) | 6% |
| Low | 45 | (-25%) | -4% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 122 | 112 | 113 |
| to Sell | 91 | 104 | 99 |
| Hld's(000) | 37534 | 38005 | 39103 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.72 | 8.10 | 8.88 | 9.90 | 10.82 | 11.05 | 12.00 | 13.34 | 12.23 | 12.50 | 12.29 | 12.70 | 13.89 | 14.53 | 14.72 | 15.78 | *15.85* | *16.35* | Revenues per sh | *16.70* |
| 1.52 | 1.36 | 1.56 | 1.86 | 1.93 | 1.93 | 2.07 | 2.32 | 2.21 | 2.47 | 2.22 | 2.34 | 3.00 | 3.11 | 3.14 | 3.88 | *3.60* | *3.75* | "Cash Flow" per sh | *3.85* |
| .74 | .67 | .75 | .95 | .98 | .91 | .86 | 1.02 | 1.02 | 1.19 | .94 | 1.01 | 1.40 | 1.36 | 1.31 | 1.97 | *2.05* | *2.20* | Earnings per sh [A] | *2.35* |
| .57 | .58 | .58 | .59 | .59 | .60 | .62 | .63 | .64 | .65 | .67 | .69 | .72 | .75 | .79 | .85 | *.92* | *.98* | Div'd Decl'd per sh [B] ■ | *1.15* |
| 2.01 | 2.14 | 1.84 | 2.41 | 2.66 | 2.97 | 2.83 | 3.04 | 2.58 | 2.76 | 3.69 | 4.77 | 5.40 | 5.65 | 5.64 | 5.93 | *5.25* | *5.50* | Cap'l Spending per sh | *5.85* |
| 7.90 | 9.07 | 9.25 | 9.72 | 10.13 | 10.45 | 10.76 | 11.28 | 12.54 | 13.11 | 13.41 | 13.75 | 14.44 | 15.19 | 16.07 | 18.30 | *19.90* | *19.70* | Book Value per sh [C] | *20.30* |
| 36.78 | 41.31 | 41.33 | 41.45 | 41.53 | 41.67 | 41.82 | 41.98 | 47.74 | 47.81 | 47.88 | 47.97 | 48.01 | 48.07 | 48.53 | 50.33 | *51.50* | *52.00* | Common Shs Outst'g [D] | *53.00* |
| 24.9 | 29.2 | 26.1 | 19.8 | 19.7 | 20.3 | 21.3 | 17.9 | 20.1 | 19.7 | 24.8 | 29.6 | 26.9 | 30.3 | 39.3 | 24.9 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *24.0* |
| 1.33 | 1.58 | 1.39 | 1.19 | 1.31 | 1.29 | 1.34 | 1.14 | 1.13 | 1.04 | 1.25 | 1.55 | 1.35 | 1.64 | 2.09 | 1.29 | | | Relative P/E Ratio | *1.30* |
| 3.1% | 2.9% | 3.0% | 3.1% | 3.1% | 3.2% | 3.4% | 3.5% | 3.1% | 2.8% | 2.9% | 2.3% | 1.9% | 1.8% | 1.5% | 1.7% | | | Avg Ann'l Div'd Yield | *2.0%* |
| 501.8 | 560.0 | 584.1 | 597.5 | 588.4 | 609.4 | 666.9 | 698.2 | 714.6 | 794.3 | *815* | *850* | Revenues ($mill) [E] | *885* |
| 36.1 | 42.6 | 47.3 | 56.7 | 45.0 | 48.7 | 67.2 | 65.6 | 63.1 | 96.8 | *105* | *115* | Net Profit ($mill) | *124* |
| 40.5% | 37.5% | 30.3% | 33.0% | 36.0% | 35.5% | 30.1% | 24.5% | 19.1% | 11.1% | *21.0%* | *21.0%* | Income Tax Rate | *21.0%* |
| 7.6% | 8.0% | 4.3% | 2.7% | 4.3% | 6.1% | 3.5% | 3.1% | 5.8% | 3.3% | *5.0%* | *5.0%* | AFUDC % to Net Profit | *5.0%* |
| 51.7% | 47.8% | 41.6% | 40.1% | 44.4% | 44.6% | 42.7% | 49.3% | 50.2% | 45.9% | *49.5%* | *45.5%* | Long-Term Debt Ratio | *41.0%* |
| 48.3% | 52.2% | 58.4% | 59.9% | 55.6% | 55.4% | 57.3% | 50.7% | 49.8% | 54.1% | *50.5%* | *54.5%* | Common Equity Ratio | *59.0%* |
| 931.5 | 908.2 | 1024.9 | 1045.9 | 1154.4 | 1191.2 | 1209.3 | 1440.2 | 1566.7 | 1702.4 | *2025* | *1875* | Total Capital ($mill) | *1825* |
| 1381.1 | 1457.1 | 1515.8 | 1590.4 | 1701.8 | 1859.3 | 2048.0 | 2232.7 | 2406.4 | 2650.6 | *2775* | *2800* | Net Plant ($mill) | *2925* |
| 5.5% | 6.3% | 6.0% | 6.3% | 5.2% | 5.5% | 7.1% | 5.9% | 5.5% | 7.0% | *6.0%* | *7.0%* | Return on Total Cap'l | *7.5%* |
| 8.0% | 9.0% | 7.9% | 9.1% | 7.0% | 7.4% | 9.7% | 9.0% | 8.1% | 10.5% | *10.5%* | *11.0%* | Return on Shr. Equity | *11.5%* |
| 8.0% | 9.0% | 7.9% | 9.1% | 7.0% | 7.4% | 9.7% | 9.0% | 8.1% | 10.5% | *10.5%* | *11.0%* | Return on Com Equity | *11.5%* |
| 2.3% | 3.4% | 3.4% | 4.1% | 2.0% | 2.4% | 4.7% | 4.0% | 3.2% | 6.0% | *5.5%* | *6.0%* | Retained to Com Eq | *6.0%* |
| 71% | 62% | 56% | 55% | 71% | 68% | 51% | 55% | 60% | 43% | *45%* | *45%* | All Div'ds to Net Prof | *49%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $1210.1 mill. **Due in 5 Yrs** $357.0 mill.
**LT Debt** $1059.9 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 6.2x) (51% of Cap'l)

**Pension Assets-12/20** $716.8 mill.
**Oblig.** $833.9 mill.

**Pfd Stock** None

**Common Stock** 51,535,000 shs.

**MARKET CAP: $3.0 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 42.7 | 44.6 | 66.5 |
| Other | 142.0 | 221.4 | 239.1 |
| Current Assets | 184.7 | 266.0 | 305.6 |
| Accts Payable | 108.5 | 131.7 | 133.0 |
| Debt Due | 197.0 | 375.1 | 150.2 |
| Other | 53.2 | 81.9 | 79.2 |
| Current Liab. | 358.7 | 588.7 | 362.4 |

**BUSINESS:** California Water Service Group provides regulated and nonregulated water service to 492,600 customers in 100 communities in the state of California. Accounts for about 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '20: residential, 70%; business, 18%; industrial, 4%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/21 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki. Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.5% | 4.0% | *2.0%* |
| "Cash Flow" | 6.0% | 8.0% | *2.0%* |
| Earnings | 5.0% | 8.0% | *7.0%* |
| Dividends | 3.0% | 4.0% | *6.5%* |
| Book Value | 5.0% | 5.0% | *3.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.)[E] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 134.6 | 174.9 | 221.3 | 167.4 | 698.2 |
| 2019 | 126.1 | 179.0 | 232.6 | 176.9 | 714.6 |
| 2020 | 125.6 | 175.5 | 304.1 | 189.1 | 794.3 |
| 2021 | 147.7 | 213.1 | *250* | *204.2* | *815* |
| 2022 | *160* | *220* | *260* | *210* | *850* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | d.02 | .31 | .75 | .32 | 1.36 |
| 2019 | d.16 | .35 | .88 | .24 | 1.31 |
| 2020 | d.42 | .11 | 1.94 | .31 | 1.97 |
| 2021 | d.06 | .75 | *.95* | *.41* | *2.05* |
| 2022 | *.10* | *.65* | *1.00* | *.45* | *2.20* |

| Calendar | QUARTERLY DIVIDENDS PAID [B] ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .18 | .18 | .18 | .18 | .72 |
| 2018 | .1875 | .1875 | .1875 | .1875 | .75 |
| 2019 | .1975 | .1975 | .1975 | .1975 | .79 |
| 2020 | .2125 | .2125 | .2125 | .2125 | .85 |
| 2021 | .230 | .230 | .230 | | |

**California Water's second-quarter results markedly exceeded expectations.** The stronger-than-anticipated showing can be largely attributed to the company's December, 2020 general rate case approval (as noted in our previous report). Specifically, cumulative rate increases and the continuation of various regulatory benefits helped bolster California Water's June-period operating results. Revenues of $213 million improved 21% year over year, easily outpacing our $200 million projection. Likewise, earnings of $0.75 per share smashed consensus estimates, jumping more than six times the previous-year tally. Positives from the abovementioned rate case vastly outweighed a modest uptick in administrative expenses. All told, we are adding $15 million and $0.35 to our current-year top- and bottom-line estimates, to $815 million and $2.05 per share, respectively.

**The West Coast utility recently received the nod to acquire the water and wastewater systems of Preserve community in Millerton.** The planned community consists of 1,400 mixed-use units, including residential, commercial, parks, and offices. California Water will begin operating and servicing the community upon official occupancy, which is slated for early next year.

**Business prospects are bright 3- to 5-years out.** First, economic conditions are apt to improve over the coming years, which ought to support residential and commercial water consumption. Second, the ball has just started rolling on the company's strategic capital investment initiatives (service pipeline and wastewater treatment facility upgrades). To this point, further rate case filings are likely to follow, suggesting higher rates for customers will eventually be on tap as well.

**Momentum investors are best suited here, at the moment.** California Water is favorably ranked (Timeliness: 2) for relative year-ahead price performance. But at the recent quotation, the stock does not particularly stand out for the pull to mid-decade, as total return potential is below the *Value Line* median. In sum, patient subscribers looking to add a noncyclical utility to their portfolios should probably turn the page, for now.

*Nicholas P. Patrikis* *October 8, 2021*

(A) Basic EPS. Excl. nonrecurring gain (loss): '11, 4¢. Next earnings report due early Nov.
(B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. intangible assets. In '20 : $27.6 mill., $0.55/sh.
(D) In millions, adjusted for split.
(E) Excludes non-regulated revenues

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 95 |
| Price Growth Persistence | 70 |
| Earnings Predictability | 60 |

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# ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE 46.48 | P/E RATIO 28.2 (Trailing: 28.0 Median: 23.0) | RELATIVE P/E RATIO 1.49 | DIV'D YLD 2.3% | VALUE LINE

TIMELINESS 3 Lowered 7/30/21
SAFETY 3 Lowered 1/8/21
TECHNICAL 3 Raised 9/3/21
BETA 1.00 (1.00 = Market)

**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$37-$87 $62 (35%)

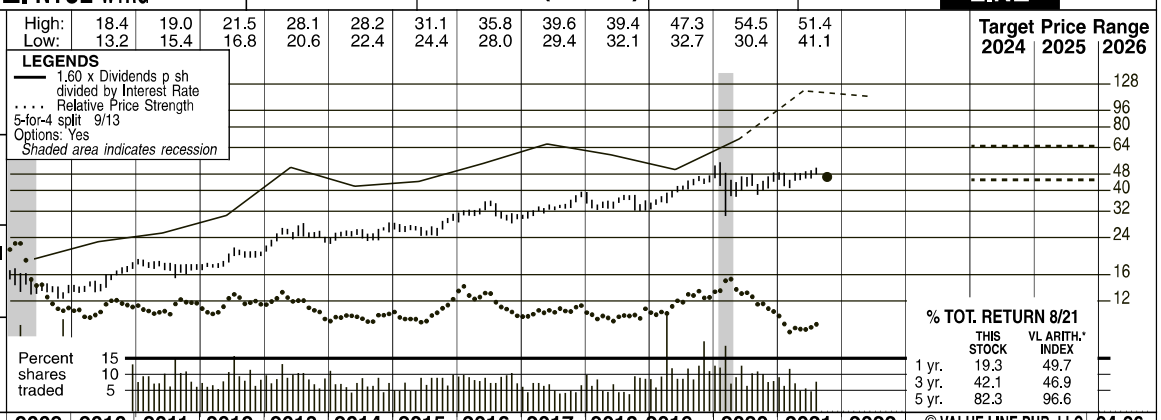
**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+40%) | 11% |
| Low | 45 | (-5%) | 2% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 264 | 258 | 244 |
| to Sell | 221 | 238 | 231 |
| Hld's(000) | 169334 | 176001 | 171680 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 18.4 | 19.0 | 21.5 | 28.1 | 28.2 | 31.1 | 35.8 | 39.6 | 39.4 | 47.3 | 54.5 | 51.4 | | | | | | | | |
| Low: | 13.2 | 15.4 | 16.8 | 20.6 | 22.4 | 24.4 | 28.0 | 29.4 | 32.1 | 32.7 | 30.4 | 41.1 | | | | | | | | |
| | 3.08 | 3.23 | 3.61 | 3.71 | 3.93 | 4.21 | 4.10 | 4.32 | 4.32 | 4.37 | 4.61 | 4.62 | 4.56 | 4.71 | 4.03 | 5.96 | *7.45* | *8.00* | Revenues per sh | *8.70* |
| | .97 | 1.01 | 1.10 | 1.14 | 1.29 | 1.42 | 1.45 | 1.51 | 1.82 | 1.89 | 1.87 | 2.07 | 2.12 | 1.90 | 1.73 | 2.21 | *2.55* | *2.80* | "Cash Flow" per sh | *3.05* |
| | .57 | .56 | .57 | .58 | .62 | .72 | .83 | .87 | 1.16 | 1.20 | 1.14 | 1.32 | 1.35 | 1.08 | 1.04 | 1.12 | *1.70* | *1.80* | Earnings per sh [A] | *2.00* |
| | .32 | .35 | .38 | .41 | .44 | .47 | .50 | .54 | .58 | .63 | .69 | .74 | .79 | .85 | .91 | .97 | *1.04* | *1.12* | Div'd Decl'd per sh [B■] | *1.40* |
| | 1.47 | 1.64 | 1.43 | 1.58 | 1.66 | 1.89 | 1.90 | 1.98 | 1.73 | 1.84 | 2.07 | 2.16 | 2.69 | 2.78 | 2.49 | 3.41 | *4.00* | *4.00* | Cap'l Spending per sh | *3.75* |
| | 5.04 | 5.57 | 5.85 | 6.26 | 6.50 | 6.81 | 7.21 | 7.90 | 8.63 | 9.27 | 9.78 | 10.43 | 11.02 | 11.28 | 17.58 | 19.09 | *20.90* | *21.80* | Book Value per sh | *24.15* |
| | 161.21 | 165.41 | 166.75 | 169.21 | 170.61 | 172.46 | 173.60 | 175.43 | 177.93 | 178.59 | 176.54 | 177.39 | 177.71 | 178.09 | 220.76 | 245.39 | *253.00* | *254.50* | Common Shs Outst'g [C] | *270.00* |
| | 31.8 | 34.7 | 32.0 | 24.9 | 23.1 | 21.1 | 21.3 | 21.9 | 21.2 | 20.8 | 23.5 | 23.9 | 24.7 | 32.6 | 39.1 | 39.6 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *27.0* |
| | 1.69 | 1.87 | 1.70 | 1.50 | 1.54 | 1.34 | 1.34 | 1.39 | 1.19 | 1.09 | 1.18 | 1.25 | 1.24 | 1.76 | 2.08 | 2.06 | | | Relative P/E Ratio | *1.50* |
| | 1.8% | 1.8% | 2.1% | 2.8% | 3.1% | 3.1% | 2.8% | 2.8% | 2.4% | 2.5% | 2.6% | 2.3% | 2.4% | 2.4% | 2.2% | 2.2% | | | Avg Ann'l Div'd Yield | *2.8%* |
| | 712.0 | 757.8 | 768.6 | 779.9 | 814.2 | 819.9 | 809.5 | 838.1 | 889.7 | 1462.7 | *1890* | *2040* | Revenues ($mill) | *2350* | | | | | | |
| | 144.8 | 153.1 | 205.0 | 213.9 | 201.8 | 234.2 | 239.7 | 192.0 | 224.5 | 284.8 | *420* | *455* | Net Profit ($mill) | *540* | | | | | | |
| | 32.9% | 39.0% | 10.0% | 10.5% | 6.9% | 8.2% | 6.6% | -- | 6.6% | 6.6% | *5.0%* | *6.0%* | Income Tax Rate | *7.0%* | | | | | | |
| | -- | -- | 1.1% | 2.4% | 3.1% | 3.8% | 6.3% | 6.8% | 7.2% | 4.5% | *7.0%* | *7.5%* | AFUDC % to Net Profit | *6.0%* | | | | | | |
| | 52.7% | 52.7% | 48.9% | 48.5% | 50.3% | 48.4% | 50.6% | 54.4% | 43.1% | 54.0% | *54.0%* | *56.0%* | Long-Term Debt Ratio | *55.0%* | | | | | | |
| | 47.3% | 47.3% | 51.1% | 51.5% | 49.7% | 51.6% | 49.4% | 45.6% | 56.9% | 46.0% | *46.0%* | *44.0%* | Common Equity Ratio | *45.0%* | | | | | | |
| | 2646.8 | 2929.7 | 3003.6 | 3216.0 | 3469.5 | 3587.7 | 3965.4 | 4407.8 | 6824.2 | 10192 | *11325* | *12400* | Total Capital ($mill) | *14500* | | | | | | |
| | 3612.9 | 3936.2 | 4167.3 | 4402.0 | 4688.9 | 5001.6 | 5399.9 | 5930.3 | 6345.8 | 9512.9 | *10175* | *10875* | Net Plant ($mill) | *12300* | | | | | | |
| | 6.9% | 6.6% | 8.0% | 7.8% | 6.9% | 7.6% | 7.1% | 5.5% | 4.2% | 3.7% | *4.5%* | *5.0%* | Return on Total Cap'l | *5.5%* | | | | | | |
| | 11.6% | 11.0% | 13.4% | 12.9% | 11.7% | 12.7% | 12.2% | 9.6% | 5.8% | 6.1% | *8.0%* | *8.5%* | Return on Shr. Equity | *8.5%* | | | | | | |
| | 11.6% | 11.0% | 13.4% | 12.9% | 11.7% | 12.7% | 12.2% | 9.6% | 5.8% | 6.1% | *8.0%* | *8.5%* | Return on Com Equity | *8.5%* | | | | | | |
| | 4.6% | 4.3% | 6.7% | 6.1% | 4.7% | 5.6% | 5.1% | 2.1% | .9% | 1.1% | *3.0%* | *3.0%* | Retained to Com Eq | *3.0%* | | | | | | |
| | 60% | 61% | 50% | 52% | 60% | 56% | 59% | 79% | 84% | 82% | *63%* | *62%* | All Div'ds to Net Prof | *70%* | | | | | | |




**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $5799.7 mill. **Due in 5 Yrs** $1102 mill.
**LT Debt** $5648.2 mill. **LT Interest** $203.0 mill.
(42% of Cap'l)

**Pension Assets-12/20** $426.8 mill.
**Oblig.** $486.2 mill.

**Pfd Stock** None
**Common Stock** 245,757,399 shares
**as of 7/23/21**

**MARKET CAP: $11.4 billion (Large Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 1868.9 | 4.8 | 8.4 |
| Receivables | 67.1 | 154.8 | 129.2 |
| Inventory (AvgCst) | 18.4 | 58.4 | 63.4 |
| Other | 58.3 | 162.2 | 103.7 |
| Current Assets | 2012.7 | 380.2 | 304.7 |
| Accts Payable | 74.9 | 177.5 | 131.8 |
| Debt Due | 130.8 | 162.6 | 151.5 |
| Other | 113.1 | 263.8 | 185.9 |
| Current Liab. | 318.8 | 603.9 | 469.2 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.0% | 2.0% | *10.0%* |
| "Cash Flow" | 4.5% | 1.0% | *6.5%* |
| Earnings | 5.5% | -1.5% | *10.0%* |
| Dividends | 7.5% | 7.5% | *7.5%* |
| Book Value | 9.5% | 11.5% | *6.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 194.3 | 211.9 | 226.2 | 205.7 | 838.1 |
| 2019 | 201.1 | 218.9 | 243.6 | 226.1 | 889.7 |
| 2020 | 255.6 | 384.5 | 348.6 | 474.0 | 1462.7 |
| 2021 | 583.6 | 397.0 | *389.4* | *520* | *1890* |
| 2022 | *600* | *435* | *435* | *570* | *2040* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .29 | .37 | .44 | d.02 | 1.08 |
| 2019 | .09 | .25 | .38 | .28 | 1.04 |
| 2020 | .21 | .29 | .22 | .40 | 1.12 |
| 2021 | .72 | .32 | *.23* | *.43* | *1.70* |
| 2022 | *.67* | *.33* | *.35* | *.45* | *1.80* |

| Calendar | QUARTERLY DIVIDENDS PAID [B■] Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .1913 | .1913 | .2047 | .2047 | .79 |
| 2018 | .2047 | .2047 | .219 | .219 | .85 |
| 2019 | .219 | .219 | .2343 | .2343 | .91 |
| 2020 | .2343 | .2343 | .2507 | .2507 | .97 |
| 2021 | .2507 | .2507 | .2682 | | |

**BUSINESS:** Essential Utilities, Inc. became the new name for Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples, a natural gas utility, which occurred in 3/20. In 2020, Aqua Amer. provided water and wastewater services to about 5 million people in PA, OH, TX, IL, NC, NJ, IN, VA NS WS. Employed 3,180 Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water respn. for 65% of revenues in 2020; residential, 39%; commercial, 10%; industrial, wastewater & other, 16%. Gas 35%. Off. & dir. own less than 1% of the common stock; Vanguard, 10.1%; BlackRock, 10.0%; Canadian Pension Plan about 8.8% (5/21 proxy). Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 W Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

**Shares of Essential Water have not performed well of late.** Since our July report, the price of the stock is up less than 1%. This compares unfavorably to the equities of other water utilities and the S&P 500 Index. Indeed, WTRG has trailed all but one equity in the group.

**A major rate case has been filed in Pennsylvania.** In late August, the company petitioned state regulators to recover the $1.1 billion (an average of $2,235 per customer), it has invested since its last filing. These funds were spent on replacing more than 400 miles of pipes and upgrading treatment plants. Historically, the regulatory commission has reached constructive decisions, as it's a recognized fact that like most other members in the industry, Essential's water infrastructure is badly in need of repair. If the full request is permitted, the average residential monthly bill would rise from $55.51 to $73.95. So, even though previous rulings have been positive, regulatory commissions are under pressure to keep rates low. Due to the necessity of these outlays, and knowing that the company must continue making large expenditures, we think state authorities will be fair.

**Second-quarter earnings were better than expected.** The June period was the first three-month income report in which Essential's numbers could be compared on an apple-to-apple basis to the previous year. (Recall that the company is the result of a large acquisition of the natural gas utility Peoples in mid-March of 2020.) Share net of $0.32 was 23% higher than we had forecast. This came despite weak demand for gas resulting from warmer-than-anticipated temperatures. We now expect the company to post earnings per share of $1.70, slightly above management's $1.64 to $1.69 range. In 2022, a more moderate advance of about 6% seems to be in the cards.

**This neutrally ranked stock does not stand out for near- or long-term total return potential.** However, its prospects are still better than most in the industry, and its dividend was recently raised a healthy 7%. Investors should also bear in mind that WTRG is no longer a pure water utility play, as its gas operations are now substantial.

*James A. Flood* *October 8, 2021*

(A) Diluted egs. Excl. nonrec. gains: '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. Quarterly EPS do not add in '19 due to a large change in the number of shares outstanding in the Dec. period. Next earnings report early November. (B) Dividends historically paid in early March, June, Sept., & Dec. ■ Div'd. reinvestment plan available (5% discount). (C) In millions, adjusted for stock splits. (D) Includes intangibles: 6/30/21, $2.341 bill./$9.53 a share.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 85 |
| Price Growth Persistence | 90 |
| Earnings Predictability | 60 |

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# MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 104.47 | P/E RATIO 43.9 (Trailing: 47.5 Median: 23.0) | RELATIVE P/E RATIO 2.32 | DIV'D YLD 1.1% | VALUE LINE

TIMELINESS 3 Lowered 6/4/21
SAFETY 2 New 10/21/11
TECHNICAL 3 Raised 10/1/21
BETA .70 (1.00 = Market)

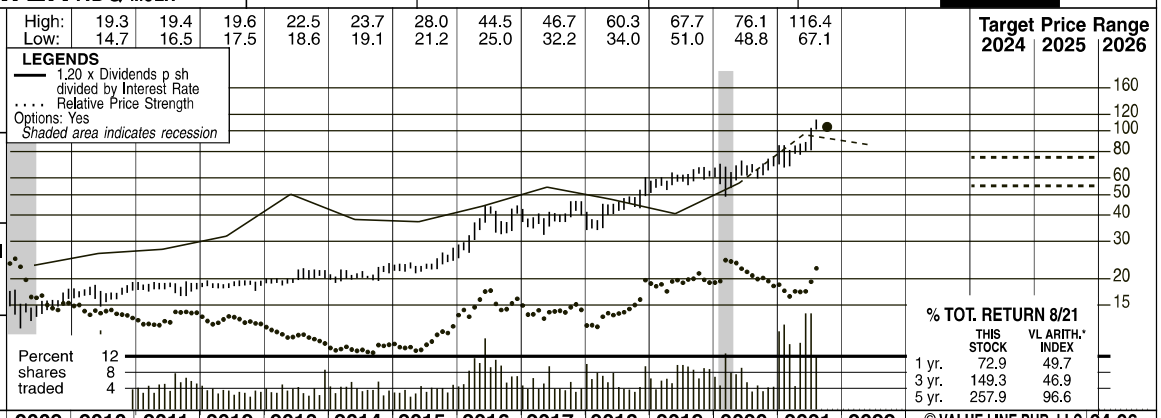
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$65-$132 $99 (-5%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 75 | (-30%) | -6% |
| Low | 55 | (-45%) | -13% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 67 | 64 | 71 |
| to Sell | 49 | 67 | 65 |
| Hld's(000) | 10675 | 10712 | 10852 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.44 | 6.16 | 6.50 | 6.79 | 6.75 | 6.60 | 6.50 | 6.98 | 7.19 | 7.26 | 7.77 | 8.16 | 8.00 | 8.42 | 7.72 | 8.10 | *8.45* | *8.70* | Revenues per sh | *9.15* |
| 1.33 | 1.33 | 1.49 | 1.53 | 1.40 | 1.55 | 1.46 | 1.56 | 1.72 | 1.84 | 1.97 | 2.17 | 2.24 | 2.89 | 2.90 | 3.25 | *3.20* | *3.35* | "Cash Flow" per sh | *3.75* |
| .71 | .82 | .87 | .89 | .72 | .96 | .84 | .90 | 1.03 | 1.13 | 1.22 | 1.38 | 1.38 | 1.96 | 2.01 | 2.18 | *2.30* | *2.40* | Earnings per sh [A] | *2.75* |
| .67 | .68 | .69 | .70 | .71 | .72 | .73 | .74 | .75 | .76 | .78 | .81 | .86 | .91 | .98 | 1.04 | *1.10* | *1.15* | Div'd Decl'd per sh [B]■ | *1.35* |
| 2.18 | 2.31 | 1.66 | 2.12 | 1.49 | 1.90 | 1.50 | 1.36 | 1.26 | 1.40 | 1.59 | 2.91 | 3.08 | 4.40 | 5.11 | 6.04 | *5.50* | *5.50* | Cap'l Spending per sh | *6.25* |
| 8.26 | 9.52 | 10.05 | 10.03 | 10.33 | 11.13 | 11.27 | 11.48 | 11.82 | 12.24 | 12.74 | 13.40 | 14.02 | 15.17 | 18.57 | 19.81 | *19.45* | *19.60* | Book Value per sh | *20.85* |
| 11.58 | 13.17 | 13.25 | 13.40 | 13.52 | 15.57 | 15.70 | 15.82 | 15.96 | 16.12 | 16.23 | 16.30 | 16.35 | 16.40 | 17.43 | 17.47 | *17.75* | *17.85* | Common Shs Outst'g [C] | *18.00* |
| 27.4 | 22.7 | 21.6 | 19.8 | 21.0 | 17.8 | 21.7 | 20.8 | 19.7 | 18.5 | 19.1 | 25.6 | 28.4 | 22.2 | 29.7 | 30.1 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *24.0* |
| 1.46 | 1.23 | 1.15 | 1.19 | 1.40 | 1.13 | 1.36 | 1.32 | 1.11 | .97 | .96 | 1.34 | 1.43 | 1.20 | 1.58 | 1.56 | | | Relative P/E Ratio | *1.30* |
| 3.5% | 3.7% | 3.7% | 4.0% | 4.7% | 4.2% | 4.0% | 4.0% | 3.7% | 3.7% | 3.3% | 2.3% | 2.2% | 2.1% | 1.6% | 1.6% | | | Avg Ann'l Div'd Yield | *2.1%* |
| 102.1 | 110.4 | 114.8 | 117.1 | 126.0 | 132.9 | 130.8 | 138.1 | 134.6 | 141.6 | *150* | *155* | Revenues ($mill) | *165* |
| 13.4 | 14.4 | 16.6 | 18.4 | 20.0 | 22.7 | 22.8 | 32.5 | 33.9 | 38.4 | *41.0* | *43.0* | Net Profit ($mill) | *49.5* |
| 32.7% | 33.9% | 34.1% | 35.0% | 34.5% | 34.0% | 32.7% | 2.8% | 2.8% | 2.8% | *21.0%* | *21.0%* | Income Tax Rate | *21.0%* |
| 6.1% | 3.4% | 1.9% | 1.7% | 1.9% | 2.7% | 3.1% | 1.4% | 3.4% | 3.9% | *2.5%* | *2.5%* | AFUDC % to Net Profit | *2.5%* |
| 42.3% | 41.5% | 40.4% | 40.5% | 39.4% | 37.9% | 37.5% | 37.8% | 41.5% | 44.0% | *42.5%* | *41.5%* | Long-Term Debt Ratio | *40.0%* |
| 56.6% | 57.4% | 58.7% | 58.8% | 59.8% | 61.5% | 61.8% | 61.6% | 58.2% | 55.7% | *57.0%* | *58.0%* | Common Equity Ratio | *60.0%* |
| 312.5 | 316.5 | 321.4 | 335.8 | 345.4 | 355.4 | 370.7 | 404.1 | 556.7 | 621.5 | *610* | *600* | Total Capital ($mill) | *630* |
| 422.2 | 435.2 | 446.5 | 465.4 | 481.9 | 517.8 | 557.2 | 618.5 | 705.7 | 796.6 | *800* | *815* | Net Plant ($mill) | *835* |
| 5.2% | 5.4% | 5.9% | 6.3% | 6.6% | 7.1% | 6.9% | 8.9% | 6.7% | 6.8% | *7.0%* | *7.5%* | Return on Total Cap'l | *8.5%* |
| 7.5% | 7.8% | 8.7% | 9.2% | 9.6% | 10.3% | 9.8% | 12.9% | 10.4% | 11.0% | *12.0%* | *12.0%* | Return on Shr. Equity | *13.0%* |
| 7.5% | 7.8% | 8.7% | 9.3% | 9.6% | 10.3% | 9.9% | 13.0% | 10.4% | 11.1% | *12.0%* | *12.5%* | Return on Com Equity | *13.0%* |
| 1.0% | 1.4% | 2.4% | 3.1% | 3.5% | 4.3% | 3.8% | 7.0% | 5.4% | 5.8% | *6.0%* | *6.5%* | Retained to Com Eq | *6.5%* |
| 87% | 83% | 73% | 67% | 63% | 58% | 62% | 46% | 48% | 48% | *48%* | *48%* | All Div'ds to Net Prof | *49%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $279.7 mill. **Due in 5 Yrs** $43.7 mill.
**LT Debt** $272.5 mill. **LT Interest** $7.5 mill.
(Total interest coverage: 7.8x)
(44% of Cap'l)

**Pension Assets-12/20** $88.9 mill.
**Oblig.** $115.9 mill.
**Pfd Stock** $2.4 mill. **Pfd Div'd:** $.1 mill.

**Common Stock** 17,490,561 shs.
**as of 7/30/20**

**MARKET CAP: $1.8 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 2.2 | 4.5 | 6.0 |
| Other | 26.9 | 29.6 | 31.2 |
| Current Assets | 29.1 | 34.1 | 37.2 |
| Accts Payable | 23.3 | 30.4 | 23.1 |
| Debt Due | 27.2 | 9.3 | 7.2 |
| Other | 14.5 | 17.1 | 50.4 |
| Current Liab. | 65.0 | 56.8 | 80.7 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.0% | 2.0% | *2.0%* |
| "Cash Flow" | 7.5% | 10.5% | *3.5%* |
| Earnings | 9.0% | 12.5% | *5.0%* |
| Dividends | 3.0% | 5.0% | *5.5%* |
| Book Value | 5.5% | 8.0% | *2.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 31.2 | 34.9 | 38.7 | 33.3 | 138.1 |
| 2019 | 30.7 | 33.4 | 37.8 | 32.7 | 134.6 |
| 2020 | 31.8 | 35.3 | 39.9 | 34.6 | 141.6 |
| 2021 | 32.5 | 36.7 | *43.0* | *37.8* | *150* |
| 2022 | *34.0* | *38.0* | *45.0* | *38.0* | *155* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .27 | .52 | .74 | .43 | 1.96 |
| 2019 | .39 | .49 | .66 | .46 | 2.01 |
| 2020 | .44 | .55 | .72 | .47 | 2.18 |
| 2021 | .39 | .62 | *.75* | *.54* | *2.30* |
| 2022 | *.47* | *.58* | *.80* | *.55* | *2.40* |

| Calendar | QUARTERLY DIVIDENDS PAID [B]■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .21125 | .21125 | .21125 | .22375 | .86 |
| 2018 | .22375 | .22375 | .22375 | .24 | .91 |
| 2019 | .24 | .24 | .24 | .2562 | .98 |
| 2020 | .2562 | .2562 | .2562 | .2725 | 1.04 |
| 2021 | .2725 | .2725 | .2725 | | |

**BUSINESS:** Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2020, the Middlesex System accounted for 59% of operating revenues. At 12/31/20, the company had 348 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 2.0% of the com. stock; BlackRock Inst. Trust Co., 7.8% (4/21 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

**Shares of Middlesex Water established a fresh all-time high price during the month of September.** In fact, since our previous report, the stock has surged more than 20% in value and, year to date, has logged about a 30% gain. Underpinning recent investor support for the water utility, in our view, is a combination of strong second-quarter financial results (discussed below) and a broadly increasing adoption of a flight-to-safety investment approach.

**We are lifting our 2021 bottom-line estimate.** For the June period, Middlesex delivered revenues of $36.7 million, which was roughly on par with consensus expectations. The figure improved about 4% year over year, helped along by higher water consumption and an expanding customer base in its Delaware systems. Meanwhile, net income jumped 13% from the previous-year tally, to $0.62 per share. On balance, we are adding $0.10 to our current-year forecast, to $2.30 per share.

**The company has agreed to an asset divestment.** Specifically, Middlesex inked a deal to sell its wholly-owned wastewater subsidiary Tidewater Environmental Services to Artesian Wastewater Management for $6.4 million in cash. The unit services approximately 3,600 customers in the Delaware area. The transaction, which is slated for completion within the fourth quarter, is subject to approval by the Delaware Public Service Commission and other customary closing conditions.

**Business prospects three to five years out are solid.** Our outlook for modest annual revenue and earnings expansion has not wavered. Middlesex's operations, which are largely uncorrelated to economic conditions, ought to perform decently over the pull to mid-decade.

**We think the recently elevated quotation presents an opportunity for current shareholders to book some profits.** Good-quality Middlesex shares are merely an Average (3) selection for relative year-ahead price performance. Moreover, the stock is trading at an extremely lofty price-to-earnings multiple. Patient subscribers should turn the page, too, as nearly all of the growth we envision out to 2024-2026 appears to already be baked into the recent price.

*Nicholas P. Patrikis* *October 8, 2021*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 85 |
| Price Growth Persistence | 70 |
| Earnings Predictability | 85 |

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# SJW GROUP NYSE-SJW

RECENT PRICE 65.82 | P/E RATIO 28.7 (Trailing: 30.6 Median: 21.0) | RELATIVE P/E RATIO 1.52 | DIV'D YLD 2.1% | VALUE LINE

TIMELINESS 4 Lowered 8/13/21
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 10/1/21
BETA .80 (1.00 = Market)

**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$52-$113 $83 (25%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 100 | (+50%) | 13% |
| Low | 65 | (Nil) | 2% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 80 | 87 | 81 |
| to Sell | 68 | 73 | 64 |
| Hld's(000) | 19850 | 20963 | 21472 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 28.2 | 26.8 | 26.9 | 30.1 | 33.7 | 35.7 | 56.9 | 69.3 | 68.4 | 74.5 | 75.0 | 71.7 | | | | | | |
| Low: | 21.6 | 20.9 | 22.6 | 24.5 | 25.5 | 27.5 | 28.6 | 45.4 | 51.3 | 53.9 | 45.6 | 58.0 | | | | | | |

LEGENDS
1.50 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
Shaded area indicates recession

Target Price Range 2024 2025 2026

% TOT. RETURN 8/21

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 13.1 | 49.7 |
| 3 yr. | 26.3 | 46.9 |
| 5 yr. | 77.4 | 96.6 |

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| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.86 | 10.35 | 11.25 | 12.12 | 11.68 | 11.62 | 12.85 | 14.01 | 13.73 | 15.76 | 14.97 | 16.61 | 18.97 | 14.00 | 14.78 | 19.77 | *19.65* | *20.50* | Revenues per sh | *22.15* |
| 2.21 | 2.38 | 2.30 | 2.44 | 2.21 | 2.38 | 2.80 | 2.97 | 2.90 | 4.42 | 3.86 | 4.76 | 5.24 | 3.29 | 3.67 | 5.28 | *3.85* | *4.30* | "Cash Flow" per sh | *5.30* |
| 1.12 | 1.19 | 1.04 | 1.08 | .81 | .84 | 1.11 | 1.18 | 1.12 | 2.54 | 1.85 | 2.57 | 2.86 | 1.82 | 1.35 | 2.14 | *2.20* | *2.65* | Earnings per sh [A] | *3.65* |
| .53 | .57 | .61 | .65 | .66 | .68 | .69 | .71 | .73 | .75 | .78 | .81 | 1.04 | 1.12 | 1.20 | 1.28 | *1.36* | *1.44* | Div'd Decl'd per sh [B]■ | *1.72* |
| 2.83 | 3.87 | 6.62 | 3.79 | 3.17 | 5.65 | 3.75 | 5.67 | 4.68 | 5.02 | 5.24 | 6.95 | 7.26 | 5.08 | 6.25 | 7.44 | *6.75* | *7.00* | Cap'l Spending per sh | *7.50* |
| 10.72 | 12.48 | 12.90 | 13.99 | 13.66 | 13.75 | 14.20 | 14.71 | 15.92 | 17.75 | 18.83 | 20.61 | 22.57 | 31.31 | 31.27 | 32.12 | *35.00* | *36.65* | Book Value per sh | *40.85* |
| 18.27 | 18.28 | 18.36 | 18.18 | 18.50 | 18.55 | 18.59 | 18.67 | 20.17 | 20.29 | 20.38 | 20.46 | 20.52 | 28.40 | 28.46 | 28.56 | *30.00* | *30.00* | Common Shs Outst'g [C] | *30.00* |
| 19.7 | 23.5 | 33.4 | 26.2 | 28.7 | 29.1 | 21.2 | 20.4 | 24.3 | 11.2 | 16.6 | 15.7 | 18.8 | 32.7 | 47.8 | 30.0 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *23.0* |
| 1.05 | 1.27 | 1.77 | 1.58 | 1.91 | 1.85 | 1.33 | 1.30 | 1.37 | .59 | .84 | .82 | .95 | 1.77 | 2.55 | 1.56 | | | Relative P/E Ratio | *1.30* |
| 2.4% | 2.0% | 1.7% | 2.3% | 2.8% | 2.8% | 2.9% | 3.0% | 2.7% | 2.6% | 2.5% | 2.0% | 1.9% | 1.9% | 1.9% | 2.0% | | | Avg Ann'l Div'd Yield | *2.1%* |
| 239.0 | 261.5 | 276.9 | 319.7 | 305.1 | 339.7 | 389.2 | 397.7 | 420.5 | 564.5 | *590* | *615* | Revenues ($mill) | *665* |
| 20.9 | 22.3 | 23.5 | 51.8 | 37.9 | 52.8 | 59.2 | 38.8 | 38.7 | 61.5 | *66.0* | *80.0* | Net Profit ($mill) | *110* |
| 41.1% | 41.1% | 38.7% | 32.5% | 38.1% | 38.8% | 36.7% | 20.6% | 25.3% | 12.0% | *21.0%* | *21.5%* | Income Tax Rate | *21.0%* |
| -- | -- | -- | -- | -- | -- | -- | -- | 2.0% | 1.5% | *1.5%* | *1.5%* | AFUDC % to Net Profit | *1.5%* |
| 56.6% | 55.0% | 51.1% | 51.6% | 49.8% | 50.7% | 48.2% | 32.7% | 59.1% | 58.4% | *53.5%* | *51.0%* | Long-Term Debt Ratio | *38.0%* |
| 43.4% | 45.0% | 48.9% | 48.4% | 50.2% | 49.3% | 51.8% | 67.3% | 40.9% | 41.6% | *46.5%* | *49.0%* | Common Equity Ratio | *62.0%* |
| 607.9 | 610.2 | 656.2 | 744.5 | 764.6 | 855.0 | 894.3 | 1320.7 | 2173.6 | 2204.7 | *2250* | *2250* | Total Capital ($mill) | *1975* |
| 756.2 | 831.6 | 898.7 | 963.0 | 1036.8 | 1146.4 | 1239.3 | 1328.8 | 2206.5 | 2334.9 | *2450* | *2565* | Net Plant ($mill) | *2775* |
| 4.9% | 5.0% | 5.0% | 8.3% | 6.3% | 7.4% | 7.9% | 3.9% | 2.5% | 4.0% | *3.5%* | *4.0%* | Return on Total Cap'l | *6.0%* |
| 7.9% | 8.1% | 7.3% | 14.4% | 9.9% | 12.5% | 12.8% | 4.4% | 4.3% | 6.7% | *6.5%* | *7.0%* | Return on Shr. Equity | *9.0%* |
| 7.9% | 8.1% | 7.3% | 14.4% | 9.9% | 12.5% | 12.8% | 4.4% | 4.3% | 6.7% | *6.5%* | *7.0%* | Return on Com Equity | *9.0%* |
| 3.1% | 3.3% | 2.8% | 10.2% | 5.7% | 8.6% | 8.2% | 1.8% | .5% | 2.7% | *2.5%* | *3.5%* | Retained to Com Eq | *4.5%* |
| 61% | 59% | 62% | 29% | 42% | 31% | 36% | 60% | 88% | 59% | *62%* | *54%* | All Div'ds to Net Prof | *47%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $1398.9 mill. **Due in 5 Yrs** $22.4 mill.
**LT Debt** $1372.1 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 4.1x)
(58% of Cap'l)

**Pension Assets-12/20** $278.1 mill.
**Oblig.** $386.1 mill.
**Pfd Stock** None.
**Common Stock** 29,804,927 shs.

**MARKET CAP: $2.0 billion (Mid Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | 17.9 | 9.3 | 28.1 |
| Accts Receivable | 36.3 | 58.1 | 54.9 |
| Other | 67.8 | 59.9 | 63.9 |
| Current Assets | 122.0 | 127.3 | 146.9 |
| Accts Payable | 34.9 | 34.2 | 39.5 |
| Debt Due | 22.3 | 76.2 | 26.8 |
| Other | 177.4 | 240.4 | 208.1 |
| Current Liab. | 234.6 | 350.8 | 274.4 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 2.0% | *5.5%* |
| "Cash Flow" | 5.5% | 2.0% | *4.5%* |
| Earnings | 7.0% | -.5% | *13.0%* |
| Dividends | 6.0% | 10.0% | *6.0%* |
| Book Value | 8.5% | 12.5% | *4.5%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 75.0 | 99.1 | 124.9 | 98.7 | 397.7 |
| 2019 | 77.7 | 103.0 | 114.0 | 126.0 | 420.5 |
| 2020 | 115.8 | 147.2 | 165.9 | 135.6 | 564.5 |
| 2021 | 114.8 | 152.2 | *175* | *148.0* | *590* |
| 2022 | *125* | *155* | *185* | *150* | *615* |

| Calendar | EARNINGS PER SHARE [A] Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .06 | .62 | .76 | .38 | 1.82 |
| 2019 | .21 | .47 | .33 | .34 | 1.35 |
| 2020 | .08 | .69 | .91 | .46 | 2.14 |
| 2021 | .09 | .69 | *.90* | *.52* | *2.20* |
| 2022 | *.18* | *.77* | *1.00* | *.70* | *2.65* |

| Calendar | QUARTERLY DIVIDENDS PAID [BD]■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .2175 | .2175 | .2175 | .3875 | 1.04 |
| 2018 | .28 | .28 | .28 | .28 | 1.12 |
| 2019 | .30 | .30 | .30 | .30 | 1.20 |
| 2020 | .32 | .32 | .32 | .32 | 1.28 |
| 2021 | .34 | .34 | .34 | | |

**BUSINESS:** SJW Group engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 231,000 connections with a total population of roughly one million people in the San Jose area and 16,000 connections that reach about 49,000 residents in the region between San Antonio and Austin, Texas. The company merged with Connecticut Water (10/19) which provides service to approx. 138,000 connections with a total population of 450,000 people. Has 361 employees. Officers and directors own 8.3% of outstanding shares (3/21 proxy). Chairman & CEO: Eric Thornburg. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

**SJW Group reported better-than-expected second-quarter financial results.** The East and West coasts water utility generated revenues of $152 million in the June period. The figure came in marginally above our $150 million call, thanks to cumulative water rate increases and higher customer usage. More impressively, SJW posted net income of $0.69 per share, matching the previous-year tally, while handily topping consensus estimates. Operating margins are indeed on the mend, but it is worth noting that roughly $0.09 can be attributed to a one-time gain from holdback funds received from the sale of equity interests in 2017.

**We are upping our current-year top- and bottom-line projections.** Our 2021 revenue estimate is moving higher by $5 million, to $590 million, while our earnings-per-share forecast is being raised by $0.15, to $2.20. Over the back half of this year, SJW's operations stand to benefit from a further rebound in economic activity, resulting in increased water consumption across both residential and commercial arenas.

**Share-net growth ought to accelerate next year and beyond.** For 2022, we look for earnings to expand 20%, year over year, to $2.65 per share. Moreover, the company has filed a relatively new rate case with the California Public Utilities Commission seeking approval to boost revenues up to $90 million, a $435 million capital budget to invest in water delivery infrastructure and upgrades, along with nearly $20 million in memorandum account recovery. All in all, the filing, which would be effective through 2024, should allow SJW to periodically increase customer rates over the next few years, thereby supporting top- and bottom-line growth.

**The stock has fallen out of favor on our Timeliness ranking scale.** Shares of SJW have been downgraded one notch, to 4 (Below Average) and, thus, are slated to lag the broader market over the coming six to 12 months. Moreover, at recent levels, total return potential over the 2024-2026 time frame is unenticing. Although long-term business prospects are favorable, we advise interested subscribers to remain on the sidelines until a better entry point is available.

*Nicholas P. Patrikis* *October 8, 2021*

(A) Diluted earnings. Excludes nonrecurring losses: '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early November. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions.
(D) Paid special dividend of $0.17 per share on 11/17.
(E) Suspended due to recent CTWS merger.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 80 |
| Earnings Predictability | 50 |

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# YORK WATER NDQ-YORW

RECENT PRICE 44.52 | P/E RATIO 32.5 (Trailing: 35.1 Median: 28.0) | RELATIVE P/E RATIO 1.72 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Lowered 1/15/21
SAFETY 3 Lowered 7/17/15
TECHNICAL 3 Raised 10/1/21
BETA .85 (1.00 = Market)

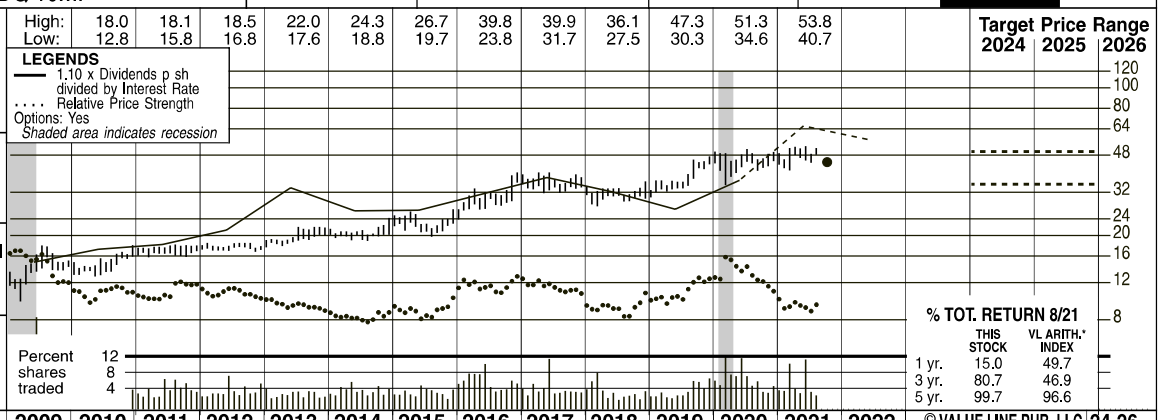
**18-Month Target Price Range**
Low-High Midpoint (% to Mid)
$34-$73 $54 (20%)

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 50 | (+10%) | 5% |
| Low | 35 | (-20%) | -4% |

**Institutional Decisions**

| | 4Q2020 | 1Q2021 | 2Q2021 |
|---|---|---|---|
| to Buy | 56 | 38 | 51 |
| to Sell | 46 | 56 | 43 |
| Hld's(000) | 5341 | 5518 | 5416 |




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 18.0 | 18.1 | 18.5 | 22.0 | 24.3 | 26.7 | 39.8 | 39.9 | 36.1 | 47.3 | 51.3 | 53.8 | | | | | | | | |
| Low: | 12.8 | 15.8 | 16.8 | 17.6 | 18.8 | 19.7 | 23.8 | 31.7 | 27.5 | 30.3 | 34.6 | 40.7 | | | | | | | | |
| | 2.58 | 2.56 | 2.79 | 2.89 | 2.95 | 3.07 | 3.18 | 3.21 | 3.27 | 3.58 | 3.68 | 3.70 | 3.77 | 3.74 | 3.96 | 4.12 | *4.25* | *4.50* | Revenues per sh | *5.10* |
| | .79 | .77 | .86 | .88 | .95 | 1.07 | 1.09 | 1.12 | 1.19 | 1.36 | 1.45 | 1.42 | 1.53 | 1.58 | 1.70 | 1.90 | *1.95* | *2.10* | "Cash Flow" per sh | *2.45* |
| | .56 | .58 | .57 | .57 | .64 | .71 | .71 | .72 | .75 | .89 | .97 | .92 | 1.01 | 1.04 | 1.11 | 1.27 | *1.35* | *1.40* | Earnings per sh A | *1.65* |
| | .42 | .45 | .48 | .49 | .51 | .52 | .53 | .54 | .55 | .57 | .60 | .63 | .65 | .67 | .70 | .73 | *.78* | *.83* | Div'd Decl'd per sh B | *1.00* |
| | 1.69 | 1.85 | 1.69 | 2.17 | 1.18 | .83 | .74 | .94 | .76 | 1.10 | 1.11 | 1.03 | 1.95 | -- | .16 | .09 | *1.35* | *1.45* | Cap'l Spending per sh | *1.85* |
| | 4.85 | 5.84 | 5.97 | 6.14 | 6.92 | 7.19 | 7.45 | 7.73 | 7.98 | 8.15 | 8.51 | 8.88 | 9.28 | 9.75 | 10.31 | 10.97 | *11.55* | *12.00* | Book Value per sh | *12.90* |
| | 10.40 | 11.20 | 11.27 | 11.37 | 12.56 | 12.69 | 12.79 | 12.92 | 12.98 | 12.83 | 12.81 | 12.85 | 12.87 | 12.94 | 13.02 | 13.06 | *13.00* | *12.90* | Common Shs Outst'g C | *12.80* |
| | 26.3 | 31.2 | 30.3 | 24.6 | 21.9 | 20.7 | 23.9 | 24.4 | 26.3 | 23.1 | 23.5 | 32.8 | 34.6 | 30.3 | 33.8 | 35.7 | *Bold figures are* | | Avg Ann'l P/E Ratio | *25.0* |
| | 1.40 | 1.68 | 1.61 | 1.48 | 1.46 | 1.32 | 1.50 | 1.55 | 1.48 | 1.22 | 1.18 | 1.72 | 1.74 | 1.64 | 1.80 | 1.83 | *Value Line* | | Relative P/E Ratio | *1.40* |
| | 2.9% | 2.5% | 2.8% | 3.5% | 3.6% | 3.5% | 3.1% | 3.1% | 2.8% | 2.8% | 2.6% | 2.1% | 1.9% | 2.1% | 1.9% | 1.6% | *estimates* | | Avg Ann'l Div'd Yield | *2.4%* |
| | | | | | | | 40.6 | 41.4 | 42.4 | 45.9 | 47.1 | 47.6 | 48.6 | 48.4 | 51.6 | 53.9 | *55.0* | *57.0* | Revenues ($mill) | *65.0* |
| | | | | | | | 9.1 | 9.3 | 9.7 | 11.5 | 12.5 | 11.8 | 13.0 | 13.4 | 14.4 | 16.6 | *17.5* | *18.0* | Net Profit ($mill) | *21.0* |
| | | | | | | | 35.3% | 37.6% | 37.6% | 29.8% | 27.5% | 31.3% | 25.9% | 15.7% | 13.5% | 10.8% | *21.0%* | *21.0%* | Income Tax Rate | *21.0%* |
| | | | | | | | 1.1% | 1.1% | .8% | 1.8% | 1.6% | 1.9% | 6.7% | 1.7% | 2.5% | 3.2% | *1.5%* | *1.5%* | AFUDC % to Net Profit | *1.5%* |
| | | | | | | | 47.1% | 46.0% | 45.1% | 44.8% | 44.4% | 42.6% | 43.0% | 42.5% | 41.3% | 46.3% | *44.5%* | *42.5%* | Long-Term Debt Ratio | *37.5%* |
| | | | | | | | 52.9% | 54.0% | 54.9% | 55.2% | 55.6% | 57.4% | 57.0% | 57.5% | 58.7% | 53.7% | *55.5%* | *57.5%* | Common Equity Ratio | *62.5%* |
| | | | | | | | 180.2 | 184.8 | 188.4 | 189.4 | 196.3 | 198.7 | 209.5 | 219.5 | 228.7 | 266.8 | *270* | *270* | Total Capital ($mill) | *265* |
| | | | | | | | 233.0 | 240.3 | 244.2 | 253.2 | 261.4 | 270.9 | 288.8 | 299.2 | 313.2 | 343.6 | *355* | *370* | Net Plant ($mill) | *405* |
| | | | | | | | 6.4% | 6.4% | 6.5% | 7.4% | 7.6% | 7.2% | 7.5% | 7.3% | 7.4% | 7.1% | *7.5%* | *7.5%* | Return on Total Cap'l | *9.0%* |
| | | | | | | | 9.5% | 9.3% | 9.3% | 11.0% | 11.5% | 10.4% | 10.9% | 10.6% | 10.7% | 11.6% | *11.5%* | *11.5%* | Return on Shr. Equity | *13.0%* |
| | | | | | | | 9.5% | 9.3% | 9.3% | 11.0% | 11.5% | 10.4% | 10.9% | 10.6% | 10.7% | 11.6% | *11.5%* | *11.5%* | Return on Com Equity | *13.0%* |
| | | | | | | | 2.5% | 2.4% | 2.4% | 3.9% | 4.4% | 3.4% | 4.0% | 3.8% | 4.0% | 5.0% | *5.0%* | *4.5%* | Retained to Com Eq | *5.0%* |
| | | | | | | | 73% | 74% | 74% | 64% | 62% | 67% | 63% | 64% | 62% | 57% | *58%* | *59%* | All Div'ds to Net Prof | *61%* |

**CAPITAL STRUCTURE as of 6/30/21**
**Total Debt** $127.0 mill. **Due in 5 Yrs** $42.5 mill.
**LT Debt** $127.0 mill. **LT Interest** $5.5 mill.
(46% of Cap'l)
**Pension Assets12/20** $56.3 mill.
**Oblig.** $54.1 mill.

**Pfd Stock** None

**Common Stock** 13,090,055 shs.

**MARKET CAP: $575 million (Small Cap)**

| CURRENT POSITION ($MILL.) | 2019 | 2020 | 6/30/21 |
|---|---|---|---|
| Cash Assets | -- | 5.0 | -- |
| Accounts Receivable | 4.4 | 5.2 | 4.2 |
| Inventory (Avg. Cost) | 1.0 | 1.0 | 1.0 |
| Other | 4.0 | 5.1 | 5.7 |
| Current Assets | 9.4 | 16.3 | 10.9 |
| Accts Payable | 3.4 | 6.5 | 8.4 |
| Debt Due | 6.5 | -- | -- |
| Other | 5.3 | 5.5 | 5.5 |
| Current Liab. | 15.2 | 12.0 | 13.9 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 3.0% | 2.5% | *4.5%* |
| "Cash Flow" | 6.0% | 5.5% | *6.0%* |
| Earnings | 6.0% | 5.5% | *6.5%* |
| Dividends | 3.5% | 4.0% | *6.0%* |
| Book Value | 4.5% | 4.5% | *4.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 11.6 | 12.0 | 12.7 | 12.1 | 48.4 |
| 2019 | 11.8 | 13.0 | 13.7 | 13.1 | 51.6 |
| 2020 | 12.9 | 13.3 | 14.3 | 13.4 | 53.9 |
| 2021 | 13.1 | 13.8 | *14.5* | *13.6* | *55.0* |
| 2022 | *13.7* | *14.3* | *15.0* | *14.0* | *57.0* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun. 30 | Sep. 30 | Dec. 31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .20 | .26 | .29 | .29 | 1.04 |
| 2019 | .22 | .28 | .35 | .26 | 1.11 |
| 2020 | .31 | .32 | .36 | .28 | 1.27 |
| 2021 | .28 | .35 | *.37* | *.35* | *1.35* |
| 2022 | *.30* | *.36* | *.38* | *.36* | *1.40* |

| Calendar | QUARTERLY DIVIDENDS PAID B Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .1602 | .1602 | .1602 | .1666 | .647 |
| 2018 | .1666 | .1666 | .1666 | .1733 | .673 |
| 2019 | .1733 | .1733 | .1733 | .1802 | .70 |
| 2020 | .1802 | .1802 | .1802 | .1874 | .73 |
| 2021 | .1874 | .1874 | .1874 | | |

**BUSINESS:** The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2020, the company's average daily availability was 35.6 million gallons and its service territory had an estimated population of 202,000. Has more than 72,600 customers. Residential customers accounted for 66% of 2020 revenues; commercial and industrial (26%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/20. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.3% of the common stock (3/21 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

**York Water delivered good share-profit growth in the June interim.** As expected, the regulated water utility posted net income of $0.35 per share for the second quarter, representing sequential and annual improvements of 25% and 9%, respectively. The bottom-line advance was aided partly by lower income taxes stemming from wider deductions under IRS tangible property rules. Meanwhile, revenues of $13.8 million rose nicely compared to the previous-year tally, thanks to a growing customer base and increased billings/collections. For this year, revenues of $55 million (up $0.5 million from our previous estimate) are likely on tap. At the same time, we are leaving unchanged our 2021 EPS call, at $1.35. Looking at 2022, our model suggests that revenues will improve by $2 million, to $57 million, and earnings ought to jump a nickel, to $1.40 per share.

**The stock price has bounced around over the past three months.** In fact, the equity was trading near all-time high territory in early September before sliding back into the mid-$40-per-share vicinity. Year to date, the stock is largely flat, despite some uncharacteristically choppy price movements.

**Long term, we think York Water is well positioned for sustainable, albeit modest top- and bottom-line growth.** Our relatively rosy thesis has a few legs to stand on, including prospects for a healthier economic backdrop (higher water consumption), further expansion in its customer base, as well as the likelihood for additional rate hikes (granted periodically by state regulators to help York replenish and maintain a strong capital spending budget). To this point, robust investment in clean water infrastructure and delivery and pumping system upgrades is probably in the cards.

**But investment appeal is limited at this juncture.** Based on our Timeliness ranking scale, shares of York Water are merely an Average (3) selection for relative year-ahead price performance. In addition, at the recent quotation, total return potential over the three- to five-year pull is nothing to write home about. Overall, we recommend subscribers turn the page, for now.

*Nicholas P. Patrikis* *October 8, 2021*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in late February, June, September, and December.
(C) In millions, adjusted for split.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 75 |
| Earnings Predictability | 100 |

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| | Company Name | AMERICAN STATES WATER COMPANY | AMERICAN WATER WORKS COMPANY, INC. | ARTESIAN RESOURCES CORPORATION | CALIFORNIA WATER SERVICE GROUP | ESSENTIAL UTILITIES, INC. | MIDDLESEX WATER COMPANY | SJW GROUP | THE YORK WATER COMPANY |
|---|---|---|---|---|---|---|---|---|---|
| 2015 | Sales-Net[y15] | 458.641 | 3159 | 77.024 | 588.368 | 814.204 | 126.025 | 305.082 | 47.089 |
| 2016 | Sales-Net[y16] | 436.087 | 3302 | 79.089 | 609.37 | 819.875 | 132.906 | 339.706 | 47.584 |
| 2017 | Sales-Net[y17] | 440.603 | 3357 | 82.235 | 676.113 | 809.525 | 130.775 | 389.225 | 48.589 |
| 2018 | Sales-Net[y18] | 436.816 | 3440 | 80.411 | 698.196 | 838.091 | 138.077 | 397.699 | 48.437 |
| 2019 | Sales-Net[y19] | 473.869 | 3610 | 83.595 | 714.557 | 889.692 | 134.598 | 420.482 | 51.578 |
| 2020 | Sales-Net[y20] | 488.243 | 3777 | 88.141 | 794.307 | 1462.698 | 141.592 | 564.526 | 53.852 |
| 2015 | Cash & Short Term Investment[y15] | 4.364 | 45 | 0.209 | 8.837 | 3.229 | 3.469 | 5.239 | 2.879 |
| 2016 | Cash & Short Term Investment[y16] | 0.436 | 75 | 0.226 | 25.492 | 3.763 | 3.879 | 6.349 | 4.209 |
| 2017 | Cash & Short Term Investment[y17] | 0.214 | 55 | 0.952 | 94.776 | 4.204 | 4.937 | 7.799 | 0.002 |
| 2018 | Cash & Short Term Investment[y18] | 7.141 | 130 | 0.293 | 47.176 | 3.627 | 3.705 | 420.722 | 0.002 |
| 2019 | Cash & Short Term Investment[y19] | 1.334 | 60 | 0.596 | 42.653 | 1868.922 | 2.23 | 12.944 | 0.002 |
| 2020 | Cash & Short Term Investment[y20] | 36.737 | 547 | 0.028 | 44.555 | 4.827 | 4.491 | 5.269 | 0.002 |
| 2015 | Current Assets-Total[y15] | 132.697 | 657 | 14.444 | 127.578 | 128.37 | 24.41 | 73.376 | 11.577 |
| 2016 | Current Assets-Total[y16] | 166.875 | 784 | 14.635 | 142.069 | 128.65 | 26.716 | 99.611 | 12.62 |
| 2017 | Current Assets-Total[y17] | 155.463 | 720 | 18.985 | 227.873 | 131.246 | 29.247 | 66.858 | 8.611 |
| 2018 | Current Assets-Total[y18] | 131.468 | 781 | 16.118 | 188.702 | 147.172 | 30.815 | 502.722 | 9.011 |
| 2019 | Current Assets-Total[y19] | 122.456 | 1285 | 14.207 | 184.712 | 2015.127 | 29.133 | 122.046 | 9.384 |
| 2020 | Current Assets-Total[y20] | 157.115 | 1906 | 17.619 | 266.016 | 380.22 | 34.123 | 127.331 | 16.29 |
| 2015 | Debt in Current Liabilities[y15] | 28.312 | 682 | 12.322 | 39.658 | 52.314 | 8.739 | 38.091 | 0.044 |
| 2016 | Debt in Current Liabilities[y16] | 90.33 | 1423 | 8.478 | 123.308 | 169.822 | 18.159 | 14.325 | 0.044 |
| 2017 | Debt in Current Liabilities[y17] | 59.324 | 1230 | 11.258 | 291.02 | 139.048 | 34.865 | 25 | 1.044 |
| 2018 | Debt in Current Liabilities[y18] | 40.32 | 1049 | 17.784 | 170.011 | 228.723 | 55.843 | 100 | 1.03 |
| 2019 | Debt in Current Liabilities[y19] | 7.193 | 814 | 9.24 | 198.42 | 142.941 | 27.178 | 139.481 | 6.5 |
| 2020 | Debt in Current Liabilities[y20] | 2.371 | 1624 | 28.695 | 376.884 | 214.22 | 9.955 | 251.335 | 0 |
| 2015 | Current Liabilities-Total[y15] | 123.507 | 1533 | 22.403 | 147.898 | 193.199 | 28.319 | 79.623 | 6.197 |
| 2016 | Current Liabilities-Total[y16] | 177.944 | 2392 | 19.328 | 250.23 | 301.536 | 47.056 | 63.573 | 8.184 |
| 2017 | Current Liabilities-Total[y17] | 156.662 | 2325 | 28.461 | 490.959 | 284.488 | 64.537 | 85.052 | 9.145 |
| 2018 | Current Liabilities-Total[y18] | 146.585 | 2094 | 37.731 | 321.166 | 398.977 | 94.363 | 163.985 | 10.841 |
| 2019 | Current Liabilities-Total[y19] | 115.998 | 2045 | 25.599 | 358.721 | 323.461 | 64.981 | 234.567 | 15.156 |
| 2020 | Current Liabilities-Total[y20] | 118.572 | 2881 | 43.724 | 588.706 | 603.873 | 56.848 | 350.795 | 11.993 |
| 2015 | noncash wkcap | 33.138 | -239 | 4.154 | 10.501 | -15.744 | 1.361 | 26.605 | 2.545 |
| 2016 | noncash wkcap | 78.825 | -260 | 3.559 | -10.345 | -6.827 | -6.06 | 44.014 | 0.271 |
| 2017 | noncash wkcap | 57.911 | -430 | 0.83 | -66.842 | -18.398 | -25.877 | 74.914 | 9.653 |
| 2018 | noncash wkcap | 18.062 | -394 | -4.122 | -9.629 | -26.709 | -11.41 | 18.015 | -0.802 |
| 2019 | noncash wkcap | 12.317 | -6 | -2.748 | -18.242 | -34.315 | -10.9 | 14.016 | 0.726 |
| 2020 | noncash wkcap | 4.177 | 102 | 2.562 | 9.639 | -14.26 | -17.261 | 22.602 | 4.295 |
| 2016 | Change Non cashWrk Cap | 45.687 | -21 | -0.595 | -20.846 | 8.917 | -7.421 | 17.409 | -2.274 |
| 2017 | Change Non cashWrk Cap | -20.914 | -170 | -2.729 | -56.497 | -11.571 | -19.817 | 30.9 | 9.382 |
| 2018 | Change Non cashWrk Cap | -39.849 | 36 | -4.952 | 57.213 | -8.311 | 14.467 | -56.899 | -10.455 |
| 2019 | Change Non cashWrk Cap | -5.745 | 388 | 1.374 | -8.613 | -7.606 | 0.51 | -3.999 | 1.528 |
| 2020 | Change Non cashWrk Cap | -8.14 | 108 | 5.31 | 27.881 | 20.055 | -6.361 | 8.586 | 3.569 |
| 2016 | | 10.48% | -0.64% | -0.75% | -3.42% | 1.09% | -5.58% | 5.12% | -4.78% |
| 2017 | WK cap/sale | -4.75% | -5.06% | -3.32% | -8.36% | -1.43% | -15.15% | 7.94% | 19.31% |
| 2018 | WK cap/sale | -9.12% | 1.05% | -6.16% | 8.19% | -0.99% | 10.48% | -14.31% | -21.58% |
| 2019 | WK cap/sale | -1.21% | 10.75% | 1.64% | -1.21% | -0.85% | 0.38% | -0.95% | 2.96% |
| 2020 | WK cap/sale | -1.67% | 2.86% | 6.02% | 3.51% | 1.37% | -4.49% | 1.52% | 6.63% |
| | Average | -1.25% | 1.79% | -0.51% | -0.26% | -0.16% | -2.87% | -0.13% | 0.51% |
| | | | | | | | Median | | -0.21% |

The following sources of information were reviewed but are not included in the workpapers as they are included separately in the section 1329 filing and are considered included by this reference:

"City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets," dated June 9, 2022, and related files prepared by Gannett Fleming, Inc.,;

Wastewater System's Fee Schedule;

Wastewater System's 537 Plan;

Wastewater System's Chapter 94 Reports;

Wastewater System's Permits;

DEP's Inspection and Discharge Monitoring Reports;

Wastewater System's Sewage Service and Treatment Agreements;

Asset Purchase Agreement;

City of Beaver Falls' Corrective Action Plans; and

City of Beaver Falls' Sewer Ordinances.

# EXHIBIT S1

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ScottMadden, Inc.
1900 West Park Drive
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508-202-7918
scottmadden.com

June 8, 2022

**Privileged and Confidential**

Mr. Thomas F. Rafferty
Director, Business Development
Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

Dear Mr. Rafferty,

ScottMadden, Inc. ("ScottMadden") is pleased to provide Aqua Pennsylvania, Inc. with this engagement letter and our proposed fees for a PA Act 12 valuation study and associated valuation report for the City of Beaver Falls Wastewater System ("Beaver Falls") to be completed within the 90-day Act 12 requirements. The study will establish a fair value for the operations of Beaver Falls in accordance with Public Utility Code (66 PA.C.S.) - Valuation of Acquired Water and Wastewater Systems for Ratemaking Purposes.

ScottMadden is highly qualified and strongly positioned to provide the requested services in a thorough, efficient, and cost effective manner. The remainder of this letter is intended to describe our proposed approach to this engagement, and summarize our proposed commercial terms.

Please be assured we will work with you to deliver the results you require. If you have any questions regarding this engagement letter, or require any additional information or clarification, I may be reached at ddascendis@scottmadden.com or 609.680.8695.

Sincerely,

Dylan W. D'Ascendis
Partner

# Valuation of the City of Beaver Falls Wastewater System

## Engagement Letter

June 8, 2022



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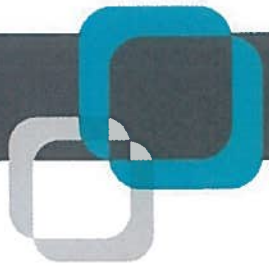



## SCOPE OF WORK

## VALUATION STUDY AND ASSOCIATED VALUATION REPORTS

### Description of Analysis, Work Plan, and Schedule

ScottMadden, Inc. ("ScottMadden") is pleased to provide Aqua America, Inc. with this engagement letter for a PA Act 12 valuation study and associated valuation report for the City of Beaver Falls Wastewater System ("Beaver Falls"). The overall requirements of this assignment fall into four general categories: (1) planning and administration; (2) data collection and verification; (3) analysis and financial modeling; and (4) report generation. These general categories are discussed in the context of our proposed approach, which consists of the following tasks.

#### Task 1: Kick Off Meeting

The purpose of this task is to begin the project planning and administration as well as better understand the goals of Beaver Falls regarding this valuation study. We plan to accomplish this task by holding a kickoff meeting. Specific activities related to this task include:

- Gathering of relevant data and information relating to the valuation study, including, but not limited to:
  - Asset listing by NARUC account (if available);
    - Date in Service
    - Original Cost
    - Accumulated Depreciation
  - Historical Financial Statements;
    - Income statements from 2017-2021
    - Cash flow statements (if available) from 2017-2021
    - History of last five rate increases (% increase, year enacted)
  - Forecasted Financial Statements;
    - Assumptions regarding revenues long-term (20 years)
    - Assumptions regarding operating expenses (20 years)
    - Assumptions regarding capital expenditures (20 years)
    - Assumptions regarding financing of capital (20 years)
      - Type of debt financing (e.g., sinking funds)







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### Task 2: Data Analysis and Interviews

After compiling the data outlined in Task 1, it will be necessary to meet with people familiar with the Beaver Falls operations (in person or via telephone) to discuss trends in the data. It will also be necessary to tour the facilities to determine the condition of the assets. After these meetings, we will solidify our assumptions with respect to the valuation analysis.

### Task 3: Development of Valuation Study

After gathering the data and discussing with Beaver Falls, the valuation study will be developed. The study will consider the national, regional, and local economy and its impact on Beaver Falls as well as industry trends and competition in the space. The study will consider three valuation approaches; the Asset (or Cost) approach, the Market approach, and the Income approach, to determine our conclusion.

### Asset Approach

The Asset (or Cost) Approach is used to estimate a value of property based on the current cost of the subject assets, minus physical deterioration, functional obsolescence and economic obsolescence. In the asset approach, an analysis must be made of the property that is actually and physically being valued. The method ScottMadden will use to determine the current cost of the assets will be a trended original cost study. This will be completed by trending each individual asset forward to current cost by use of the Handy-Whitman Index of Public Utility Construction Costs. From this current value the accumulated depreciation of those assets will be subtracted to provide an indication of the value of the assets using the Asset Approach.

### Market Approach

The Market Approach develops a value through an analysis of recent sales of comparable property. These transactions must be actual transactions (or current offerings) involving similar property. The transactions can be broken down into specific multiples (e.g. purchase price per customer / connection, purchase price / EBIT, etc.) and applied to Beaver Falls' asset, or the actual purchase price can be adjusted to reflect differences between the completed transactions and Beaver Falls' asset. Unfortunately, an active market may or may not exist, which means there can be too few transactions or non-representative transactions for the approach to be meaningful. ScottMadden will conduct searches for similar market transactions for regulated water / wastewater companies and will apply judgment on which adjustments to use, or which multiples are applicable to regulated water / wastewater companies. ScottMadden will also determine if the transactions identified are meaningful and if the Market Approach is valid in this case.

### Income Approach

The Income Approach measures the present value of monetary benefits anticipated to be derived in the future from asset ownership. The present value of monetary benefits is measured by taking into account the duration and pattern of the income stream and the risk inherent in realizing that income stream. ScottMadden will use historical and projected income statements to determine a realistic pattern of cash flows over a 20-year time frame then determine an appropriate capitalization rate to discount those cash flows back to present value which determines the indicated value.

Report Generation



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The valuation study will be used to generate the valuation report. As mentioned above, each valuation approach will produce an indicated value for the assets. ScottMadden will incorporate all three valuation approaches in the final report.

## PROJECT TEAM

The project will be led by Dylan W. D'Ascendis, CRRA, CVA, Partner of ScottMadden, Inc. Mr. D'Ascendis will co-author the reports and testify in any subsequent regulatory filing (if needed). Mr. D'Ascendis will be supported by Matthew Howard, Manager, who will be Mr. D'Ascendis' co-author, but will not testify. Resumes and prior testimonies are available upon request.

In addition to Mr. Howard, the Project Team will be supplemented by ScottMadden's pool of highly qualified consultants, as needed, throughout the engagement.

## PROPOSED COMMERCIAL TERMS

Based on the above Scope of Work, which outlines our approach to developing the valuation study, associated report, and related appendices, ScottMadden proposes a fee of $35,000. Any travel related to the study will be billed at our direct cost with no markup and is not included in the $35,000 fee.

Any additional services required after delivery of the report (*e.g.,* testimony, discovery requests) will be billed at the following hourly rates:

| Position | Hourly Rate |
|---|---|
| Partner / Executive Advisor | $325 |
| Director | $295 |
| Manager | $270 |
| Senior Associate | $230 |
| Associate | $200 |
| Senior Analyst | $150 |
| Analyst | $125 |
| Administrative Assistant | $65 |

Should you have any questions, or wish to discuss the proposed terms, please feel free to contact me directly at your convenience via phone (609) 680-8695 or email ddascendis@scottmadden.com. We look forward to working with you and your staff.

Please indicate your acceptance of these terms by signing in the space provided on the following page.



Copyright © 2022 by ScottMadden, Inc. All rights reserved.

We look forward to working with Aqua Pennsylvania, Inc. on this engagement.

Sincerely,

Dylan W. D'Ascendis
Partner

ACCEPTED AND AGREED BY:

Name: MARC LUCCA

Signature:

Title: PRESIDENT

Date: 6/8/22









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scottmadden
MANAGEMENT CONSULTANTS

Smart. Focused. Done Right.

**ScottMadden, Inc.**
2626 Glenwood Avenue
Suite 480
Raleigh, NC 27608
919-781-4191
scottmadden.com

October 20, 2022

Invoice Number: 021724

PO Number: 5550M00066

Contract No.: 5381000

Thomas F. Rafferty
Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

In Reference To: Professional services provided for project 335-022
City of Beaver Falls Wastewater Valuation Study

| | | ***Amount*** |
|---|---|---|
| **Professional Fees** | $ | 2,055.00 |
| **Total Fees & Expenses** | $ | 2,055.00 |
| **Fixed Fee for Valuation Study** | $ | 35,000.00 |
| **Total Due** | **$** | **37,055.00** |

If you have any questions regarding this invoice, please let me know. Please remit payment in U.S. funds to: ScottMadden, PO Box 935955, Atlanta, GA 31193-5955. Thank you for retaining ScottMadden.

Sincerely,



Dylan D'Ascendis

Partner

ScottMadden, Inc.
Tax ID: 56-1445505

City of Beaver Falls
Order # 5550M00066
Account # 5381000
Company Code : 5550
PC: P5550000
Contact : Thomas Rafferty

**Project** **City of Beaver Falls Wastewater Valuation Study**

**In Reference to:** **Professional services for project 335-022**

| | | Current Hours | Rate | Current Amount |
|---|---|---|---|---|
| **Professional Fees** | | | | |
| **Dylan D'Ascendis** | 9/22/2022 | 3.00 | 325.00 | 975.00 |
| Direct testimony | | | | |
| **Matthew Howard** | 9/20/2022 | 4.00 | 270.00 | 1,080.00 |
| Testimony | | | | |
| Professional Fees | | 7.00 | | 2,055.00 |

# EXHIBIT S2

CITY OF BEAVER FALLS

ORDINANCE NO. 4028

AN ORDINANCE OF THE CITY OF BEAVER FALLS (THE "CITY"), BEAVER COUNTY, PENNSYLVANIA, APPROVING THE ~~CONTRACT~~/AGREEMENT BETWEEN THE CITY OF BEAVER FALLS AND Gannett Fleming *, PROVIDING FOR appraisal valuation engineering analysis services.

BE IT ORDAINED AND ENACTED by the Council of the City of Beaver Falls, a Third Class City under the laws of the Commonwealth of Pennsylvania, and it is hereby ordained and enacted by virtue of the authority of the same as follows:

SECTION I. That the contract/agreement between the City of Beaver Falls and GFV+RC, LLC., a true and correct copy of which is attached hereto, and by reference made a part hereof, is hereby approved.

SECTION II. That the Mayor and City Clerk are hereby authorized to execute duplicate counterparts of the attached contract/agreement and to affix the Seal of the City of Beaver Falls.

SECTION III. That following the execution, attestation and ensealing of said duplicate counterparts of said contract/agreement, the City Clerk is hereby directed to provide one duplicate counterpart to each of the parties and to file the remaining counterpart in the appropriate City Office.

SECTION IV. That City Council, from time to time by Resolution, amend and/or enter into similar agreements in the future.

SECTION V. This Ordinance shall take effect immediately on final passage.

SECTION VI. Any ordinance, or parts of any ordinance inconsistent herewith are hereby repealed.

PASSED AND ADOPTED BY THE COUNCIL of the City of Beaver Falls, this 28th day of December, 20 20.

ATTEST:

Paula J. Swiak
City Clerk

CITY OF BEAVER FALLS:

George D. Gray
Mayor

* Valuation & Rate Consultants, LLC

Gannett Fleming

*Excellence Delivered* ***As Promised***

October 1, 2020

Via email to CJones@beaverfallspa.org

Mr. Charles R. Jones, Jr.
City Manager
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Dear Mr. Jones:

Fair Market Value Appraisal

In response to your request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") is pleased to submit this cost proposal to provide the City of Beaver Falls ("City") with a fair market value appraisal of the Beaver Falls' Wastewater System assets ("Wastewater System") consistent with the date of the Engineer's Assessment.

## SCOPE OF SERVICES

Gannett Fleming proposes to conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market and income approaches. It should be noted that Gannett Fleming will utilize asset cost information provided by the Engineering Assessment of the Wastewater System's assets.

Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."

As stated, the standard of value for this engagement is fair market value. The premise of value is going concern. The going concern premise of business value assumes that the business will continue running normally using all of its assets to produce income and will continue operating beyond the valuation date.

Gannett Fleming will value the Wastewater System's assets as a group under the premise that they collectively comprise an ongoing operating business enterprise. In accordance with 66 Pa. C.S. Section 1329, the original source of funding for any part of the assets of the selling utility will not be relevant to the determination of the value of said assets.

We will accept all information and data provided by the Wastewater System as it pertains to this assignment "as is" after a limited review. That is, we will neither audit nor verify any data, original cost study, financial records or operating data provided for this assignment.

We will provide direct testimony summarizing our fair market value appraisal suitable for filing before the Pennsylvania Public Utility Commission (PaPUC).

## SITE INSPECTION

We will visit or inspect the Wastewater System's facilities and rely on the information provided by the Engineering Assessment of the Wastewater System's assets provided by the Wastewater System.

## APPRAISAL REPORT

We will prepare a written document to substantiate our opinion. Our appraisal will be developed consistent with the Uniform Standards of Professional Appraisal Practices. Our valuation will include a detailed analysis and will be presented in a narrative comprehensive, "stand-alone" document for your use. The estimate of value that results from a valuation engagement will be expressed as a conclusion of value to be used for the purposes stated above.

Although our valuation is intended to estimate fair market value, we assume no responsibility for the inability of a seller or buyer to obtain a sale or purchase contract at that price.

## QUALIFICATIONS

Since 1915, Gannett Fleming and its predecessors have been helping clients in public pricing policy and related financial matters for managerial purposes, before regulatory commissions and in courts of law. Our staff has considerable experience in providing an array of specialized financial services to support the core needs and objectives of our clients.

Our specialized financial services encompass utility valuations, economic valuation studies, cost of capital studies, depreciation studies, rate studies, lead lag studies, analyses of public utility accounting systems, debt financing reports, economic and demographic studies, financial decision studies, optimum capital structure, debt service levels, dividend policy, private placement of debt, financial benchmarking, and conducting property inventories.

We design each study and its related report to meet the specific requirements of our clients. These studies require objective analyses of basic data, informed professional judgment, and clear presentation of the results. Our staff includes professionals specialized in public utility accounting and ratemaking, valuation, cost of capital, lead lag, depreciation, associated technical services, and financial analysis. We are experienced utility valuation experts who determine fair market value using the cost, market and income approaches in accordance with 66 Pa. C.S. Section 1329. We are a registered Municipal Advisor with the Securities & Exchange Commission (SEC); and are a subsidiary of Gannett Fleming, Inc.

Gannett Fleming is approved as a "Utility Valuation Expert" by the PaPUC within the context of 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems.

## FIDUCIARY DUTY

Gannett Fleming has a fiduciary duty to, and will, provide a thorough, objective, and fair market valuation using the cost, market and income approaches in accordance with 66 Pa. C.S. Section 1329 and Pennsylvania laws.

Gannett Fleming attests that it does not derive any material financial benefit from the sale of, or purchase of, a selling utility other than fees for services rendered. Gannett Fleming also verifies it does not have any immediate family members who are directors, officers or employees of either an acquiring public utility, entity or selling utility within a 12-month period of the date of hire to perform an appraisal. We further affirm that Gannett Fleming is not directly or indirectly owned, partnered or in any way affiliated with a water/wastewater distribution company.

## BASIS FOR COMPENSATION

Gannett Fleming will perform the above services, and other related services that you may authorize, based on hourly billing rates for our personnel in effect when we perform the work, plus the reimbursement of direct expenses. Direct expenses include transportation, meals, lodging and incidental expenses incurred while traveling and any other expenses required as a result of the assignment that are not incidental to the normal conduct of business. Attached is a copy of our billing rates currently in effect. We will render invoices monthly for services performed during the preceding month.

Based on our experience, we estimate that the cost for a complete study, direct testimony, and other filing requirements will range from $30,000 to $35,000. The actual charges for these services will, of course, depend on the time required to complete the assignment and the extent to which data are provided. The availability and quality of the required data sources of information will affect the final cost.

**SCHEDULE**

The fair market value appraisal should be completed within 45 to 60 days of completion of the Engineering Assessment, and timely receipt of an executed proposal and the requested data.

Based on the understanding outlined in this letter, we propose that the City of Beaver Falls retain Gannett Fleming Valuation and Rate Consultants, LLC to perform the services as outlined in this letter. If this letter proposal is acceptable, please have it executed below by an individual authorized to bind the City of Beaver Falls, and then scan and email a copy to me at hwalker@gfnet.com, with a copy to Cheryl Rutter at crutter@gfnet.com.

We thank the City of Beaver Falls for this opportunity to provide valuation services in connection with the fair market value appraisal of the Wastewater System's assets. We look forward to acceptance of our proposal and to a successful project.

Respectfully Submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

HAROLD WALKER, III
Manager, Financial Studies

The City of Beaver Falls accepts the foregoing Proposal and authorizes Gannett Fleming Valuation and Rate Consultants, LLC to proceed with the services described herein.

ACCEPTED BY:

(Signature)

Charles R Jones Jr.
(Printed Name)

City Manager
(Title)

12-28-2020
(Date)

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

BILLING RATES

| Personnel | Hourly Rate |
|---|---|
| SUPERVISORY STAFF | |
| J. J. Spanos, President | $280.00 |
| H. Walker, III, Manager, Financial Studies | 250.00 |
| J. F. Wiedmayer, Jr., Project Manager, Depreciation | 230.00 |
| N. W. Allis, Vice President | 230.00 |
| C. E. Heppenstall, Senior Project Manager, Rate Studies | 230.00 |
| STAFF | |
| Senior Project Engineer | 250.00 |
| Analysts and Engineers | 180.00 |
| Associate Analysts and Engineers | 170.00 |
| Assistant Analysts and Engineers | 160.00 |
| Senior Technicians | 120.00 |
| Support Staff | 120.00 |

GANNETT FLEMING

**Gannett Fleming**
**Valuation and Rate Consultants, LLC**

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
**P** 717.763.7211 | **F** 717.763.8150

gannettfleming.com

June 13, 2022

Via email to CJones@beaverfallspa.org

Mr. Charles R. Jones, Jr., City Manager
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Dear Mr. Jones:

Official Notification to Begin Fair Market Value Appraisal of
Beaver Falls' Wastewater System Assets

As you are aware, on December 28, 2020, the Council of City of Beaver Falls passed and adopted Ordinance No. 4028 approving the agreement between Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) and City of Beaver Falls regarding our fair market value appraisal of the Beaver Falls' Wastewater System assets (Wastewater System) consistent with the date of the Engineer's Assessment. It is our understanding that the Engineer's Assessment will be completed later in June 2022.

The purpose of this letter is to request your official notification, via signature and date, for Gannett Fleming to begin the fair market value appraisal of the Wastewater System as soon as the Engineer's Assessment is completed. Please email a signed copy of this document to me at hwalker@gfnet.com, with a copy to Cheryl Rutter at crutter@gfnet.com.

We thank the City of Beaver Falls for this opportunity to provide valuation services in connection with the fair market value appraisal of the Wastewater System's assets, and we look forward to a successful project.

Respectfully Submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

HAROLD WALKER, III
Manager, Financial Studies

This is official notification that the Engineer's Assessment of the Beaver Falls' Wastewater System assets has been completed and Gannett Fleming Valuation and Rate Consultants, LLC should proceed with the services previously described herein, in accordance with Council's Ordinance No. 4028.

AUTHORIZED AND NOTIFIED BY:

(Signature)

Charles R Jones Jr.
(Printed Name)

City Manager
(Title)

6-16-22
(Date)

GANNETT FLEMING

Check Payment Information:
**Gannett Fleming Valuation and Rate Consultants, LLC**
PO Box 829160, Philadelphia, PA 19182-9160 **Federal EIN:** 46-4413705
ACH/EFT Payment Information:
**Account Name:** Gannett Fleming Companies **ABA:** 031312738
**Account No.:** 5003165655
**Send Remit Info:** AccountsReceivable@gfnet.com

**Attention:** Charles R. Jones
**City of Beaver Falls**
**715 15th Street**
**Beaver Falls, PA 15010**
**UNITED STATES**

**Invoice :** 0000011675
**Invoice Date :** 8/2/2022
**Project :** 069306
**Project Name :** CityBeaverFalls-FairMktValAppr-WWtr
**Bill Term :** 01

**For Professional Services Rendered For 6/4/2022 Through 7/1/2022**

Fair Market Value Appraisal - Wastewater System

| | Current Billings |
|---|---|
| 000 - FairMrktValAppr-Wastewater | 915.00 |
| Total : | 915.00 |

| | | |
|---|---|---|
| **Current Billings** | | 915.00 |
| **Amount Due This Bill** | **US** | 915.00 |

**Harold Walker III**

**000 - FairMrktValAppr-Wastewater**

**Rate Labor**

| *Class* | *Hours* | *Rate* | *Amount* |
|---|---|---|---|
| Harold Walker III | 2.00 | 270.000 | 540.00 |
| Support Staff | 3.00 | 125.000 | 375.00 |
| ***Total Rate Labor*** | 5.00 | | ***915.00*** |

**Total Bill Task : 000 - FairMrktValAppr-Wastewater** **915.00**

**Total Project : 069306 - CityBeaverFalls-FairMktValAppr-WWtr** **915.00**

GANNETT FLEMING

**Check Payment Information:**
**Gannett Fleming Valuation and Rate Consultants, LLC**
PO Box 829160, Philadelphia, PA 19182-9160 **Federal EIN:** 46-4413705
**ACH/EFT Payment Information:**
**Account Name:** Gannett Fleming Companies **ABA:** 031312738
**Account No.:** 5003165655
**Send Remit Info:** AccountsReceivable@gfnet.com
**Send Audit Inquiries:** GovtContractAudit@gfnet.com
All Other Inquires Contact the Project Team

**Attention:** Charles R. Jones
**City of Beaver Falls**
**715 15th Street**
**Beaver Falls, PA 15010**
**UNITED STATES**

**Invoice :** 0000012373
**Invoice Date :** 8/16/2022
**Project :** 069306
**Project Name :** CityBeaverFalls-FairMktValAppr-WWtr
**Bill Term :** 01

**For Professional Services Rendered For 7/2/2022 Through 7/29/2022**

Fair Market Value Appraisal - Wastewater System

| | Current Billings |
|---|---|
| 000 - FairMrktValAppr-Wastewater | 16,845.00 |
| Total : | 16,845.00 |

| | | |
|---|---|---|
| **Current Billings** | | 16,845.00 |
| **Amount Due This Bill** | **US** | 16,845.00 |

**Harold Walker III**

**Outstanding Receivables**

| Invoice Number | Date | Amount | Balance Due |
|---|---|---|---|
| 0000011675 | 8/2/2022 | 915.00 | 915.00 |
| | | | 915.00 |

**000 - FairMrktValAppr-Wastewater**

**Rate Labor**

| *Class* | *Hours* | *Rate* | *Amount* |
|---|---|---|---|
| Associate Analyst | 3.00 | 180.000 | 540.00 |
| Harold Walker III | 59.00 | 270.000 | 15,930.00 |
| Support Staff | 3.00 | 125.000 | 375.00 |
| ***Total Rate Labor*** | 65.00 | | ***16,845.00*** |

**Total Bill Task : 000 - FairMrktValAppr-Wastewater** **16,845.00**

**Total Project : 069306 - CityBeaverFalls-FairMktValAppr-WWtr** **16,845.00**

GANNETT FLEMING

**Check Payment Information:**
**Gannett Fleming Valuation and Rate Consultants, LLC**
PO Box 829160, Philadelphia, PA 19182-9160 **Federal EIN:** 46-4413705
**ACH/EFT Payment Information:**
**Account Name:** Gannett Fleming Companies **ABA:** 031312738
**Account No.:** 5003165655
**Send Remit Info:** AccountsReceivable@gfnet.com
**Send Audit Inquiries:** GovtContractAudit@gfnet.com
All Other Inquires Contact the Project Team

**Attention:** Charles R. Jones
**City of Beaver Falls**
**715 15th Street**
**Beaver Falls, PA 15010**
**UNITED STATES**

**Invoice :** 0000012908
**Invoice Date :** 9/6/2022
**Project :** 069306
**Project Name :** CityBeaverFalls-FairMktValAppr-WWtr
**Bill Term :** 01

**For Professional Services Rendered For 7/30/2022 Through 8/26/2022**

Fair Market Value Appraisal - Wastewater System

| | Current Billings |
|---|---|
| 000 - FairMrktValAppr-Wastewater | 16,482.50 |
| Total : | 16,482.50 |

| | | |
|---|---|---|
| **Current Billings** | | 16,482.50 |
| **Amount Due This Bill** | **US** | 16,482.50 |

**Harold Walker III**

**Outstanding Receivables**

| Invoice Number | Date | Amount | Balance Due |
|---|---|---|---|
| 0000011675 | 8/2/2022 | 915.00 | 915.00 |
| | | | 915.00 |

**000 - FairMrktValAppr-Wastewater**

**Rate Labor**

| *Class* | *Hours* | *Rate* | *Amount* |
|---|---|---|---|
| Associate Analyst | 6.00 | 180.000 | 1,080.00 |
| Harold Walker III | 54.50 | 270.000 | 14,715.00 |
| Support Staff | 5.50 | 125.000 | 687.50 |
| ***Total Rate Labor*** | 66.00 | | ***16,482.50*** |
| **Total Bill Task : 000 - FairMrktValAppr-Wastewater** | | | **16,482.50** |

**Total Project : 069306 - CityBeaverFalls-FairMktValAppr-WWtr** **16,482.50**

# EXHIBIT T1

# VERIFIED STATEMENT

I, Dylan W. D'Ascendis, C.V.A., C.R.R.A., Partner of ScottMadden, Inc. ("ScottMadden"), a Utility Valuation Expert in the Commonwealth of Pennsylvania, hereby state the following subject to the penalties of 18 Pa. Cons. Stat. § 4904 (relating to unsworn falsification to authorities):

1. ScottMadden was selected by Aqua Pennsylvania Wastewater, Inc. to perform a fair market value appraisal of the City of Beaver Falls wastewater system assets ("System");

2. As Partner of ScottMadden, I prepared the foregoing Fair Market Value Appraisal of the System at or under my direction;

3. The facts set forth in the Fair Market Value Appraisal are true and correct to the best of my knowledge, information, and belief;

4. ScottMadden has no affiliation with either Aqua Pennsylvania Wastewater, Inc. or the City of Beaver Falls;

5. As Partner of ScottMadden, I determined the fair market value of the System in compliance with the most recent edition of the Uniform Standards of Professional Appraisal Practice as of the date of the Appraisal, employing the cost, market and income approaches;

6. As Partner of ScottMadden, I applied applicable jurisdictional exceptions to the submitted Appraisal;

7. Neither ScottMadden nor I have derived any material benefit from the sale of the System other than fees for services rendered; and

8. I am not an immediate family member of a director, officer or employee of either Aqua Pennsylvania Wastewater, Inc., or the City of Beaver Falls, Beaver County, within a 12-month period of the date ScottMadden was engaged to perform the appraisal.

Dylan W. D'Ascendis, C.V.A., C.R.R.A.
ScottMadden, Inc.

Dated: January 13, 2023

# EXHIBIT T2

# VERIFIED STATEMENT

I, Harold Walker, III, Manager of Financial Studies of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett"), a Utility Valuation Expert in the Commonwealth of Pennsylvania, hereby state the following, subject to the penalties of 18 Pa. Cons. Stat. § 4904 (relating to unsworn falsification to authorities):

1. Gannett was selected by the City of Beaver Falls, to perform a fair market value appraisal of the City of Beaver Falls wastewater system assets ("System");

2. As Manager of Financial Studies of Gannett, I prepared the foregoing Fair Market Value Appraisal of the System at or under my direction;

3. The facts set forth in the Fair Market Value Appraisal are true and correct to the best of my knowledge, information, and belief;

4. Gannett has no affiliation with either the City of Beaver Falls or Aqua Pennsylvania Wastewater, Inc.;

5. As Manager of Financial Studies of Gannett, I determined the fair market value of the System in compliance with the most recent edition of the Uniform Standards of Professional Appraisal Practice as of the date of the Appraisal, employing the cost, market and income approaches;

6. As Manager of Financial Studies of Gannett, I applied applicable jurisdictional exceptions to the submitted Appraisal;

7. Neither Gannett nor I have derived any material benefit from the sale of the System other than fees for services rendered; and

8. I am not an immediate family member of a director, officer or employee of either the City of Beaver Falls, Beaver County, or Aqua Pennsylvania Wastewater, Inc., within a 12-month period of the date Gannett was engaged to perform the appraisal.

Harold Walker, III
Gannett Fleming Valuation and Rate
Consultants, LLC

Dated: January 11, 2023

# EXHIBIT U

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 1

# DIRECT TESTIMONY OF WILLIAM C. PACKER

**With Regard To**
**A General Overview of the Transaction**
**Financial and Legal Fitness of Aqua**
**APA Rate Provisions**
**Public Benefits of the Transaction**
**Section 1329**
**Section 507**

**February 2023**

**TABLE OF CONTENTS**


I. INTRODUCTION ..... 1
II. OVERVIEW OF AQUA PA AND AQUA ..... 7
III. FITNESS ..... 8
IV. FUNDING ..... 10
V. APA RATE PROVISIONS AND RATE STABILIZATION PLAN ..... 10
VI. PUBLIC INTEREST ..... 12
VII. SECTION 1329 FAIR MARKET VALUE CONSIDERATIONS ..... 19
VIII. SECTIONS 507 AND 508 ..... 22
IX. CONCLUSION ..... 25

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Essential Utilities, Inc. ("Essential"), as Vice President, Regulatory Accounting and Regional Controller. In this position, I am the Regional Controller of Aqua Pennsylvania, Inc. ("Aqua PA"), and Aqua New Jersey, Inc. ("Aqua NJ"). Additionally, I oversee rate issues for all subsidiaries of Essential. Aqua PA is the parent company to Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company").

**Q. Please provide a brief description of your education and work experience.**

A. I graduated from Richard Stockton College of New Jersey in 1998 with a Bachelor of Science degree in Business Studies with a concentration in Accounting. In 1998, I joined GE Capital Mortgage Services Inc. as a Staff Accountant. In September 1999, I joined New Jersey American Water Company ("NJ American") as a General Staff Accountant responsible for financial statement preparation, account reconciliation, financial support for rate cases, and account analysis. In September 2001, I was transferred to American Water Works' Service Company ("American"), in its Shared Services operation located in Mt. Laurel, New Jersey. I was employed there for four years in several roles, including Senior Fixed Assets/Job Cost Accountant, Financial Support Analyst, and Accounting Supervisor Fixed Assets. At American, I had the opportunity to support the

rate-making process by working closely with operating subsidiaries in 23 states, preparing schedules and answering interrogatories.

In March 2005, I joined Aqua NJ, where I served as Assistant Controller until December 2006, when I transferred to Aqua America, Inc. In July 2008, I was promoted to the position of Mid-Atlantic Manager of Rates. In April 2011, I became the Manager of Rates and Planning – Northeast Divisions. I was promoted to Regional Controller for the Aqua PA and Aqua NJ subsidiaries in October 2012. In April 2017, I was promoted to Vice President – Controller of Aqua PA. In 2020, I was promoted to my current position of Vice President, Regulatory Accounting and Regional Controller where I have additional responsibilities to oversee rates and regulatory accounting matters of Essential.

In addition to my corporate experience, I served three terms as a Councilman in the Borough of Woodbury Heights, New Jersey. In that role, I served as the Chairman of the Finance, Administration, and Personnel committee; in addition, I served as a member of the Public Safety and Streets/Roads committees.

I was elected as Mayor of the Borough of Woodbury Heights in November of 2018 and was sworn in on January 5, 2019. I was re-elected as Mayor in November of 2022 and sworn in on January 8, 2023. The Borough of Woodbury Heights is one of 565 municipalities in New Jersey and has a population of approximately 3,000 residents.

**Q. Have you testified before this Commission before?**

A. Yes, I have testified in several proceedings before the Pennsylvania Public Utility Commission ("PUC" or the "Commission"), including Aqua PA's petition to charge a 7.5% Distribution System Improvement Charge ("DSIC") at Docket R-2008-2079310,

Aqua PA's last four rate cases at Docket Nos. R-2009-2132019, R-2011-2267958, R-2018-3003558 (water) & R-2018-3003561 (wastewater), and R-2021-3027385 (water) & R-2021-3027386 (wastewater, and Aqua's eight previous Section 1329 proceedings in Docket Nos. A-2016-2580061, A-2017-2605434, A-2018-3001582, A-2019-3008491, A-2019-3009052, A-2019-3015173, A-2021-3024267, and A-2021-3026132. I have also testified in Aqua PA's recent Section 1329 proceeding in Docket No. A-2022-3034143. I have also testified in various other proceedings before the Commission.

**Q. What is the purpose of your testimony?**

A. The purpose of my testimony is as follows: (1) to provide a general overview of Aqua; (2) to provide a general overview of the proposed transaction ("Proposed Transaction") between Aqua and the City of Beaver Falls ("Beaver Falls" or the "City"); (3) to describe Aqua's legal and financial fitness to own and operate the Beaver Falls Wastewater System (the "System"); and (4) to explain the benefits of the proposed transaction.

**Q. Are you sponsoring any Exhibits with your testimony?**

A. Yes. Attached to my testimony as Appendix A is a schedule showing the revenue deficiency and overall impact on customers.

**Q. Are there any other witnesses submitting testimony with this application?**

A. Yes. In addition to my testimony, Aqua is submitting the following statements in support of the Application:

- Aqua Statement No. 2 – Direct Testimony of Mark J. Bubel, Sr. Mr. Bubel will provide testimony regarding the specifics of the System being acquired from an operations/engineering perspective and Aqua's technical fitness.
- Aqua Statement No. 3 – Direct Testimony of Zach Martin. Mr. Martin will provide testimony regarding the operations of the System and the benefits of Aqua's ownership.
- Aqua Statement No. 4 – Direct Testimony of Charles R. Jones, Jr. Mr. Jones will provide testimony regarding the background of the Proposed Transaction from Beaver Falls' perspective and benefits of the Proposed Transaction.
- Aqua Statement No. 5 – Direct Testimony of Dylan W. D'Ascendis. Mr. D'Ascendis will provide testimony regarding the appraisal conducted on behalf of Aqua.
- Aqua Statement No. 6 – Direct Testimony of Harold Walker III. Mr. Walker will provide testimony regarding the appraisal conducted on behalf of Beaver Falls.

**Q. Has the Company filed an application with the Commission for regulatory approval to acquire the wastewater system assets of the Beaver Falls (the "Acquired Assets")?**

A. Yes. Aqua filed its Application on February 17, 2023.

**Q. What is Aqua seeking in its application?**

A. There are five requests. First, Aqua is requesting approval of the acquisition under Section 1102, 66 Pa.C.S. § 1102, similar to many requests that come before the Commission. Second, Aqua is requesting Commission approval to begin providing

wastewater service in the requested territory, as shown as the area outlined in red on the map attached to the Application as **Exhibit A** (the "Requested Territory"). Third, pursuant to Act 12 of 2016 ("Act 12" or the "Act"), 66 Pa.C.S. § 1329, Aqua is seeking to utilize fair market value for the determination of the ratemaking rate base of the Acquired Assets. Fourth, Aqua also requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507 of the Public Utility Code, 66 Pa.C.S. § 507, for the Asset Purchase Agreement between Aqua and the City, and for certain municipal contracts which will be assigned to Aqua or entered into by Aqua at closing on the Proposed Transaction. Fifth, to the extent that certain municipal customers do not enter into a new conveyance and treatment agreement, the Company requests that the Commission amend certain municipal contracts pursuant to Section 508 of the Public Utility Code, 66 Pa.C.S. § 508.

**Q. What does Section 1329 require to be included in the application?**

A. Section 1329 requires that the application include (1) copies of the two appraisals, (2) the purchase price, (3) ratemaking rate base, (4) transaction and closing costs, and (5) the proposed tariff. A rate stabilization plan could also be required if it is applicable to the transaction.

**Q. Can you generally opine on the purpose of Section 1329 and the Commission's view of this provision of the Public Utility Code?**

A. Yes, as stated by the Commission, "Section 1329 works to: (1) provide certainty as to the value of acquired utility property; (2) remove regulatory barriers to the prudent sale of

public water and wastewater assets; (3) protect a Seller from having to offer public assets for sale at below-market rates; and (4) allow a Buyer to recover market-based investment in those public assets through regulated rates."[1] I also agree with the Commission that Section 1329 "encourages a realistic approach to the sale of public assets based upon the fair market value of those assets."[2] Moreover, as further explained by the Commission:

> Section 1329 recognizes that no reasoned argument would propose that these public assets are of marginal value simply because the book value and the Commission's traditional rate setting methodology dictate as much. Rather, the valuation methods of Section 1329 provide municipalities and authorities with a wholistic recognition of the fair market value of the public assets they seek to sell based on a balancing of accepted business valuation principles, specifically, the cost, market, and income approaches. 66 Pa. C.S. § 1329(a). Thus, for sale purposes, Section 1329 works to value the public assets as the businesses they are as opposed to what their value might be under regulatory accounting for depreciated utility assets.[3]
>
> …
>
> Section 1329 enables a Seller to price its public assets at a market value based on reasonable business valuation principles and enables a Buyer to recover its investment in those public assets at that market-based value.[4]

**Q. What does the Commission require for the approval of the certificate that utilizes Section 1329?**

A. In its Final Implementation Order entered October 27, 2016, in Docket No. M-2016-2543193 ("Final Implementation Order"), the Commission referenced the checklist in the Tentative Implementation Order for items to include with the application for it to be processed in a six-month time frame. This checklist was subsequently updated in March

[1] *Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 Tentative Supplemental Implementation Order at 4 (Sep. 20, 2018) (hereinafter "TSIO").
[2] TSIO at 7.
[3] TSIO at 6.
[4] TSIO at 7.

2017. The Commission released its Final Supplemental Implementation Order on February 28, 2019 at Docket No. M-2016-2543193, which included an updated checklist, standard data requests ("SDR"), jurisdictional exceptions, and form testimony for Utility Valuation Experts ("UVE"). Aqua has included references with the Checklist indicating where in the Application the relevant information is located.

## II. OVERVIEW OF AQUA PA AND AQUA

**Q. Please provide a general overview of Aqua PA and Aqua.**

A. Aqua PA is the second largest investor-owned regulated water/wastewater utility operating in the Commonwealth of Pennsylvania. Aqua PA provides water and wastewater utility service to approximately 508,000 customers, consisting of 448,000 water customers and 60,000 wastewater customers. Aqua PA employs approximately 600 highly trained utility professionals to achieve its mission to provide safe, adequate, and reliable utility service at reasonable rates. In addition, Aqua PA is one of eight regulated water and wastewater subsidiaries of Essential, which brings to bear its own financial, technical, and managerial resources to assist in our mission.

Aqua is a subsidiary of Aqua PA and is engaged in the business of collecting, treating, transporting, and disposing of wastewater for the public. Aqua provides wastewater service to approximately 60,000 customers in Adams, Berks, Bucks, Carbon, Chester, Clarion, Clearfield, Delaware, Lackawanna, Luzerne, Monroe, Montgomery, Pike, Schuylkill, Venango, and Wyoming Counties.

**Q. Please provide a description of Beaver Falls.**

A. Beaver Falls is a duly organized and validly existing city under a Home Rule Charter. The City owns the sanitary wastewater collection and treatment system which provides sanitary wastewater service to approximately 3,190 customers in the City, and provides transmission and treatment service for 7 contributory municipalities/municipal authorities, including Big Beaver Borough, West Mayfield Township, White Township, North Sewickley Township, Eastvale Borough, Patterson Township, and Patterson Heights Borough ("Contributing Municipalities"). Please see Aqua Statement No. 4, Direct Testimony of Charles R. Jones, Jr., for a further description of the City.

**Q. Please provide an overview of the proposed Transaction.**

A. After arms-length negotiations between Aqua and the City, the Asset Purchase Agreement ("APA") was signed and executed on October 20, 2021, providing for the sale of the Acquired Assets, which have the meaning specified in Section 2.01 of the APA. The purchase price totaled $41,250,000. According to the APA, Aqua will implement Beaver Falls' sanitary wastewater rates in effect at closing as reflected on Schedule 7.04 of the APA. Aqua's tariff rules and regulations will apply following closing.

## III. FITNESS

**Q. Please describe how the Company is legally fit to own and operate the System.**

A. Aqua is a public utility operating under Commission granted certificates of public convenience. There are no pending legal proceedings challenging Aqua's ability to provide safe and adequate service to customers.

**Q. Please describe how the Company is financially fit to own and operate the System.**

A. As I mentioned in my overview, Aqua PA, as parent company to Aqua, is a Class A water utility in the Commonwealth. Aqua PA is the largest water/wastewater subsidiary of Essential, with total net utility plant assets of $4.1 billion and annual revenues of $495 million in 2021. Aqua PA had operating income of approximately $260 million and net income of $194 million. Aqua PA's cash flows from operations equaled approximately $275 million.

Aqua is a Class A wastewater utility in the Commonwealth, with total net utility plant assets of approximately $490 million and annual revenues of approximately $70 million.

Aqua PA has an A rating from Standard and Poor's Rating Service and has approximately $1.9 billion in outstanding long-term debt at a weighted average interest rate of approximately 4.04%. Aqua PA also utilizes low-cost long-term debt financing instruments through the Pennsylvania Infrastructure Investment Authority ("PENNVEST"), representing about 1.4% of Aqua PA's total debt portfolio. In addition to Aqua PA's access to long-term debt, Aqua PA has its short-term credit facility of $100 million and has access to equity capital as a subsidiary of Essential. Aqua, as a subsidiary of Aqua PA, has access to all of Aqua PA's financing capabilities.

## IV. FUNDING

**Q. Please explain how Aqua plans to fund the Proposed Transaction.**

A. The Proposed Transaction will be funded using existing short-term credit lines. The short-term credit funding will be converted to a mix of long-term debt and equity capital at a later date.

**Q. Do you anticipate the Proposed Transaction will affect Aqua PA's corporate credit rating?**

A. No. The Company does not anticipate that the Proposed Transaction will affect Aqua PA's corporate credit rating.

## V. APA RATE PROVISIONS AND RATE STABILIZATION PLAN

**Q. Please explain the rate provisions in Paragraph 7.04 of the APA.**

A. Under the provisions of Paragraph 7.04 of the APA, Aqua will implement Beaver Falls' sanitary wastewater rates in effect at closing as reflected on Schedule 7.04 of the APA. At and after closing, the Company shall apply its then-existing miscellaneous fees and charges in the Company's Tariff.

**Q. What is a rate stabilization plan?**

A. A rate stabilization plan is defined in Section 1329(g), 66 Pa.C.S. § 1329(g), as a plan that will hold rates constant or phase rates in over a period of time after the next base rate case.

**Q. Does the Application include a rate stabilization plan?**

A. No.

**Q. Does the Application include a proposed tariff that includes language that would constitute a rate stabilization plan?**

A. No. The Company is proposing to implement the City's current rates. There is no language in Aqua's proposed tariff requesting that rates be held constant or phased in over a period of time after the next rate case. Section 7.04 of the APA, accordingly, does not constitute a rate stabilization plan.

**Q. Are you requesting the implementation of a DSIC for City customers at this time?**

A. No. Following closing, Aqua intends to amend its Long-Term Infrastructure Improvement Plan ("LTIIP") to include Beaver Falls in the LTIIP and file the amended LTIIP with the PUC. The Company will include a request in that filing to initiate the DSIC to Beaver Falls customers as permitted by Section 1329.

**Q. Please explain how the Company will bill the City's customers after closing.**

A. Currently, the City bills on a quarterly and monthly basis based on water usage. Metered water usage information is provided by Beaver Falls Municipal Authority ("BFMA"), which provides water service to customers in the City and in the Contributing Municipalities. The Company will continue to bill customers on a quarterly and monthly basis. A schedule of rates tariff page implementing monthly and quarterly rates for City customers post-closing is attached to the Application as **Exhibit G**. The Contributing

Municipalities are billed quarterly, with the exception of North Sewickley Township which is billed monthly, based on water meter read data on a volumetric basis.

## VI. PUBLIC INTEREST

**Q. Please explain why the proposed transaction is in the public interest.**

A. The PUC has a long-standing record of support for consolidation/regionalization of water/wastewater systems. The PUC understands that in doing so, the utility industry will have a better chance to realize the benefits of better management practices, economies of scale, and the resulting greater customer/environmental/economic benefits. The Commission has previously stated that "acquisitions of smaller systems by larger more viable systems will likely improve the overall long-term viability of the water and wastewater industry. Additionally, these types of acquisitions will also enhance the quality of ratepayers' daily lives, promote community economic development, and provide environmental enhancements."[5] Ultimately, these benefits inure to customers both existing and acquired. The Proposed Transaction with Beaver Falls is no exception to the principles noted in the aforementioned Policy Statement, and Aqua PA and Aqua have successfully acquired numerous water/wastewater utilities in over approximately 135 years of operation.

[5] Pennsylvania Public Utility Commission, Final Policy Statement on Acquisitions of Water and Wastewater Systems, Docket No. M-00051926, Final Order at 18 (Aug. 17, 2006) ("Policy Statement").

**Q. Please discuss the Company's track record of acquiring and improving wastewater systems in the Commonwealth.**

A. Aqua currently provides utility service to approximately 60,000 wastewater customers in the Commonwealth and has years of experience operating wastewater treatment and collection systems in a safe, reliable and efficient manner. Moreover, Aqua has the managerial, technical, and financial resources to continue to operate, maintain and improve the Beaver Falls System.

Aqua has acquired 14 wastewater systems over the past 10 years.[6] Many of these systems required significant investment to correct service and environmental issues. Other systems did not need substantial capital investment. Aqua and Aqua PA are essentially the compilation of smaller systems that have been acquired over the last 135 years and make both utilities what they are today. The inherent diversification of systems and customers provides a foundation of stability in the day to day, month to month, and year to year operations of the utility, in that, they are all not requiring major capital investments at the same time. Thus, spreading the financial impacts over the long-term operations of the utility. I would submit that if Aqua were permitted to acquire only non-viable systems, rather than a mix of viable and non-viable, this would have a significant impact on its existing customers' rates and service. Both types of systems, viable and non-viable, are consistent with the Commission's policy statements regarding acquisitions. The acquisition of the Beaver Falls System will continue to address the Commission's supported policy of consolidation and regionalization.

[6] East Whiteland, Lower Makefield (2022); New Garden, East Norriton (2020); Cheltenham (2019); East Bradford, Limerick (2018); Tobyhanna, Avon Grove (2017); Emlenton, Honeycroft (2016); Bunker Hill (2015); Penn Township (2014); and Treasure Lake (2013).

**Q. Did the Commonwealth Court refer to the Commission's policy of consolidation/regionalization and Aqua's expertise in system operations and ability to raise capital in its opinion in *McCloskey v. Pa. P.U.C.* addressing Aqua's transaction with New Garden Township?**

A. Yes. Although I am not an attorney, I have read the Court's Opinion in the *McCloskey* case. At the end of Section A of the Opinion, the Court refers to Commission findings that Aqua, as owner of numerous water and wastewater systems in Southeastern Pennsylvania, has sufficient expertise to operate a system and ability to raise capital to support a system and that the Commission has a policy of consolidation and regionalization that allows for increased maintenance, upgrade and expansion of public facilities. The Court concludes that the foregoing are reasons of the type that the Supreme Court in its *Verizon* decision held were sufficient to meet the public benefit standard and substantial evidence to support the notion that there is a public benefit for the transaction. This same analysis is sufficient to support the public benefit and substantial evidence of public benefit in this proceeding.

**Q. Will the City's customers benefit from the transaction?**

A. Yes. The City's customers will become part of a larger scale, efficiently operated, wastewater utility. The Company is already the owner and operator of wastewater systems in nearby Venango County, and Aqua PA owns and operates water systems in nearby Lawrence County. As such, we have key operations in nearby service areas and will be able to assume the operations of the Beaver Falls System, fold them into a larger

scale, efficiently operated wastewater utility that over time will likely yield further operating efficiencies and improve long term viability as envisioned in the PUC Policy Statement.

Aqua is not anticipating any physical, operational or managerial changes at its Southeastern Office or Western divisional offices as a result of the acquisition. Aqua will be hiring seven operational staff from Beaver Falls to address the day-to-day operations of Beaver Falls. These seven staff members represent the full complement of Beaver Falls sewer employees, and as such Aqua will be ensuring continued employment for the Beaver Falls sewer employees. The retention of this operational staff will benefit customers served by the Beaver Falls System by ensuring that system-specific knowledge and expertise is retained.

Additionally, the acquisition will not have any immediate impact on the rates of either the City's customers or the existing customers of Aqua. The Company is projecting less operating and maintenance costs under the Company's ownership that will likely be realized through reductions in costs for wastewater maintenance, as well as efficiencies in administrative and general costs, such as insurance, auditing and legal, among others. Specifically, referencing Beaver Falls 2021 Financial Statements, Total Operating and Maintenance Expenses for the System (i.e., the Joint Sewer Users Fund and the City Sewer Users Fund) were approximately $2.03 Million, whereas the Company is projecting annual expenses of approximately $1.46 Million, or an approximate 29% reduction.

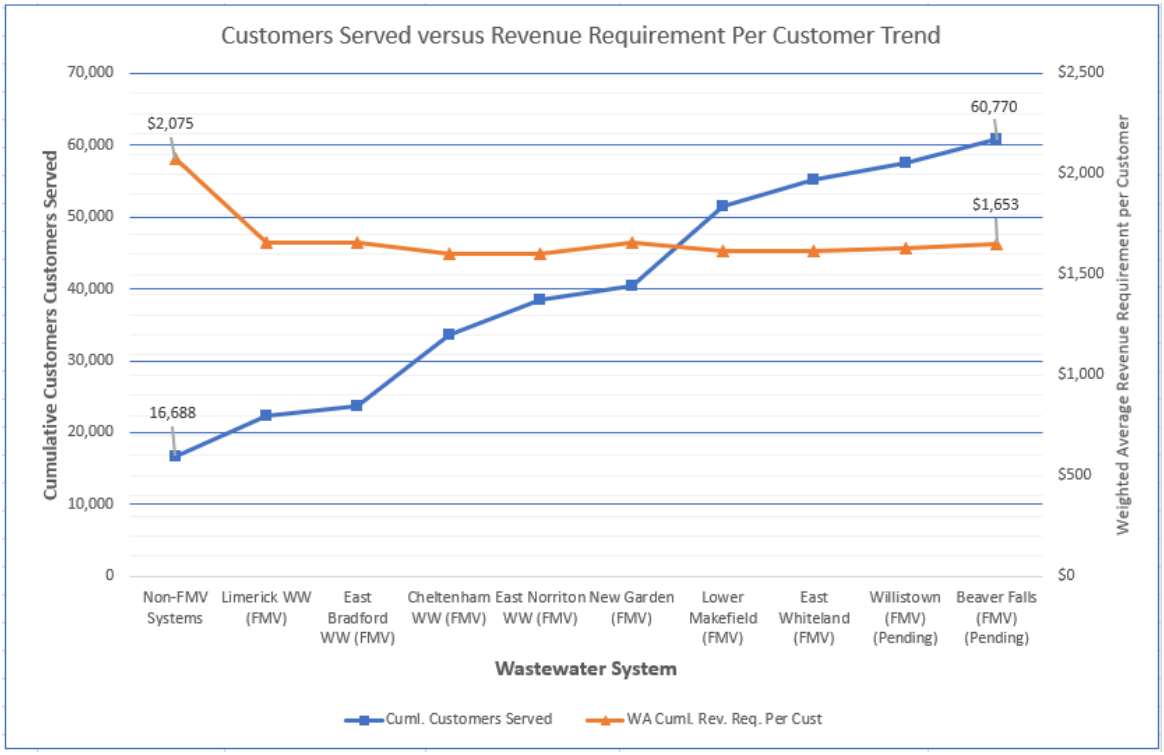
Lastly, given the fact that there are meaningful investments needed in this System, as noted in the testimony of Mark J. Bubel, Sr., Aqua Statement No. 2, the customers of

the Beaver Falls System will benefit greatly from the Company's technical experience and fitness in deploying resources towards capital improvements.

**Q. Will Aqua's existing customers benefit from the acquisition?**

A. Yes. The acquisition of the Beaver Falls System will be an approximate 5% increase in Aqua's customer base. By virtue of the Company's larger customer base, future infrastructure investments across the state will be shared at a lower incremental cost per customer for all of Aqua's customers. This is demonstrated in the below chart (Figure 1) I have developed using revenue requirement data for Aqua's legacy non-fair market value systems, all acquired prior to 2018, and also includes subsequent fair market value systems acquired, approved to be acquired, and including the Beaver Falls system. Figure 1 shows the linear trend line of the combined weighted average revenue requirement per customer of Aqua's legacy non-fair market value systems at $2,075 annually, which is a declining trend and demonstrates economies of scale that have been realized from prudent acquisition growth including systems such as Beaver Falls:

Figure 1




The above chart is an example of the economies of scale realized by the Company as a result of acquisitions. Aqua is providing wastewater utility service to more customers at a lower overall cost per customer.

I note again that both Aqua and Aqua PA have developed into the utilities they are today by acquiring and operating smaller and mid-sized systems. This progression has successfully happened over the last several decades and taken the form of both viable and non-viable systems. Over the long term, this process has benefitted both current customers, future customers that were acquired, and the Commonwealth.

**Q. In *McCloskey*, the Commonwealth Court concluded that the Commission must address rate impact "in a general fashion" when deciding whether there is substantial public benefit. Please address the rate impact of the Proposed Transaction.**

A. The current average bill of a residential customer in Beaver Falls, is approximately $97.24 per quarter. As my calculations in Appendix A show the average bill could increase to approximately $266.52 per quarter or a 174.09% increase, which assumes that one hundred percent of the revenue requirement deficiency is borne by the acquired customers of Beaver Falls. While this quantification is on possible outcome, as the Commission noted in its Final Supplemental Implementation Order "the Section 1329 valuation could have a highly unlikely rate effect of $0. Equally unlikely is the full allocation of all costs – acquisition and perhaps others – to a rate division consisting of only the customers of the acquired municipal system. The more likely *outcome* is indeterminate; it will be found somewhere between possible extremes."[7]

Again, this System has characteristics that demonstrate that economies of scale can be achieved as a result of this acquisition. Given this fact and the fact that there are meaningful future investments needed to address deficiencies in the System, those future rate impacts could be spread across a broader customer base thus moderating those future rate increases over time. Yet, while the rates of the Beaver Falls System are reasonably expected to increase, either on their own, or whether acquired by the Company, the fact is

[7] *Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 Final Supplemental Implementation Order at 32 (Feb. 28, 2019) (emphasis original) ("FSIO").

that there is more flexibility and opportunity to deal with those impacts over a much larger customer base. This benefits both existing and acquired customers alike.

**Q. Is the impact on rates outweighed by other positive factors from the Proposed Transaction?**

A. Yes. While Appendix A shows there could be future increases in rates as a result of the transaction, this is not unexpected, and the possibility of increased rates is noted by the Commonwealth Court in *McCloskey*. The positive factors from the transaction noted in my testimony, as well as the other witness who have submitted testimony in this Application, outweigh the possibility of increased rates. These types of transactions further a recognized legislative objective and are consistent with the Commission's consolidation/regionalization policy. The Company's application demonstrates that there will be both tangible and intangible positive factors that are likely realized as a result of the Proposed Transaction, including capital improvements, expense efficiencies, and economies of scale.

## VII. SECTION 1329 FAIR MARKET VALUE CONSIDERATIONS

**Q. Is Aqua proposing that its application be evaluated utilizing the Fair Market Value provisions of Section 1329 of the Public Utility Code?**

A. Yes. The Company's Application has been prepared with this in mind. Specifically, the Company is requesting that the ratemaking rate base of the Beaver Falls System be based on the lesser of the average of the Fair Market Value Appraisals included in the Application or the purchase price pursuant to Section 1329 of the Public Utility Code.

**Q. Has Aqua prepared its application in compliance with the Commission's Final Implementation Order and Final Supplemental Implementation Order?**

A. Yes. Aqua has complied with all required documentation according to the PUC's application checklist including, but not limited to, the Engineering Assessment of Assets, responses to SDRs, testimony supporting the Application, and two independent Fair Market Value appraisals.

**Q. Please provide an overview of the valuation process.**

A. Following the execution of the APA, the Company and the City agreed to engage Gannett Fleming, Inc. to complete the Engineer's Assessment, which is attached to the Application as Exhibit D. Both parties engaged their respective UVEs to perform a Fair Market Value analysis of the System in accordance with the Uniform Standards of Professional Appraisal Practice ("USPAP"), utilizing the cost, market, and income approaches. Aqua engaged the services of ScottMadden, Inc. ("ScottMadden") and has attached to its Application their Fair Market Value Appraisal as Exhibit Q. The City engaged the services of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett") and their Fair Market Value Appraisal is attached to the Application as Exhibit R. Both firms have been pre-certified as authorized UVEs by the PUC and are on the list of qualified appraisers maintained by the PUC.

**Q. Please describe the conclusions of the two appraisals used to determine the fair market value of the City's assets.**

A. The two appraisals used the USPAP employing the cost, market, and income approaches to arrive at the fair market value of the System. The City sponsored appraisal performed by Gannett arrived at a System value of $44,292,000. The Company sponsored appraisal performed by ScottMadden arrived at a System value of $40,199,348. Therefore, the fair market value as defined in Act 12 is the average of these two appraisals which is $42,245,674.

**Q. Pursuant to Section 1329 of the Public Utility Code, what is the resulting rate base determination for the Beaver Falls System?**

A. According to Section 1329, the ratemaking rate base is the lesser of either the purchase price in the APA, which is $41,250,000, or the fair market value which is $42,245,674. In this instance, since the purchase price is lower than the fair market value, the ratemaking rate base for the Beaver Falls System is $41,250,000.

**Q. Please state the total of the UVE fees incurred by the Company.**

A. The UVE fees for the Company's appraisal received as of the date of the Application totaled $37,055.00. The Company's UVE fees will be included in the transaction and closing costs of this Proposed Transaction as stated below.

**Q. Please explain whether you believe the UVEs' fees are reasonable?**

A. Based on the scope of work, the methods used as accepted industry practice, and that the UVEs' fees were less than 5% of the fair market value benchmark noted in the Final Implementation Order and Final Supplemental Implementation Order, I believe the fees are reasonable. Per the Final Implementation Order, Final Supplemental Implementation Order and Checklist, the contract engaging the Company's UVE, ScottMadden, along with ScottMadden's invoices are included as Exhibit S1. The contract engaging the City's UVE, Gannett, along with Gannett's invoices are included as Exhibit S2.

**Q. Please comment on the transaction and closing costs?**

A. The Company anticipates that the transaction and closing costs will be approximately $714,980 including the Company's UVE fees. The exact closing costs will be determined at closing.

## VIII. SECTIONS 507 AND 508

**Q. Is Aqua requesting the Commission issue certificates of filing for certain municipal contracts that will be entered into or assigned to Aqua at closing?**

A. Yes. Aqua is first asking for the Commission to approve the APA between the City and Aqua. As noted in the Application, Beaver Falls accepts wastewater flow into its collection system from seven Contributing Municipalities, which is treated at the Beaver Falls WWTP, pursuant to certain agreements with the Contributing Municipalities. Flow is conveyed from the Contributing Municipalities through the City's gravity sewers, force mains, and pump station. As noted in the Application, the Company could not locate

certain agreements that set forth the terms and conditions under which flow is sent from Patterson Heights Borough, West Mayfield Borough, and White Township. In addition, for the Contributing Municipalities that did have agreements that could be located (Big Beaver Municipal Authority, Eastvale Borough, North Sewickley Township, and Patterson Township), there are certain provisions regarding the annual recalculation of rates that the Company cannot implement as it is not a municipality. As such, the Company has developed pro forma agreements that it intends to negotiate with the Contributing Municipalities so that all the Contributing Municipalities, both those that had agreements and those that did not, will be under the same arrangement for rates and service. The arrangement for conveyance and treatment of flow is set forth in the pro forma agreement between Aqua and the Contributing Municipalities.

To the extent that the pro forma agreement cannot be negotiated by closing of this Transaction, the Company is requesting that for those Contributing Municipalities that have existing agreements that certain provisions be amended under Section 508 of the Public Utility Code to provide for Aqua to charge for service provided under a regulated public utility ratemaking model. The changes proposed to these exiting agreements are reflected in Exhibit CC to the Application. Those Contributing Municipalities that do not have existing agreements, and that do not enter into a negotiated agreement with Aqua, will be charged the Bulk Rate as set forth in Aqua's tariff supplement included in the Application as Exhibit G.

**Q. Does the pro forma agreement set forth how the Contributing Municipalities will be charged for wastewater conveyance and treatment?**

A. Yes. The pro forma agreement currently provides for the implementation of the existing base rate that Beaver Falls charges to the Contributing Municipalities. This base rate will then change by a Consumer Price Index ("CPI") on January 1 of each year, except for years where Aqua will have new base rates effective through a base rate case. In the years where new base rates will be effective from a base rate proceeding, the increase will be what the Commission determines is a just and reasonable increase for the Contributing Municipalities.

**Q. Could the terms of this pro forma agreement change through negotiation?**

A. Yes. As stated above, the Company is intending to negotiate this pro forma agreement. Through such negotiation, it is possible that the final terms may be different from what is presented in the initial Application filing. The Company will provide any updated agreement to the parties for their review. The Company will present the final form of agreement to the Commission for approval under Section 507.

**Q. Are there any other municipal contracts to be approved under Section 507?**

A. Yes. The Application includes additional contracts to be approved under Section 507 in Exhibits F11 and 12.

## IX. CONCLUSION

**Q. Does this conclude your direct testimony?**

A. Yes it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

# Appendix A

***Aqua Pennsylvania, Inc. - Water***
***City of Beaver Falls - Wastewater***

**1.) City of Beaver Falls - Wastewater**

| | | 2023 Year 1 | Notes |
|---|---|---|---|
| Revenue | $ | 2,463,118 | |
| O&M | | 1,462,000 | |
| Depreciation | | 1,307,096 | ****3.09% Composite Depreciation Rate* |
| Taxes Other | | 73,263 | |
| Income Taxes | $ | (318,864) | ******21% Federal & 8.99% State* |
| **Operating Income** | **$** | **(60,377)** | |
| Rate Base at Fair Market Value | $ | 41,250,000 | |
| Capital Investments *(Year 1)* | $ | 1,050,834 | |
| Rate Base *(Including Capital Investments less depreciation year 1)* | $ | 40,993,739 | |
| Interest Expense ^ | | 755,105 | |
| ^ *Includes Interest Expense syncronized with rate base* | | | |
| **Required Operating Income *(Rate Base x Rate of Return)*** | **$** | **2,966,717** | |
| **Operating Income Deficiency** | **$** | **3,027,094** | |
| Gross Revenue Conversion Factor | | 1.416433 | |
| **Revenue Deficiency (Excess) $** | **$** | **4,288,000** | |
| **Revenue Deficiency (Excess) %** | | **174.09%** | |
| **Increase applied to Acquired (Authority) customers 80% Cost of Service** | **$** | **2,937,776** | |
| **Increase %** | | **119.27%** | |
| **Increase applied to Acquired (Authority) customers 100%** | **$** | **4,288,000** | |
| **Increase %** | | **174.09%** | |
| **Increase applied to Acquired (Authority) customers 50%** | **$** | **2,144,000** | |
| **Increase %** | | **87.04%** | |
| **Increase applied to Existing (Company Wastewater) customers 50%** | **$** | **2,144,000** | |
| **Increase %** | | **3.08%** | |
| **Increase applied to Existing (Company Water) customers 20% - Cost of Service** | **$** | **1,350,224** | |
| **Increase %** | | **0.24%** | |

| | Avg. Usage / Kgal | | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|---|
| Residential (Domestic) - 80% Cost of Service | 9.49 | $ | 115.98 | 119.27% |
| Commercial - 80% Cost of Service | 39.87 | $ | 422.57 | 119.27% |
| Industrial - 80% Cost of Service | 96.71 | $ | 332.05 | 119.27% |
| Public - 80% Cost of Service | 69.26 | $ | 719.17 | 119.27% |
| Bulk - 80% Cost of Service | 6,354.46 | $ | 34,408.71 | 119.27% |
| Bulk Other (Dalton) - 80% Cost of Service | 440.53 | $ | 7,951.38 | 119.27% |
| Residential - 100% Revenue Deficiency | 9.49 | $ | 169.28 | 174.09% |
| Commercial - 100% Revenue Deficiency | 39.87 | $ | 616.78 | 174.09% |
| Industrial - 100% Revenue Deficiency | 96.71 | $ | 484.66 | 174.09% |
| Public - 100% Revenue Deficiency | 69.26 | $ | 1,049.70 | 174.09% |
| Bulk - 80% Revenue Deficiency | 6,354.46 | $ | 50,223.20 | 174.09% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ | 11,605.89 | 174.09% |
| Residential - 50% Revenue Deficiency | 9.49 | $ | 84.64 | 87.04% |
| Commercial - 50% Revenue Deficiency | 39.87 | $ | 308.39 | 87.04% |
| Industrial - 50% Revenue Deficiency | 96.71 | $ | 242.33 | 87.04% |
| Public - 50% Revenue Deficiency | 69.26 | $ | 524.85 | 87.04% |
| Bulk - 80% Revenue Deficiency | 6,354.46 | $ | 25,111.60 | 87.04% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ | 5,802.94 | 87.04% |
| Impact Existing Customers (Company Wastewater) - Residential - 50% | 4.00 | $ | 2.60 | 3.08% |
| Impact Existing Customers (Company Wastewater) - Commercial - 50% | 8.33 | $ | 4.13 | 3.08% |
| Impact Existing Customers (Company Wastewater) - Industrial - 50% | 1.50 | $ | 1.41 | 3.08% |
| Impact Existing Customers (Company Wastewater) - Public - 50% | 8.33 | $ | 4.13 | 3.08% |
| Impact Existing Customers (Company Water) - Residential - 20% Cost of Service | 4.00 | $ | 0.19 | 0.24% |
| Impact Existing Customers (Company Water) - Commercial - 20% Cost of Service | 33.38 | $ | 1.07 | 0.24% |
| Impact Existing Customers (Company Water) - Industrial - 20% Cost of Service | 200.15 | $ | 5.17 | 0.24% |
| Impact Existing Customers (Company Water) - Public - 20% Cost of Service | 33.38 | $ | 1.07 | 0.24% |

**2.) Rate of Return**

| | Ratio | Cost Rate | WACC |
|---|---|---|---|
| Debt | 46.05% | 4.00% | 1.84% |
| Equity | 53.95% | 10.00% | 5.40% |
| | 100.00% | | 7.24% |

**3.) Gross Revenue Conversion Factor**

| | | |
|---|---|---|
| Dollar of Revenue | | 1.0000000 |
| Less: Gross Receipts (Revenue) Tax | 0.00% | 0.0000000 |
| Less: Reg Assesments | 0.62% | 0.0062419 |
| Less: Bad Debts | 1.17% | 0.0117050 |
| State Taxable Income | | 0.9820531 |
| State Income Tax | 8.9999% | 0.0883838 |
| Federal Taxable Icome | | 0.8936693 |
| Federal Tax Rate | 21.00% | |
| Federal Income Tax | | 0.1876706 |
| Net Revenue Dollar | | 0.7059987 |
| Gross Revenue Conversion Factor | | 1.4164331 |
| EFT | 28.1099% | |

***Aqua Pennsylvania, Inc. - Water***
***Calculation of City of Beaver Falls - Wastewater - Present Revenues***

| *Address Type* | *Service* | *Billed Dollars* | *Quarterly Minimum Fee Up to 3 Kgal* | *Rate per Kgal* | *Customers* | *EDUs* | *Total Usage* | *Average Usage* | *Average Quarterly Bill* | *Average Monthly Bill* |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic | Wastewater | $1,119,810 | $42.37 | $8.46 | 2,879 | 3,078 | 109,238,000 | | | |
| **Domestic/Residential Total** | | **$1,119,810** | | | **2,879** | **3,078** | **109,238,000** | **9,486** | **$ 97.24** | |
| Commercial | Wastewater | $391,141 | $42.37 | $8.46 | 276 | 376 | 44,017,000 | | | |
| **Commercial Total** | | **$391,141** | | | **276** | **376** | **44,017,000** | **39,870** | **$ 354.29** | |
| Industrial | Wastewater | $23,385 | $42.37 | $8.46 | 7 | 7 | 2,708,000 | | | |
| **Industrial Total** | | **$23,385** | | | **7** | **7** | **2,708,000** | **96,714** | **$ 835.19** | **$ 278.40** |
| Public | Wastewater | $41,002 | $42.37 | $8.46 | 17 | 17 | 4,710,000 | | | |
| **Public Total** | | **$41,002** | | | **17** | **17** | **4,710,000** | **69,265** | **$ 602.97** | |
| Bulk | Wastewater | $807,780 | | $4.54 | 7 | 3,767 | 177,925,000 | | | |
| **Bulk Total** | | **$807,780** | | | **7** | **3,767** | **177,925,000** | **6,354,464** | **$ 28,849.27** | |
| Bulk Other | | $80,000 | | $4.54 | 1 | 1 | 1,762,115 | | | |
| **Bulk Total** | | **$80,000** | | | **1** | **1** | **1,762,115** | **440,529** | **$ 20,000.00** | **$ 6,666.67** |
| **Total Service Revenue** | | **$2,463,118** | | | **3,187** | **7,246** | **340,360,115** | | | |

***Aqua Pennsylvania, Inc. - Water***
***Calculation of City of Beaver Falls - Wastewater - Operating and Maintenance Expenses***

| | | **2023** |
|---|---|---|
| *OPERATING AND MAINTENANCE EXPENSES:* | | *Year 1* |
| O&M Labor Exp Reg | $ | 435,000 |
| O&M Labor Exp OT | | 20,000 |
| O&M Employee Benefits | | 260,000 |
| O&M Sludge Removal | | 62,000 |
| O&M Purchased Power | | 125,000 |
| O&M Chemicals | | 33,000 |
| O&M Mgmt Fees | | 126,000 |
| O&M Cust Ops ACO (@ $10.00 per customer) | | 70,000 |
| O&M OS Engineering | | 25,000 |
| O&M OS Lab Testing | | 15,000 |
| O&M OS Operations | | - |
| O&M OS Maintenance | | 215,000 |
| O&M Supplies | | 16,000 |
| O&M Supplies | | 60,000 |
| Total O&M Expenses => | $ | 1,462,000 |

***Aqua Pennsylvania, Inc. - Water***
***Calculation of City of Beaver Falls - Wastewater - Taxes Other Than Income***

| *TAXES OTHER THAN INCOME (PRE-RATE CASE)* | *Rate* | | *Year 1* |
|---|---|---|---|
| Payroll Taxes (FICA, FUTA, SUTA) | 8.000% | $ | 34,800 |
| Property Taxes / (Purta) | 0.890% | $ | 21,922 |
| Regulatory Assessments | 0.672% | $ | 16,541 |
| Total | | $ | 73,263 |

**Assessment Rates**

| | |
|---|---|
| *Public Utility Commission* | *0.47%* |
| *Consumer Advocate* | *0.16%* |
| *Small Business Advocate* | *0.03%* |
| *Damage Prevention Committee* | *0.01%* |

Docket No. R-2021-3027385
Exhibit 1-A(a)

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Metered: | | | | | | | |
| 2 | Residential | 398,180 | 400,887 | 401,624 | 402,361 | 402,250 | - | 111 |
| 3 | Commercial | 22,385 | 22,521 | 22,492 | 22,463 | 22,463 | - | - |
| 4 | Industrial | 740 | 728 | 728 | 728 | 728 | - | - |
| 5 | Public | 1,184 | 1,184 | 1,184 | 1,184 | 1,184 | - | - |
| 6 | Bulk Water | - | - | - | - | - | - | - |
| 7 | Private Fire Protection | 5,449 | 5,550 | 5,550 | 5,550 | 5,550 | - | - |
| 8 | Sales to Water Utilities | 10 | 13 | 13 | 13 | 13 | - | - |
| 9 | Total Metered Customers | 427,948 | 430,883 | 431,591 | 432,299 | 432,188 | - | 111 |
| 10 | Other: | | | | | | | |
| 11 | Unmetered | 2,801 | 2,246 | 2,246 | 2,246 | 2,229 | - | 17 |
| 12 | Availability Charge | - | - | - | - | - | - | - |
| 13 | Public Fire Protection | 268 | 267 | 267 | 267 | 267 | - | - |
| 14 | Private Fire Protection | 863 | 868 | 868 | 868 | 868 | - | - |
| 15 | Total Customers | 431,880 | 434,264 | 434,972 | 435,680 | 435,552 | - | 128 |

Docket No. R-2021-3027386
Exhibit 1-B through 1-G

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA WASTEWATER, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Residential | 31,411 | 37,986 | 38,078 | 38,170 | 37,829 | 70 | 271 |
| 2 | Commercial | 1,715 | 2,227 | 2,227 | 2,227 | 2,226 | - | 1 |
| 3 | Industrial | 9 | 9 | 9 | 9 | 9 | - | - |
| 4 | Public | 60 | 62 | 62 | 62 | 62 | - | - |
| 5 | Miscellaneous | - | - | - | - | - | - | - |
| 6 | Availability Charge | - | - | - | - | - | - | - |
| 7 | Total Customers | 33,195 | 40,284 | 40,376 | 40,468 | 40,126 | 70 | 272 |

| | | | |
|---|---|---|---|
| ADD | Lower Makefield | Res | 10,916 |
| | | Com | 235 |
| | | Ind | - |
| | East Whiteland | Res/Com | 3,895 |
| | | **Total Existing WW Customers** | **55,514** |

| | |
|---|---|
| Wastewater Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-B through 1-G APWW Rate Case => | $ 55,789,513 |
| Add Lower Makefield WW - Appendix A | $ 10,038,836 |
| Add East Whiteland Revenue - Appendix A | $ 3,769,536 |
| Total Existing Revenues | **$ 69,597,885** |

Docket No. R-2021-3027385

| | |
|---|---|
| Water Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-A APW Rate Case => | $ 561,514,060 |
| Residential | $ 364,984,139 |
| Commercial | $ 140,378,515 |
| Industrial Revenues | $ 22,460,562 |
| Other Revenues | $ 33,690,844 |
| Total Existing Revenues (Res, Com, & Ind classes) | **$ 561,514,060** |

Docket No. R-2021-3027385

AQUA PENNSYLVANIA, INC.

[illegible]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | $ 548,225,086 | $ 511,148,592 | $ 19,011,761 | $ 3,978,573 | $ 1,014,569 | $ 7,258,740 | $ 2,923,770 | $ 2,889,080 | |
| A[illegible] | | 69,078,487 | 39,108,336 | 15,595,716 | 5,573,913 | 776,166 | 2,747,284 | 2,736,794 | 2,540,277 | $ 67,046,644 |
| A[illegible] | (1) | *16.79%* | (0) | 11,257,132 | (8,773,183) | (2,308,940) | (127,958) | 2,032,232 | (1,079,811) | (999,471) |
| [illegible] | | | $ 617,303,573 | $ 561,514,060 | $ 25,834,295 | $ 7,243,546 | $ 1,662,778 | $ 12,038,256 | $ 4,580,752 | $ 4,429,886 |
| [illegible] | | | $ 69,078,487 | $ 50,365,468 | $ 6,822,533 | $ 3,264,973 | $ 648,209 | $ 4,779,516 | $ 1,656,983 | $ 1,540,806 |
| Rate Increase/(Decrease) - % | | | 12.60% | 9.85% | 35.89% | 82.06% | 63.89% | 65.84% | 56.67% | 53.33% |
| | | | | | -25.35% | -24.17% | -7.15% | 20.31% | -19.08% | -18.41% |

**Notes:**

(1) [illegible]

**Aqua Pennsylvania, Inc.**
**Residential Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bills | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16,347 | 16,359 |
| RZ 10 - East Norriton | 10 | 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 52,639 | 55,124 |
| RZ 10 - East Norriton - Whitpain | 10 | 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 66 | 66 |
| RZ 11 - New Garden | 11 | 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6,080 | 6,080 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25,609 | 27,588 |
| RZ 1B - Penn Township | 1B | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 9,953 | 9,953 |
| RZ 2 - Emlenton, Rivercrest, White Haven (Kidder) | 2 | 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 11,088 | 20,435 |
| RZ 3 - Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26,224 | 26,224 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6,415 | 6,415 |
| RZ 5 - Newlin Green | 5 | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 588 | 588 |
| RZ 5 - Sage Hill | 5 | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 252 | 264 |
| RZ 6 - Masthope | 6 | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16,452 | 16,488 |
| RZ 7 - Limerick | 7 | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 61,094 | 61,094 |
| RZ 8 - East Bradford - Single Family Home | 8 (Unmetered) | 8 (Metered) | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4,596 | 4,596 |
| RZ 8 - East Bradford - Townhome | 8 (Unmetered) | 8 (Metered) | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 9,663 | 9,663 |
| RZ 9 - Cheltenham | 9 | 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 117,807 | 117,807 |
| RZ 3 - Links of Gettysburg, Thornhurst Div, Laurel Lakes, Woodloch Springs Unmetered | 3 | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 11,496 | 11,496 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23,389 | 23,389 |
| RZ 7 - Limerick (Unmetered) | 7 (Unmetered) | 7 (Unmetered) | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6,078 | 6,078 |

[illegible] A[illegible] [illegible] B[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] A[illegible] C[illegible] [illegible]

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania, Inc.**
**Commercial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bills | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 9 - Cheltenham | 9 | 9 | | | | | | 84,326 | 84,326 |
| RZ 7 - Limerick | 7 | 7 | | | | | | 21,828 | 22,260 |
| RZ 10 - East Norriton | 10 | 10 | | | | | | 2,938 | 3,202 |
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | | | | | | 3,660 | 3,684 |
| RZ 11 - New Garden | 11 | 11 | | | | | | 1,281 | 1,281 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | | | | | | 729 | 789 |
| RZ 1B - Penn Township | 1B | 1 | | | | | | 480 | 504 |
| RZ 2 - Emlenton, Rivercrest, White Haven (Kidder) | 2 | 2 | | | | | | 623 | 3,745 |
| RZ 3 - Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | | | | | | 1,476 | 3,425 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | | | | | | 42 | 42 |
| RZ 6 - Masthope | 6 | 6 | | | | | | 96 | 108 |
| RZ 8 - East Bradford | 8 | 8 | | | | | | 416 | 416 |
| RZ 5 - Avon Grove School District | 5 | 5 | F | | | | | 12 | 12 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | ED | | | | | 1,559 | 7,427 |

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania, Inc.**
**Industrial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bills | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Media | 1 | 1 | | | | | | 12 | 12 |
| RZ 9 - Cheltenham | 9 | 9 | | | | | | 108 | 108 |

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania, Inc.**
**Residential Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills | Consumption | Average Gallons |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | | | | | | 4,433,841 | 190,268,063 | 4,291 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | | | | | | 11,125 | 437,656 | 3,934 |
| Beech Mountain | 1* | 1* | 5/8" | | | | | | 11,304 | 385,051 | 3,406 |
| Bristol Township | 1* | 1* | 5/8" | | | | | | 5,168 | 222,802 | 4,311 |
| Mifflin Township | 1* | 1 | 5/8" | | | | | | 5,815 | 184,250 | 3,169 |
| Mt. Jewett | 1* | 1 | 5/8" | | | | | | 4,796 | 143,987 | 3,002 |
| Robin Hood Lakes | 1* | 1 | 5/8" | | | | | | 2,413 | 74,484 | 3,087 |
| Chalfont | 2 | 2 | 5/8" | | | | | | 26,538 | 1,120,730 | 4,223 |
| Concord Park | 2 | 2* | 5/8" | | | | | | 1,964 | 77,374 | 3,940 |
| Superior | 2 | 2 | 5/8" | | | | | | 51,088 | 2,393,598 | 4,685 |
| Treasure Lake | 2 | 2* | 5/8" | | | | | | 25,628 | 828,948 | 3,235 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | | | | | | 65,052 | 1,424,213 | 2,189 |
| Bunker Hill | Bunker Hill | Bunker Hill | 5/8" | | | | | | 829 | 40,581 | 4,895 |
| Sun Valley | Sun Valley | Sun Valley | 5/8" | | | | | | 765 | 30,588 | 3,998 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | | | | | | 5,502 | 212,940 | 3,870 |

Based on 5/8" meter and an average consumption of 4,000 per month.

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Commercial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | | | | | | 273,458 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | | | | | | 32 |
| Beech Mountain | 1* | 1* | 5/8" | | | | | | 60 |
| Bristol Township | 1* | 1* | 5/8" | | | | | | 1,797 |
| Mifflin Township | 1* | 1 | 5/8" | | | | | | 351 |
| Mt. Jewett | 1* | 1 | 5/8" | | | | | | 4,796 |
| Chalfont | 2 | 1 | 5/8" | | | | | | - |
| Concord Park | 2 | 1* | 4" | | | | | | 24 |
| Superior | 2 | 1 | 5/8" | | | | | | 2,810 |
| Treasure Lake | 2 | 1* | 5/8" | | | | | | 386 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | | | | | | 1,044 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | | | | | | 829 |
| | | **WA Consumption =>** | | | **WA Bill =>** | | | | |

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Industrial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 | 1 | 1 | 5/8" | | | | | | 9,057 |
| Rate Zone 2 | 2 | 1 | 2" | | | | | | 60 |
| Rate Zone 3 | 3 | 3 | 5/8" | | | | | | 12 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | | | | | | 48 |
| | | **WA Consumption =>** | | | **WA Bill =>** | | | | |

Where applicable, present rates includes DSIC at 7.50%.

# EXHIBIT V

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 2**

**DIRECT TESTIMONY OF**
**MARK J. BUBEL, SR.**

**With Regard To**
**Description of the System**
**Environmental Compliance**

**February 2023**

# Table of Contents

I. INTRODUCTION ..... 3
II. OVERVIEW OF AQUA AND THE BEAVER FALLS SYSTEM ..... 5
III. ENVIRONMENTAL COMPLIANCE ..... 9
IV. CONCLUSION ..... 13

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Mark J. Bubel, Sr. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA") as a Project Engineer III.

**Q. Please provide a brief description of your education and work experience.**

A. I received a Bachelor's of Science Degree (B.S.) in Civil Engineering in 1980 from Lehigh University and a Master's Degree in Civil Engineering (M.C.E.) with a concentration in Environmental Engineering in 1983 from Villanova University. I have worked in various engineering roles and have over 40 years of experience in environmental engineering related to municipal and industrial wastewater treatment and operations. I have worked at Essential Utilities, Inc. *f/k/a* Aqua America, Inc. since 2003 in roles related to wastewater treatment facilities including planning, design, start-up, and operational troubleshooting. I am a Registered Professional Engineer in Pennsylvania, Delaware, Maryland, North Carolina, and Florida. I am also a Licensed Water and Wastewater Operator in Pennsylvania.

**Q. Have you previously testified before the Pennsylvania Public Utility Commission ("PUC" or the "Commission")?**

A. Yes. I provided testimony in Aqua Pennsylvania Wastewater, Inc.'s ("Aqua" or the "Company") New Garden, Limerick, East Bradford, Cheltenham, East Norriton, Delaware County Regional Water Quality Control Authority, Lower Makefield, Willistown, and East Whiteland Section 1329 Application proceedings at Docket Nos. A-2016-2580061, A-2017-2605434, A-2018-3001582, A-2019-3008491, A-2019-3009052, A-2019-3015173, A-2021-3024267, A-2021-3027268, and A-2021-3026132 respectively. I also provided testimony in Aqua PA and Aqua's 2018 base rate case proceeding at Docket Nos. R-2018-3003558 and R-2018-3003561

**Q. What is the purpose of your testimony?**

A. The purpose of my testimony is as follows: (1) to provide a general description of the acquired system and (2) to discuss environmental compliance of the System.

**Q. Are you sponsoring any Exhibits with the Company's filing?**

A. Yes. Attached to my direct testimony as Appendix A is Aqua's 10-year capital plan for the City of Beaver Falls ("City" or "Beaver Falls") wastewater collection and treatment system ("System").

## II. OVERVIEW OF AQUA AND THE BEAVER FALLS SYSTEM

**Q. Please provide a general overview of Aqua.**

A. Aqua, a subsidiary of Aqua PA, is engaged in the business of collecting, treating, transporting, and disposing of wastewater for the public. Aqua serves approximately 60,000 customers in Adams, Berks, Bucks, Carbon, Chester, Clarion, Clearfield, Delaware, Lackawanna, Luzerne, Monroe, Montgomery, Pike, Schuylkill, Venango, and Wyoming Counties. Aqua operates 39 wastewater treatment plants ("WWTP") throughout the Commonwealth of Pennsylvania, and four systems of Aqua's Western Division are in proximity to the City allowing for operational efficiencies. Aqua, and its parent company Aqua PA, have approximately 600 employees bringing extensive expertise in providing water and wastewater service to citizens of Pennsylvania.

**Q. Please provide a description of the Beaver Falls System.**

A. The City is located in the north central part of Beaver County, Pennsylvania and the entirety of the City is served by a public sewer system. The Beaver Falls System is a collection, conveyance, and treatment system owned by the City that collects wastewater from within City and from the seven contributing municipalities – Big Beaver Borough, West Mayfield Borough, White Township, Patterson Township, Patterson Heights Borough, North Sewickley Township, and Eastvale Borough, collectively the "Contributing Municipalities". The wastewater from North Sewickley and Eastvale is pumped via the Eastvale pump station into the City and then flows by gravity sewers to the City owned wastewater treatment plant ("WWTP"). The other Contributing Municipalities' flow is

pumped via pump stations owned by those municipalities and flows into the City via gravity sewers to the WWTP.

Description of the System

The City WWTP began treatment of wastewater in about 1938. The plant receives flow from the Contributing Municipalities from one force main and gravity sewers. Flow from the one force main discharges to gravity sewer about mid-way through the City's collection system. The plant raw wastewater influent structure provides fine screening meters and diverts the flow into three primary clarifiers, which are operated in parallel, for gravity settling to remove heavy inorganic and organic solids as well as to reduce biochemical oxygen demand ("BOD5"). Following the primary clarifiers, further reduction of BOD5 (sufficient to also allow nitrification) occurs biologically in the two circular trickling filters ("TFs") which provides fixed film biological treatment of the wastewater. Final settling is achieved following the TFs in five final settling tanks. The final treatment step prior to discharge to the Beaver River is chlorine gas disinfection.

Wastewater solids produced during primary clarification are pumped through cyclone de-gritters where grit is removed from the wastewater and separated into a sanitary waste bin for landfill disposal.

The City WWTP is permitted at an annual average flow of 4.8 million gallons per day ("MGD") and has a maximum monthly average flow of 2.59 MGD. The 2021 annual average flow was 2.02 MGD and the 3-month maximum average flow was 2.3 MGD. The WWTP is permitted for a maximum organic loading of 9,207 pounds per day (lbs./day). The 2021 maximum month organic loading was 6,225 lbs./day.

The City collection and transmission piping is summarized in the Engineering Assessment included as Exhibit D to the Application.

**Q. Please provide the elevations for the City WWTP, Eastvale Pump Station, and the Requested Territory.**

A. City WWTP: elevation generally varies between EL 722 to EL 738.

Requested Territory: Area elevations vary generally from:

- EL 885 to EL 1150 along the western boundary.
- EL 720 to EL 985 along the southern boundary.
- EL 755 to EL 850 along the northern boundary.
- EL 720 to EL 820 along the eastern boundary.

Eastvale Pump Station: The Pump Station elevation is approximately EL 741.

**Q. Please state the approximate time of the installation of the component facilities of the system.**

A. With regard to the approximate time of the original construction, the City's WWTP was constructed and placed in service in approximately 1938 and provided basic primary treatment. The plant was most recently upgraded in 1996 with the installation of a second oxidation tower, three additional final settling tanks, a grit wash and grease separator building, aerated sludge holding tank, thickened sludge storage tank, and upgrades to the garage, belt filter press and secondary pump station.

The majority of the City System was originally constructed between 1936 and 1938 with the above-described additions made in the 1990s. The average age of the pipe in the City System is approximately 74 years old.

**Q. Is Aqua planning any capital projects over the next 10 years?**

A. Yes. Aqua looked at upgrades to the treatment plant, and gravity collection systems based on facility conditions observed, facility age, and safety. Aqua estimates that it will invest approximately $10.2 million over the next 10 years.

Upgrades to the treatment plant include improvements to filter tower No. 1 and sludge collectors, along with electrical work associated with the Supervisory Control and Data Acquisition ("SCADA") systems to provide greater assurance of continued process control and compliance. Aqua also plans to complete headworks upgrades and gas to liquid chlorine conversion to improve safety. Gravity collection system pipe rehabilitation and replacement will occur based on an assessment of pipe age and condition. Aqua will work with City and the DEP to address the inflow and infiltration ("I&I") and sanitary sewer overflows ("SSOs") within the System if they were to occur. Aqua will also work with the Contributing Municipalities regarding the Corrective Action Plans ("CAP") of those Contributing Municipalities. There were no reported SSOs in 2020 or 2021 as reported in the respective Chapter 94 Reports.

**Q. Do you foresee any other projects that would be required in the immediate future?**

A. Replacement and upgrade of facilities will continue beyond Aqua's 10-year capital plan based on facility age and expected facility life span.

**Q. Please state the actual number of City customers by class and gallons billed.** The City has 3,190 customers and 7 Contributing Municipalities. The breakdown by customer class and usage is shown in the below table.

| Service Area | Residential | Commercial | Public | Industrial | Contributing Municipalities | Bulk Other (Dalton) | Total |
|---|---|---|---|---|---|---|---|
| Beaver Falls | 2,879 | 276 | 17 | 7 | 7 | 1 | 3,187 |
| Gallons | 109,238,000 | 44,017,000 | 4,710,000 | 2,708,000 | 177,925,000 | 1,762,115 | 340,360,115 |

Gallons billed in the above table are based on water meter data. Total Gallons treated at the City WWTP for 2021 was 738,580,000.

**Q. Are the acquired City customers currently Aqua PA water customers?**

A. No. City wastewater customers are currently served by the Beaver Falls Municipal Authority within the City.

## III. ENVIRONMENTAL COMPLIANCE

**Q. Does the Application include National Pollution Discharge Elimination System ("NPDES") permits?**

A. Yes, the NPDES discharge permit for the City WWTP is included in the Application as Exhibit N1.

**Q. Does the Application include Water Quality Management ("WQM") Permits?**

A. Yes. The WQM permits for the City WWTP and Eastvale Pump Station are included with the Application as Exhibit M1 and M2.

**Q. Are Act 537 plans included in the Application?**

A. Yes. The City's Act 537 plan is included with the Application as Exhibit P1.

**Q. Are there any Notices of Violation ("NOV") issued to City by the DEP in the last five years?**

A. Yes. The City received an NOV in July 2021 related to total suspended solids ("TSS") violation and from the sampler refrigerator which was not keeping the sample at six degrees Celsius. No formal action was taken as the TSS violation was noted in the March 2021 discharge monitoring report, and a new sampler and industrial refrigerator was already ordered to replace the existing refrigerator.

The City received an NOV in August 2017 and November 2018 related to effluent limitation exceedances of its NPDES permit, and had noted exceedances in an August 2019 inspection report. The City provided a response in August 2017 to address DEP's letter. The City provided an email response to the November 2018 NOV related to the by-pass plant flow during a 6.05 inch rain event (discussed below); there was not a formal letter response. The effluent exceedances during this time period were addressed in a Consent Assessment of Civil Penalty ("CACP") discussed below.

**Q. Were there any other environmental issues concerning the System the last five years?**

A. The City experienced a secondary bypass of 1,035,000 gallons in September 2018 due to high levels of rainfall. This incident was reported to DEP via email included in Exhibit O1 to the Application. Aqua understands that the November 2018 NOV resulted from discharge monitoring report ("DMR") exceedances from July 2017 to June 2018.

**Q. Have there been any CACPs entered into by the Township and the DEP?**

A. Yes. The City entered into a CACP with DEP in 2019 for failure to comply with effluent limitations under its NPDES permit on multiple occasions from 2016-2019. The City agreed to pay $8,500 to resolve the exceedances during this period. The CACP is included with the Application as Exhibit O2.

**Q. Please state if there are any current environmental compliance issues for the City System.**

A. The City is currently under a CAP on file with DEP. The CAP is included in the Application as Exhibit O3. The CAP does not require physical upgrades to the system, but does require updating the existing sewer collection system mapping, administering the Tap Control Plan (Connection Management Plan), and continuing to prevent unpermitted discharges. The Contributing Municipalities also have CAPs submitted to DEP, except Eastvale Borough, Patterson Heights Borough, and West Mayfield Borough who have not submitted a CAP to DEP. Aqua believes that what prompted DEP to require a CAP was the fact that there were a number of City customers who would experience basement flooding due to surcharged sewers in rain events even though the City's collection is not a combined system, that is, conveying both sanitary and stormwater flow. As Aqua

understands, the City addressed the basement flooding condition through the installation of backflow prevention devices on the subject customer laterals.

The Company's review of the flow and billing data from the City indicates that there is likely I&I present in the system. While this is expected for a system of this age, Aqua has planned main and manhole repairs in its capital plan and will continue reviewing ways to address sources of I&I within the system. Aqua plans on conducting manhole inspections as well as developing a Geographic Information System ("GIS") map of the collection system to supplement and confirm work that the City has also conducted as part of the CAP. This work is planned for the first full year of ownership and budgeted to cost approximately $80,000. In addition, flow metering of the collection system will be conducted to identify basin areas contributing the greatest amount of flow in comparison to the City customers present within the basin areas, thereby providing targeted areas for Closed Circuit Television ("CCTV") and subsequent I&I repair work. This study may cost approximately $100,000. Sanitary sewer lateral repair work is also included in the capital plan to be conducted on an annual basis; $50,000 per year has been budgeted. Laterals can be a significant source of I&I present within a system.

CCTV inspection of pipes will be conducted following completion of the temporary flow metering program once those basin areas identified as generating the greatest amount of I&I can be determined. CCTV work is presently planned for years 4 through 6 after taking ownership of the system and is projected to cost approximately $375,000. Prioritized sewer main rehabilitation and replacement will be conducted in the same time period and $90,000 has been allocated; a total of just over $2 million has been budgeted in years 8 through 10 for sewer main rehabilitation and replacement to address the defects

identified during the CCTV phase of the work. $400,000 has been allocated for manhole rehabilitation during the same period. Aqua's 10-Year Capital Plan is attached to my Direct Testimony as Appendix A.

**Q. Are there any noncompliance issues pending with the United States Environmental Protection Agency ("EPA")?**

A. None of which Aqua is aware.

**Q. Please state the estimated number of future connections for the system for the next 5 years.**

A. The below table provides projected equivalent dwelling units ("EDU") for the next five years (2022-2026):

| Year | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|---|---|---|---|---|---|
| City | 36 | 34 | 36 | 38 | 39 | 183 |

**Q. Is there present system capacity to meet the demands of current and future customers?**

A. Yes. Based upon the permitted capacity of the WWTP at 4.8 MGD, the average annual flow ranging from 2-3 MGD over the last five years, and the projected EDUs over the next five years, there is system capacity to meet the demands of present and future customers.

## IV. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

# Appendix A

| | System Component | Description | 2023 Year 1 | 2024 Year 2 | 2025 Year 3 | 2026 Year 4 | 2027 Year 5 | 2028 Year 6 | 2029 Year 7 | 2030 Year 8 | 2031 Year 9 | 2032 Year 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Safety Measures (Safety) | Miscellaneous | $ 75,000 | | | | | | | | | | $ 75,000 |
| 2 | Collection (Compliance) | MH Inspections / GIS Based Map Creation | $ 80,000 | | | | | | | | | | $ 80,000 |
| 3 | Collection (Compliance) | Temporary Metering Program | $ 100,000 | | | | | | | | | | $ 100,000 |
| 4 | Collection (Compliance) | CCTV Main Inspections | | | | $ 125,000 | $ 125,000 | $ 125,000 | | | | | $ 375,000 |
| 5 | Collection (Compliance) | MH Rehabilitation | | | | | | | | $ 100,000 | $ 100,000 | $ 200,000 | $ 400,000 |
| 6 | Collection (Compliance) | Prioritized Main Rehabilitaton and replacement | | | | $ 30,000 | $ 30,000 | $ 30,000 | | $ 1,300,000 | | $ 650,000 | $ 2,040,000 |
| 7 | Collection (Compliance) | Upgrade / Replace Contributing Muncipality Meters | | $ 250,000 | | | | | | | | | $ 250,000 |
| 8 | Collection | New Customer Connections | | $ 25,000 | | $ 25,000 | | $ 25,000 | | $ 25,000 | | $ 25,000 | $ 125,000 |
| 9 | Collection (Compliance) | Existing Lateral Repairs | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 500,000 |
| 10 | Treatment (Safety / Compliance) | Replace Trickling Filter Tower #1 | | $ 125,000 | $ 125,000 | | | | | | | | $ 250,000 |
| 11 | Treatment (Safety) | HVAC Upgrades in Headworks | $ 175,000 | | | | | | | | | | $ 175,000 |
| 12 | Treatment (Safety) | Headwork Room Upgrades | | $ 250,000 | | | | | | | | | $ 250,000 |
| 13 | Treatment (Safety / Compliance) | Screen Replacement | | | | | $ 350,000 | | | | | | $ 350,000 |
| 14 | Treatment (Safety / Compliance) | Electrical Upgrades / Arc Flash remediation | | $ 250,000 | | | $ 750,000 | | | $ 750,000 | | | $ 1,750,000 |
| 15 | Treatment (Safety) | Convert from Cl Gas to Hypo | | | | | $ 300,000 | | | | | | $ 300,000 |
| 16 | | | | | | | | | | | | | $ - |
| 17 | Treatment (Compliance) | Replace primary clarifier sludge collector gear drives | | | | | $ 250,000 | | | | | | $ 250,000 |
| 18 | Treatment (Compliance) | SCADA System | $ 50,000 | $ 250,000 | | | | | | | | | $ 300,000 |
| 19 | Treatment (Compliance) | Miscellaneous Repairs | $ 50,000 | $ 50,000 | | $ 50,000 | $ 50,000 | | $ 50,000 | $ 50,000 | | $ 50,000 | $ 350,000 |
| 20 | | | | | | | | | | | | | $ - |
| 21 | Administration | IT Transition | $ 50,000 | | | | | | | | | | $ 50,000 |
| 22 | Administration | IT Capex (@$16/customer & 7,019 customers) | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 112,304 | $ 1,123,040 |
| 23 | Transportation | Colorado Extended Cab 4X4 | $ 38,000 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 38,000 |
| 24 | Transportation | Replace Dump Truck (if needed) | $ 75,000 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 75,000 |
| 25 | Safety Measures (Safety) | PHASE II Site Assess | $ 100,000 | | | | | | | | | | $ 100,000 |
| 26 | | | | | | | | | | | | | $ - |
| 27 | | | | | | | | | | | | | $ - |
| | | | | | | | | | | | | | $ - |
| | Contingency 10% | 10% of items above | $ 95,530 | $ 136,230 | $ 28,730 | $ 39,230 | $ 201,730 | $ 34,230 | $ 21,230 | $ 238,730 | $ 26,230 | $ 108,730 | $ 930,604 |
| | | **TOTALS** | $ 1,050,834 | $ 1,498,534 | $ 316,034 | $ 431,534 | $ 2,219,034 | $ 376,534 | $ 233,534 | $ 2,626,034 | $ 288,534 | $ 1,196,034 | $ 10,236,644 |
| | Rolling Total | | $ 1,050,834 | $ 2,549,369 | $ 2,865,403 | $ 3,296,938 | $ 5,515,972 | $ 5,892,506 | $ 6,126,041 | $ 8,752,075 | $ 9,040,610 | $ 10,236,644 | |

# EXHIBIT W

# (Public Version)

**PUBLIC VERSION – CONFIDENTIAL INFORMATION REDACTED**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 3**

# DIRECT TESTIMONY OF ZACH MARTIN

**With Regard To**
**Operations**
**Customer Service**
**Public Benefits**

**February 2023**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS ..... 3
III. CONCLUSION ..... 13

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Please provide a brief description of your education and work experience.**

A. I graduated from the Kent State University with an Associate of Science degree in 2009 and then a Bachelor of Business Administration in 2021. I have worked in the water and wastewater industry for nineteen years. I began my career in the utility industry in the spring of 2004 with the City of North Canton, Ohio as a water plant operator where I secured my Class III Water Supply Certification from the Ohio EPA. I moved into a leadership role in early 2009 as the Regional Water Superintendent for Portage County Water Resources where I was responsible for managing plant and distribution employees in the county operations of three water systems. I also served as backup to the wastewater superintendent there for the 13 wastewater treatment plants and 113 lift stations. In 2010, I moved to Aqua Ohio, Inc. as the Production Manager for the Struthers Division. There I was responsible for the operations and maintenance of the large surface water system including the 5 million gallon per day ("MGD") surface water treatment plant and the five

source water lakes and their six dams. In 2013, I was promoted in Aqua PA as the Assistant Division / Production Manager and later a Plant Manager II in 2017, and I held that position through 2021. During those eight years I was responsible for all aspects of production, treatment, and distribution facilities of the eight drinking water systems in Western PA. In 2021, I was promoted to the position of Area Manager II. In total I have worked for the Aqua subsidiaries of Essential Utilities, Inc. ("Essential") (*f/k/a* Aqua America, Inc.) for 13 years. I am responsible for leading a team of employees delivering drinking water to customers and returning treated wastewater back to the environment in nine counties of Western Pennsylvania. I am involved in all aspects of operations including budgeting, planning, employee relations, and process control. I am also involved in the business development functions in my area of operations. I am also a veteran of Operation Iraqi Freedom III and served in the U.S. Army and Ohio Army National Guard.

**Q. Do you hold any professional licenses or certifications?**

A. Yes. I hold three environmental operator certifications in two states. I am a Class-A certified water and Class-A certified wastewater operator in Pennsylvania with 18 subclasses in total. I am also a Class 3 water supply licensed operator in the state of Ohio. I have maintained operational laboratory certifications in both states as well.

**Q. Have you previously testified before the Pennsylvania Public Utility Commission ("PUC" or the "Commission")?**

A. No.

**Q. What is the purpose of your Direct Testimony?**

A. The purpose of my Direct Testimony is to discuss Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") operations and how Aqua will integrate the City of Beaver Falls ("City" or "Beaver Falls") wastewater system ("the System") into Aqua's operations; and to discuss the public benefits of this transaction.

**Q. Are you sponsoring any Exhibits with the Company's filing?**

A. No.

## II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS

**Q. Please describe Aqua's operations in relation to the System geographically.**

A. Aqua's Western Division office in Sharon, PA is located approximately 34 miles from the City. Aqua's Western Division oversees nine water and four wastewater systems serving 30,031 customers in 34 municipalities. Aqua's Western Area office will oversee and provide operations support for the System, along with management support from Aqua's Southeast Headquarters.

**Q. Please state how many miles the City System is from Aqua's existing service territory.**

A. The City System's distance from Aqua's existing service territory is as follows:

| Buyer's Plant | Location | Approximate Distance to City (miles) |
|---|---|---|
| Emlenton System | Emlenton, PA (Venango) | 42 |
| Western Area Office | Sharon, PA (Mercer) | 32 |
| Mahoning Township System | Hillsville, PA (Lawrence) | 19 |

**Q. Will the System be physically interconnected with Aqua's system or be operated as a standalone system?**

A. The System will be operated as a standalone system within Aqua's footprint.

**Q. Please describe how Aqua will integrate the operation of the System into its current operations.**

A. The operation of the System will be managed from Aqua's Western Area office in Sharon, PA. Management, customer service, regulatory compliance, engineering, financial, and ancillary services will be provided seamlessly from there with support from our Southeastern Headquarters office. Aqua plans to offer employment to seven current employees of the City to address the day-to-day operations of the System.

**Q. Will other Aqua PA employees assist in the operation of the system, if needed?**

A. Yes. Aqua has 12 wastewater operators in the Western PA Area, many holding dual water and wastewater certifications, which may be called upon to assist in the operations of the system. There are also 20 certified water operators in the Western PA Area that

are familiar with treatment systems and can follow standard operating procedures ("SOPs") if needed. These operators are also supported by Aqua PA employees, which will benefit customers through engineering and field service functions.

**Q. Please explain the support services that Aqua Services will provide to the System.**

A. Aqua Services, Inc. ("Aqua Services"), the Service Company for the Aqua subsidiaries, provides expertise in a variety of areas to the water and wastewater subsidiaries of Essential. Aqua Services will provide support to the operation of the system through its employees' expertise in accounting and financial, administrative, communications, corporate secretarial, customer service and billing, engineering, fleet services, human resources, information systems, operations, regulatory compliance, rates and regulatory, risk management, water quality, legal, and purchasing, contracts and sales of real estate.

A benefit to the community of Beaver Falls and the City customers will be the access to expansive customer service provided by the Aqua-owned customer service call centers, the Everbridge after hours call center, and the customer service work order programs. City customers will have access to customer service centers during normal business hours and emergency call centers 24/7. Customer calls are recorded for training and complaint resolution, account status can be confirmed, outages and emergencies like broken meters, obstructed or leaking service connections, and water or wastewater main breaks can be reported and dispatched with date and timestamped record keeping. The City's customers will benefit from Aqua's extensive list of internal and external resources

in the immediate Western PA Area, throughout all the Aqua PA operations, as well as all of Essential.

Another example of the support that Aqua will provide to the City System is through its purchasing and supply chain management groups. Aqua sources materials and supplies to include chemicals, pipe, fittings, equipment, and vehicles through national contracts. Through leveraging our purchasing power and economies of scale, Aqua can secure the best materials and supplies at very competitive costs. Aqua maintains relationships with suppliers large and small, and Aqua has a history of being able to shift inventories of materials and supplies across areas, companies, and regions to meet customer service and maintenance needs of systems. Aqua will be able to extend these cost savings to the City System and ensure that capital investments can be completed as cost effective as possible. The increases of supplies and materials that the City System adds to the total Aqua purchasing will help maintain or even lower costs as quantities increase.

**Q. Does Aqua plan any physical, operational, and managerial changes after closing?**

A. As mentioned in the Direct Testimony of Mark J. Bubel, Sr., there are planned capital improvements and Aqua plans to offer employment to seven City employees. The System will be operated from Aqua's Western Area office. There will be no other physical, operational, and managerial changes after closing.

**Q. Is the System similar to other systems owned and operated by Aqua?**

A. Yes. The System, as stated above, is a wastewater collection and treatment system. Aqua owns four other collection and treatment systems located within Western Pennsylvania.

**Q. Do you believe that Aqua is technically fit to own and operate the system?**

A. Yes.

**Q. Please describe the Company's technical fitness and how the Company can provide quality and reliable service to City wastewater customers.**

A. Aqua PA and Aqua are Class A utilities that already have certificates to operate throughout the Commonwealth and have acquired many systems in the last three decades. Aqua will provide quality and reliable service to the City wastewater customers given the Company's operational expertise as well as engineering support local to the City System. Aqua has expertise in troubleshooting mechanical equipment as well as wastewater treatment processes. Aqua also has expertise in operating wastewater collection and conveyance systems. Aqua strives to ensure the collection, conveyance, and pumping systems which the Company owns provide continuous safe and reliable service. Aqua has worked with the Commission and statutory advocates to acquire and improve troubled wastewater systems (e.g., Washington Park Wastewater, Docket No. A230550F2000). In addition, Aqua was appointed receiver for the North Heidelberg Sewer Company system in Berks County by the Commission effective March 5, 2018.

Aqua took over daily wastewater operations of the facility serving approximately 274 customers on March 5, 2018. Aqua has provided operations service and improvements to the system to ensure quality and reliable service.

Specifically in the Western Area of its operations, Aqua has replaced six sewer lift stations, upgraded treatment plant headworks to include a new equalization tank, and increased permitted capacity of the Treasure Lake wastewater system plant. Aqua has installed a state-of-the-art ultraviolet disinfection system at this plant. Aqua also navigated strict Pennsylvania Department of Environmental Protection ("DEP") regulations to install chemical treatment systems and optimize the plant for copper removal to benefit an impaired receiving stream.

In Emlenton, Aqua has worked to rebuild rotating biological contactors, we have improved residuals management practices, rebuilt the influent lift station and headworks of the treatment facility, as well as installed new de-chlorination facilities to meet compliance requirements for the receiving stream.

Aqua will immediately incorporate the equipment and facilities acquired from the City into the established asset management programs to include preventative maintenance programs and corrective maintenance management.

**Q. Does Aqua have emergency preparedness measures in place?**

A. Yes. Aqua currently has emergency preparedness measures in place to ensure security and continued service in emergency circumstances all of which have been reviewed by

the Commission. Aqua maintains a cyber security, physical security, and business continuity plan.

Aqua has an in-house IT department that is dedicated to preventing and responding to security concerns, including actively monitoring for cyber threats. Aqua has physical security plans including door locks with card swipe functionality on all major facilities. Aqua reviews new acquisitions for potential physical security improvements to ensure the continued viability of its facilities. Finally, Aqua maintains a business continuity plan which allows for management of the Company to continue should facilities be compromised. The System would come under each of these plans and would therefore benefit from Aqua's planning.

**Q. Please explain Aqua's safety programs.**

A. Aqua and Aqua PA maintain safety programs that entail basic safety training in all the major categories which operators and operations management personnel are required to complete including but not limited to:

- Confined Space Training
- Back and Lifting Safety
- Work Zone Traffic Control
- Excavation Safety Awareness
- Fall Protection Training
- Hazard Communication
- Personal Protective Equipment
- Emergency Egress, Exits and Fire Safety
- Electrical Safety Training
- Control of Hazardous Energy | Lockout Tagout
- Arc-Flash Assessment and Protection
- Respiratory Protection
- Hearing Conservation

- Occupational Safety and Health Administration ("OSHA") Process Safety Management ("PSM") Program
- U.S. Environmental Protection Agency ("EPA") Risk Management Program ("RMP")

Aqua's safety program and procedures provide public benefits in that the City's customers will have a leader in the wastewater industry providing service. The City employees will benefit from the implementation of programs that have been proven effective and compliant with state and federal regulations.

**[BEGIN CONFIDENTIAL]**

[redacted]

[redacted]

[redacted]

**[END CONFIDENTIAL]**

**Q. Please describe Aqua's current arrangements to supply power to its facilities.**

A. Essential has a national contract with a number of energy companies for purchased power. These national contracts allow Aqua PA to acquire power at a favorable rate across all its water and subsidiary wastewater operations. Essential employs a full-time energy manager to ensure that it is getting the best price for power across its footprint. Aqua also maintains an inventory of emergency portable generators across all the Aqua subsidiaries. The Western Pennsylvania operations team currently maintains two portable generators as backups to the stationary generators at all critical facilities. Aqua also maintains several portable drinking water pumps as well as several solids handling wastewater bypass pumps. One of each of these pumps is stationed in Western Pennsylvania for emergency support of operations.

**Q. Please summarize why you believe Aqua is technically fit to own and operate the system.**

A. My explanation of Aqua's current operations, the System's similarity to other systems operated by Aqua, the additional support that will be provided by Aqua as an experienced wastewater utility, all support that Aqua is technically fit to own and operate the System.

## III. CONCLUSION

**Q. Does this conclude your Direct Testimony?**

A. Yes, it does. However, I reserve the right to supplement my Direct Testimony as additional issues and facts arise during the course of this proceeding.

# EXHIBIT X

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 4**

**DIRECT TESTIMONY OF**

**CHARLES R. JONES, JR.**

**CITY MANAGER**

**CITY OF BEAVER FALLS**

**With Regard To:**
**A General Overview of the Transaction**
**The City's Sale Process**
**Information Provided to Residents**
**Benefits of the Proposed Transaction**

**February 2023**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. DESCRIPTION OF THE CITY AND ITS WASTEWATER SYSTEM ..... 4

III. SALE PROCESS ..... 5

IV. BENEFITS OF THE PROPOSED TRANSACTION ..... 7

V. RATES ..... 9

VI. CONCLUSION ..... 10

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Charles R. Jones, Jr. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the appointed City Manager for the City of Beaver Falls (the "City"). My duties as defined by the City's Home Rule Charter are to manage day-to-day operations and oversee administrative functions of all City departments. I report directly to the Mayor of the City and City Council.

**Q. Please provide a brief description of your education and work experience.**

A. I am a United States Air Force Veteran, with extensive training and experience with law enforcement management and operations. I am a graduate of the F.B.I. National Academy and currently serve on several local and regional boards, including my role as an executive board member of our local Chamber of Commerce. I have an Associate's Degree in Criminal Justice and Police Technology. I have an undergraduate degree and graduate degree in leadership and organizational management, and I am a recent recipient of an honorary doctorate degree in leadership from Geneva College.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("Commission") before?**

A. No.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "Acquired Assets").

**Q. Please describe the purposes of your direct testimony and summarize the key points it will address.**

A. The purpose of my testimony is to provide: (1) a description of the Acquired Assets, (2) a description of the anticipated benefits of the sale of the Acquired Assets in accordance with an Asset Purchase Agreement ("APA") between the City and Aqua, and (3) a description of how the City sets its annual rates.

There are numerous benefits of the proposed transaction that are most important to the City and the customers who use the Acquired Assets, which include:

- The ability of the City to avoid Act 47 status and distressed community status, under the Municipalities Financial Recovery Act, Act of July 10, 1987, P.L. 246, No. 47 ("Act 47"), by improving the City's financial condition and outlook and by paying down debt and funding unfunded pension liabilities which will provide budgetary relief.
- Avoid navigating stringent United States Environmental Protection Agency ("EPA") and Pennsylvania Department of Environmental Protection ("DEP") regulations and rules which have grown increasingly more challenging to comply with.

- Ability to secure future financial stability for the City and its residents.
- The ability and flexibility to make necessary future capital investments within the City that will benefit residents of the City.
- The ability to preserve all wastewater collection system jobs.
- Aqua's ability as a Commission-regulated company to provide high quality professional wastewater services to the public.
- Anticipated additional property on the City's property tax rolls as a result of more development opportunities.
- Benefitting from Aqua's expertise, long-standing capital improvement programs, and its experience in improving and investing in aging systems in need of capital investments.
- Accessing Aqua's well-established and accessible programs to provide assistance for qualifying low-income customers.
- Improving the Acquired Assets' defenses against cyber-security attacks targeted at municipal-owned utilities with less sophisticated technology infrastructure and defenses.
- Benefitting from enhanced customer service and operational functions through expanded customer service center hours, more streamlined payment options (including by phone), enhanced customer information and education programs, access to Aqua's customer assistance program, and Aqua's team of experienced water and wastewater professionals.
- Benefitting from Aqua's proven record of environmental stewardship for the operation of wastewater systems; and

- Receiving the benefit of regulation by the Commission, which will ensure regulatory oversight, require approval for all rate increases, and provide significant consumer protections.

**Q. Are you sponsoring any Exhibits with your testimony?**

A. No.

## II. DESCRIPTION OF THE CITY AND ITS WASTEWATER SYSTEM

**Q. Please provide a general overview of the City.**

A. The City is a Home Rule Charter Municipality (as of January 3, 2022; the City was formerly a City of the Third Class) located in Beaver County, Pennsylvania, approximately 31 miles north of the City of Pittsburgh. The City is governed by a Mayor and a City Council comprised of four members. There are approximately 9,005 residents in the City (based on the 2020 U.S. Census). The City is approximately 2.317 square miles. According to the 2020 American Community Survey by the U.S. Bureau of the Census, the City's median household income is $35,951.

**Q. Please provide a description of the City's wastewater system.**

A. The City owns, operates and maintains the Acquired Assets, consisting of a sanitary wastewater collection and conveyance system and the Beaver Falls Sewage Treatment Plant. Along with the residents of the City, a total of seven municipalities contribute flow to be treated at the plant, including North Sewickley, Patterson Township, West Mayfield Township, White Township, Patterson Heights Borough, Big Beaver Borough, and

Eastvale Borough (the "Contributing Municipalities"). The City does not own any of the collection and conveyance sewers of the Contributing Municipalities. The City's collection and conveyance system includes approximately 36.3 miles of pipe serving approximately 3,190 customers within the City. The treatment plant has a hydraulic design capacity of 4.8 million gallons per day.

A majority of the Acquired Assets' sanitary sewer pipes were installed in the 1930s, with a few smaller sections installed in 1982 and 1996. The City does not have a long-term capital plan for the Acquired Assets as a result of the City's financial condition.

## III. SALE PROCESS

**Q. Please describe the City's decision-making process in concluding that a sale of the Acquired Assets was in the best interest of the City.**

A. The sale of the Acquired Assets was a result of extensive considerations and discussions with City leadership, staff and with the public. The City conducted a thorough internal review and solicited outside experts to review the Acquired Assets taking into account future costs and the potential liabilities of managing the wastewater system.

An evaluation was conducted to determine both qualitative and quantitative factors in reference to selling or maintaining ownership of the Acquired Assets. The careful and well-thought-out decision to sell resulted from the following main considerations. First, the City wanted to exit the business of providing sanitary sewer service and instead focus on its core governmental functions while still ensuring that our

residents would have safe and reliable service at affordable rates. Second, we wanted to generate revenue that would help secure the City's financial stability in the coming years.

After City Council made the decision to sell the Acquired Assets based on the above considerations, the City issued a Request for Qualifications to select a pool of qualified buyers, and, after preparation of the APA, a Request for Bids. Once the City reviewed the responses, we determined that Aqua, submitted a bid for our system that was in the best interest of, and provided the greatest value to, the City and its residents.

**Q. Did the City request public input on the sale?**

A. Yes, multiple public meetings were held in the City to receive input from residents on the state of the Acquired Assets and the advantages and disadvantages of the potential sale. The potential sale was discussed at various public meetings throughout the process including timely updates provided by the City's financial advisor, PFM Financial Advisors, LLC.

**Q. Did the City Council hold a vote at a regularly schedule public meeting on the sale, following input from the City residents?**

A. Yes, the duly elected members of City Council decided that the Proposed Transaction was in the best interests of the City. After public meetings, as detailed above, the City Council voted to authorize the City's solicitor to prepare an ordinance/resolution to accept Aqua's bid. In compliance with the Third Class City Code, two readings of the proposed ordinance to approve the APA were held on September 14th and September

28th, 2021, after providing notice to City residents publication was made in the Beaver County Times on September 22, 2021.

**Q. Please describe the process that the Township used to hire a Utility Valuation Expert ("UVE") for the Proposed Transaction.**

A. When City Council voted to unanimously approve the sale on September 28, 2021, it also authorized the City Manager to select a Utility Valuation Expert. On October 1, 2020, the City received a proposal from Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"), which was accepted after confirming their qualifications. Gannett Fleming is not otherwise affiliated with the City. The City authorized Gannett Fleming to begin working on the fair market value appraisal on June 16, 2022.

## IV. BENEFITS OF THE PROPOSED TRANSACTION

**Q. Please describe the benefits of the Proposed Transaction for the City.**

A. The City will benefit from the Proposed Transaction in many ways, as its wastewater collection and treatment system will be operated by a well-run public utility with a history of providing excellent service and a proven track record. Furthermore, the key benefits of the Proposed Transaction to the City and its residents are: (1) improve the City's financial condition and outlook, and (2) enable the City to reallocate its administration time to focus on other key initiatives of the City.

First, the Proposed Transaction will greatly improve the City's financial condition. The City has historically experienced financial difficulties, particularly during periods of economic recession, and is vulnerable to future economic downturns. This infusion of cash

will help prevent the City from being named by the Commonwealth Department of Community and Economic Development ("DCED") to distressed community or Act 47 status, which indicates severe financial difficulties and could lead to the City being placed in receivership.

Second, with respect to reallocating administrative time and expense, given the time and economic impact on the City of dealing with the Acquired Assets, by reallocating City administration time to focusing on other key initiatives of the City, the Proposed Transaction will provide significant public benefits.

The purchaser took great care with explaining their commitment to assist lower income residents and the importance of being a part of our community.

**Q. Please describe any further benefits from the Proposed Transaction.**

A. The City will realize many additional benefits from the sale of the Acquired Assets to Aqua. These benefits include, but are not limited to, the following:

- Property will be added to the City's property tax rolls through increased development opportunities;
- Aqua can draw upon a broad range of engineering and operational experience, as well as deeper financial resources than are available to the City, to address the environmental compliance challenges of the wastewater system;
- The City will benefit from Aqua's capital improvement programs, and its experience in improving wastewater systems and correcting potential future compliance issues that may arise;

- City residents will benefit from enhanced customer service and operational functions through expanded customer service center hours, additional payment options (including by phone or online), enhanced customer information and education programs, access to Aqua's customer assistance program, and Aqua's team of experienced water and wastewater professionals;
- Aqua has the capability and experience to make long-term investments in necessary capital improvements to the Acquired Assets;
- Aqua has a proven record of environmental stewardship for the operation of wastewater systems; and
- The City will acquire a new corporate citizen. Aqua's commitment to the communities it serves through investment in the community is clear throughout the Commonwealth.

**Q. Do you believe that the Proposed Transaction is in the public interest?**

A. Yes. For the reasons I set forth above, I believe that the Proposed Transaction provides substantial affirmative public benefits and is in the public interest. I urge the Commission to promptly approve the Proposed Transaction.

## V. RATES

**Q. How does the City of Beaver Falls set the rates it charges customers for wastewater treatment and collection?**

A. Rates are governed by the Third Class City Code and the Home Rule Charter and are set by City Council by ordinance and resolution after consideration of the costs of providing

service. Any rate increases must be approved by City Council through an ordinance. Rates to the inside City residents are billed based on a base and volumetric charge. Customers within the City are mainly charged a quarterly service charge which includes the first 3,000 gallons of consumption and a volumetric charge per additional 1,000 gallons used. Certain larger commercial and industrial customers are billed on a monthly basis. City customers are billed quarterly by the Beaver Falls Municipal Authority, which provides water service within the service area of the Acquired Assets. The Beaver Falls Municipal Authority remits the sewer portion of residents' payments to the City. The Contributing Municipalities are billed wholesale based on a set usage charge per 1,000 gallons of water used. The City's Sewage Department bills outside municipalities on a wholesale basis based on water usage readings provided by the Beaver Falls Municipal Authority.

**Q. How frequently does the City of Beaver Falls adjust rates?**

A. On November 8, 2022, the City adopted a rate ordinance confirming rates for residential and commercial customers and for the Joint Sewer Users. As was the case with the City's prior rate ordinance, this ordinance provides for late fees and an automatic 3% increase on an annual basis in order to account for inflation and cost increases.

## VI. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to file additional testimony at a later date as may be necessary or appropriate.

# EXHIBIT Y

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 5

# DIRECT TESTIMONY OF DYLAN W. D'ASCENDIS

**February 2023**

# DIRECT TESTIMONY OF
# DYLAN W. D'ASCENDIS

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

A. My name is Dylan W. D'Ascendis. My business address is 3000 Atrium Way, Suite 200, Mount Laurel, NJ 08054.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by ScottMadden, Inc. ("ScottMadden") as Partner.

**Q. PLEASE DESCRIBE YOUR PROFESSIONAL EDUCATION AND EXPERIENCE.**

A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues and class cost of service issues. I am a Utility Valuation Expert ("UVE") in the Commonwealth of Pennsylvania approved by the Pennsylvania Public Utility Commission ("PUC" or the "Commission") (Utility Code 9919278). I also assist in preparing rate filings, including, but not limited to, revenue requirements and original cost and lead/lag studies. I am a graduate of the University of Pennsylvania, where I received a Bachelor of Arts degree in Economic History. I also hold a Masters of Business Administration from Rutgers University with a concentration in Finance and International Business, which was conferred with high honors. I am a Certified Rate of Return Analyst ("CRRA") and a Certified Valuation Analyst ("CVA"). My full professional qualifications, including my expert witness appearances, are provided in Attachment A.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

A. Yes. I have testified before the Commission on several occasions as shown on Attachment A.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. The purpose of my testimony is to describe the fair market value appraisal of the wastewater operations of the City of Beaver Falls ("Beaver Falls" or the "City") that my staff and I performed on behalf of Aqua Pennsylvania Wastewater, Inc ("Aqua"). Beaver Falls is selling their operations to Aqua. Our report is entitled "Valuation Report City of Beaver Falls Wastewater System As of September 7, 2022." The valuation and its report were developed to meet the criteria established in Section 1329 of the Pennsylvania Public Utility Code ("Code"), 66 Pa.C.S. § 1329 ("Determination of the fair market value of water and wastewater assets").

In its 2015-2016 legislative session, the Pennsylvania Legislature passed Act 12 of 2016 and Governor Wolf signed into law Section 1329 of the Code establishing the legislative guidelines facilitating the acquisition of municipal water and wastewater systems by private investor-owned utilities and other entities which are rate-regulated by the PUC.

## QUALIFICATION AS UTILITY VALUATION EXPERT

**Q. ARE YOU ON THE COMMISSION'S REGISTRY OF UTILITY VALUATION EXPERTS?**

A. Yes. I am considered a UVE in the Commonwealth of Pennsylvania approved by the PUC (Utility Code 9919278).

**Q. PLEASE DESCRIBE THE PROCESS BY WHICH SCOTTMADDEN WAS PLACED ON THE COMMISSION'S REGISTRY OF UTILITY VALUATION EXPERTS.**

A. After passage of Section 1329 of the Code, the Commission established an application process by which the Commission would approve and designate firms to be placed on the Commission's "Registry of Utility Valuation Experts." ScottMadden submitted its application and the required proof of experience on October 13, 2016 and received confirmation and approval from the Commission of ScottMadden's placement on the Commission's UVE Registry on December 7, 2016. ScottMadden has remained on the Commission's registry ever since.

**Q. HAVE YOU EVER HAD YOUR PROFESSIONAL CREDENTIALS REVOKED OR SUSPENDED?**

A. No.

**Q. DO YOU HAVE SPECIFIC EXPERIENCE WITH THE VALUATION AND APPRAISAL OF UTILITY ASSETS?**

A. Yes. Please see Attachment A for the details of my valuation assignments.

**Q. HAVE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF DERIVED ANY MATERIAL FINANCIAL BENEFIT FROM THE SALE OF BEAVER FALLS' ASSETS OTHER THAN FEES FOR YOUR SERVICES RENDERED?**

A. No.

**Q. ARE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF AN IMMEDIATE FAMILY MEMBER OF A DIRECTOR, OFFICER, OR EMPLOYEE OF EITHER BEAVER FALLS OR AQUA?**

A. No.

**Q. IS SCOTTMADDEN IN COMPLIANCE WITH APPLICABLE PENNSYLVANIA LAWS?**

A. Yes.

**Q. DOES SCOTTMADDEN HAVE THE FINANCIAL AND TECHNICAL FITNESS, INCLUDING PROFESSIONAL LICENSES AND TECHNICAL CERTIFICATIONS, TO PERFORM A FAIR MARKET VALUATION OF THE ASSETS OF BEAVER FALLS?**

A. Yes.

**Q. ARE YOU AWARE OF ANY FACT, INCLUDING BUT NOT LIMITED TO ANY POTENTIAL CONFLICT OF INTEREST, THAT WOULD CAST DOUBT UPON YOUR ABILITY TO PROVIDE A THOROUGH, OBJECTIVE, UNBIASED, AND FAIR VALUATION IN THIS PROCEEDING?**

A. No.

**Q. ARE YOU ADVOCATING FOR ANY PARTY OR OUTCOME?**

A. No.

## FEES PAID FOR UTILITY VALUATION EXPERT SERVICES

**Q. HOW IS SCOTTMADDEN BEING COMPENSATED FOR ITS SERVICES IN THIS MATTER?**

A. ScottMadden is being compensated on a fee basis, which includes a fixed fee upon delivery of the initial valuation report, and hourly rates for any services rendered thereafter. True, correct, and complete copies of ScottMadden's invoices to Aqua for this matter, as of the date of Application filing, are attached to Aqua's Application as Application Exhibit S1 and I incorporate those invoices in my direct testimony as if set forth in their entirety.

**Q. WILL SCOTTMADDEN RECEIVE FEES FOR ITS SERVICES REGARDLESS OF WHETHER THE COMMISSION APPROVES THE PROPOSED TRANSACTION OR WHETHER IT CLOSES?**

A. Yes.

**Q. ARE THESE FEES CONSISTENT WITH COMPENSATION RECEIVED FOR SIMILAR SERVICES PROVIDED TO OTHER CLIENTS?**

A. Yes.

## FAIR MARKET VALUATION OF BEAVER FALLS' ASSETS

**Q. PLEASE IDENTIFY EXHIBIT Q TO THE APPLICATION IN THIS PROCEEDING?**

A. Exhibit Q of Aqua's Application includes my Valuation Report dated September 7, 2022, which I prepared for Aqua to be filed in this proceeding.

**Q. HOW DO YOU RECOGNIZE IT?**

A. I personally prepared and supervised ScottMadden personnel in preparing the Report, and recognize it as ScottMadden's work product.

**Q. IS APPLICATION EXHIBIT Q A TRUE, COMPLETE, AND ACCURATE COPY OF YOUR VALUATION REPORT?**

A. Yes, and I incorporate it into my direct testimony as if set forth in its entirety.

**Q. PLEASE DESCRIBE THE PROCESS BY WHICH YOU PREPARED THE VALUATION REPORT.**

A. In accordance with Section 1329 of the Code, Aqua and Beaver Falls engaged Gannett Fleming, Inc. ("Gannett Fleming") as the licensed engineer to conduct an assessment of the City's tangible assets. Aqua engaged ScottMadden to prepare the fair market valuation

report for their operations. Beaver Falls provided financial statements regarding their operations and a copy of the City of Beaver Falls Engineers Assessment of Wastewater System Assets ("Engineer's Assessment") developed by Gannett Fleming as required by Section 1329(a)(4). After those activities and data gathering, we developed the appraisal.

The appraisal contains a letter of transmittal; a narrative report explaining our methodology and conclusions; a statement of assumptions and limiting conditions; a statement of the Valuation Analyst's Representations; a statement of the professional qualifications of Dylan W. D'Ascendis, CVA, CRRA and Matthew R. Howard, CRRA; and various schedules and appendices.

The intent of the valuation report is to provide the appraisal results, as well as the entire appraisal work file, in sufficient detail to satisfy the parties' and Commission's review requirements of Section 1329 and the Commission's Final Implementation Order, *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (Order entered October 27, 2016). In addition to a copy of my appraisal report, I have provided supporting work papers for the appraisal report. The relevant work papers have been submitted to the Commission with the Application and provided to the statutory advocates in live electronic format. ScottMadden considers the live electronic files, which are in Excel format, to be CONFIDENTIAL.

**Q. IS THERE ANYTHING THAT YOU WOULD CHANGE IN THE VALUATION REPORT SINCE ITS PREPARATION?**

A. No.

**Q. WAS THE FAIR MARKET VALUATION OF THE CITY'S ASSETS DETERMINED IN COMPLIANCE WITH THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE ("USPAP")?**

A. Yes. Included in ScottMadden's cover letter is a statement of our report's compliance with USPAP.

**Q. DID YOU EMPLOY THE COST, MARKET AND INCOME APPROACHES IN PREPARING YOUR VALUATION?**

A. Yes. We developed our appraisal utilizing the cost, market, and income approaches as required by USPAP and Section 1329 of the Code. These approaches are summarized below.

**Table 1: Summary of Indicated Values**

| Valuation Approach | Indicated Value |
|---|---|
| Cost Approach | $11,446,928 |
| Market Approach | $46,817,319 |
| Income Approach | $39,970,803 |

**Q. DID YOU RELY UPON A LICENSED ENGINEER'S ASSESSMENT OF THE TANGIBLE ASSETS OF BEAVER FALLS IN PERFORMING YOUR VALUATION?**

A. Yes. Aqua and Beaver Falls engaged Gannett Fleming as the licensed engineer to conduct an assessment of Beaver Falls' tangible assets. Beaver Falls provided a copy of the Engineer's Assessment developed by Gannett Fleming as required by Section 1329(a)(4). A copy of the Engineering Assessment is included as Appendix E to the Valuation Report.

**Q. DID THE ENGINEER'S ASSESSMENT INCLUDE AN INVENTORY OF THE USED AND USEFUL UTILITY PLANT ASSETS TO BE TRANSFERRED COMPILED BY YEAR AND ACCOUNT?**

A. Yes.

**Q. DID THE ENGINEER'S ASSESSMENT LIST ALL NON-DEPRECIABLE PROPERTY SUCH AS LAND AND RIGHTS-OF-WAY?**

A. Yes.

**Q. TO THE BEST OF YOUR KNOWLEDGE, WAS THE ENGINEER'S ASSESSMENT DEVELOPED FROM AVAILABLE RECORDS, MAPS, WORK ORDERS, DEBT ISSUE CLOSING DOCUMENTS FUNDING CONSTRUCTION PROJECTS, AND OTHER SOURCES TO ENSURE AN ACCURATE LISTING OF UTILITY PLANT INVENTORY BY UTILITY ACCOUNT?**

A. Yes. However, Gannett Fleming noted that in certain instances there was not original cost data available. In those instances, Gannett Fleming developed a current replacement cost based on its estimated probable construction cost.

**Q. DO YOU HAVE ANY REASON TO DOUBT THE ACCURACY OF THE ENGINEER'S ASSESSMENT OF THE ASSETS?**

A. No.

**Q. DID YOU INCORPORATE THE ENGINEER'S ASSESSMENT INTO YOUR COST APPROACH IN DEVELOPING YOUR VALUATION?**

A. Yes.

**Q. DID YOU HAVE TO EXERCISE PROFESSIONAL DISCRETION IN DEVELOPING ANY ASPECT OF YOUR VALUATION?**

A. Yes. The use of professional discretion is detailed throughout ScottMadden's Valuation Report, where applicable.

**Q. PLEASE DESCRIBE ANY ASSUMPTIONS, EXTRAORDINARY ASSUMPTIONS, HYPOTHETICAL CONDITIONS, AND/OR LIMITING CONDITIONS THAT YOU APPLIED TO THE VALUATION.**

A. The Statement of Assumptions and Limiting Conditions and the Valuation Analyst's Representations are provided in Appendices A and B to ScottMadden's Valuation Report. Three examples of the limiting conditions for this valuation are:

- Financial statements for the year 2021 were not available; nor were projected capital expenditures as developed by Beaver Falls;
- The reporting nature of Beaver Falls consumption data made it difficult for ScottMadden to verify their reported consumption totals; and
- Original costs for certain items were not available, as outlined in the Engineers Assessment.

**Q. HOW DID YOU DEVELOP THE WEIGHTING APPLIED TO EACH APPROACH IN YOUR APPRAISAL AND WHY ARE THE INDIVIDUAL WEIGHTS YOU CHOSE APPROPRIATE FOR THE PROPOSED TRANSACTION?**

A. No method of valuation will produce the exact value of a business. A valuation study cannot incorporate market conditions at the time of sale or predict a potential investor's desire, or lack thereof, to acquire the business. Beaver Falls' desire to sell additional assets to the potential acquirer may increase the desire of some investors, and as a result, increase the value of both sets of assets. Our valuation and report cannot incorporate these considerations.

I have determined the range of values of Beaver Falls based on the relative weighting of the three valuation methods, as will be discussed below. The weightings indicate the value placed on each appraisal method from the valuation expert. In my opinion, the income and market approaches should receive weights of 45%, and the cost approach a weight of 10%. The reason for this is the Cost Approach does not accurately represent Beaver Falls' value as it cannot reflect the revenues from the residents outside the City, which are the majority of Beaver Falls' historical and expected revenues. Beaver Falls' wastewater operations provide wastewater treatment, conveyance, and collection services to residents within the City of Beaver Falls, and wastewater treatment and conveyance services to residents outside the City of Beaver Falls, including customers from Big Beaver Borough, Eastvale Borough, North Sewickley Township, the Borough of Patterson Heights, Patterson Township, West Mayfield Borough, and White Township

(collectively, the "Contributing Municipalities")[1], as well as customers serviced by Dalton's Service Co. ("Dalton") which provides sewer hauling services.

In this instance, the value of Beaver Falls is not only reflected in its physical assets, but its intermunicipal flow volumes. The indicated result based on the Cost Approach would remain the same regardless of whether the City's assets continue to serve the Contributing Municipalities or not. The range of values and relative weightings of the valuation approaches are set forth in Table 2, below:

**Table 2: Conclusion of Value for Beaver Falls**

| Valuation Approach | Indicated Value | Weight | Weighted Value |
|---|---|---|---|
| Cost | $11,446,928 | 10% | $1,144,693 |
| Market | $46,817,319 | 45% | $21,067,793 |
| Income | $39,970,803 | 45% | $17,986,861 |
| **Indicated Value** | | **100%** | **$40,199,347** |

**Cost Approach**

**Q. REGARDING YOUR APPLICATION OF THE COST APPROACH, WHAT METHOD DID YOU USE TO DETERMINE THE COST APPROACH RESULT?**

A. I used a trended original cost method to determine the reproduction cost new, less depreciation ("RCNLD") of Beaver Falls' assets. In order to arrive at the Reproduction Cost New for Beaver Falls' assets, I began with the original cost of the assets provided by the Engineer's Assessment and used the Handy-Whitman Index ("HW Index") to determine the current reproduction value, or for assets which only a replacement cost was

[1] Referred to as the Joint Sewer Users in the ScottMadden Appraisal.

available, to determine an estimated original cost. The HW Index is prepared specifically for electric, gas, and water utilities, and is the only publication of its kind available to the public. The HW Index has been published continuously since 1924. The Index is comprised of historical index values for various accounts prescribed by the NARUC Uniform System of Accounts, as well as for construction, material, and labor, by geographic region of the United States. For assets not included in the HW Index, specifically laboratory equipment, office furniture, computer equipment, audio/video equipment, communication equipment, truck trailers, and storage equipment, I used the Producer Pricing Index. I also used the Consumer Pricing Index for various small tools owned by Beaver Falls.

The trended original cost method consists of the development of adjustment factors from the time when the asset was put into service to the current date. For example, an average main (NARUC account 331) placed into service in 1985 with an original cost of $100,000 would be trended forward by the ratio of the index value at the current date divided by the index value at the time of installation. The index value of NARUC account 331 in July 2021 is 911.00, and the index value in 1985 when the assets were installed was 254.00, which means the ratio applied to the original cost of the main would be 3.59.[2] This would translate into a current cost for that main of $358,661.[3]

The next step in deriving the RCNLD for Beaver Falls' assets is to quantify the amount of physical deterioration, functional obsolescence, and economic obsolescence of the assets. Physical deterioration is caused by use, wear and tear, and the aging process. Functional obsolescence is caused by changes in design or construction to create efficiencies not present in the current asset. Economic obsolescence is a loss in value due

[2] 911.00 / 254.00 = 3.59.
[3] (911.00 / 254.00) x $100,000 = $358,661.

to external factors not in the control of Beaver Falls such as economic conditions. The most common measure of physical deterioration is the reserve held for depreciation, which is based on the asset's remaining life versus its average useful life. Functional obsolescence is measured by comparing the subject asset to a replacement asset with current technology. The Engineering Assessment found no significant functional obsolescence for Beaver Falls' assets. Economic obsolescence is usually measured by market conditions, which have been supportive towards the water and wastewater industries in the recent past, as well as prospectively, so I do not believe there is significant economic obsolescence present in Beaver Falls' assets. Since the only applicable measure of loss of value is physical deterioration, the useful lives for each asset were determined, and reserves for depreciation were calculated for each Beaver Falls asset if original costs were available. As mentioned previously, certain assets did not have original costs assigned, so I relied upon the estimation of original cost provided by the Engineer's Assessment.

**Q. HOW DID YOU CALCULATE THE DEPRECIATION RESERVE FOR EACH ASSET?**

A. First, I determined the useful life for each asset,[4] then I reduced the original cost of each asset each year by 1/useful life until the asset was fully depreciated or through 2021, which ever one came first and put that value into the depreciation reserve.

[4] Useful lives are based on the System of Accounts for Water and Wastewater Utilities – with 200 or more connections from the Public Utility Commission of Texas with several exceptions. I used a 75-year useful life for mains as determined by the PUC in Docket No. A-2019-3008491, a 50-year useful life for structures, and a 10-year useful life for transportation equipment. My use of both 50 and 10-year useful lives for structures and transportation equipment was not challenged by the parties in Docket No. A-2021-3024681.

**Q. WHAT IS THE INDICATED VALUE OF BEAVER FALLS BASED ON THE COST APPROACH?**

A. Using the HW, and Producers and Consumer Pricing Indices to trend the original cost, less depreciation of Beaver Falls' assets forward, I derived a RCNLD of $11,446,928 as shown on Schedule 1 of ScottMadden's Valuation Report.

As stated above, the value derived from the cost approach is based solely on Beaver Falls' underlying assets, which means it does not take into account the expected cash flows of these assets. This is especially important given the impact of the Contributing Municipalities (as outlined above) that Beaver Falls provides wastewater treatment and conveyance for. Additionally, even though the HW Index takes into account the changes in the cost of various factors over time in different regions throughout the country, it cannot take into account intricacies such as terrain (e.g., mountains in Appalachia versus farmland in Pennsylvania) or changes in development and zoning since original installation. All else remaining equal, different terrains or changes in laws will translate into different timeframes to complete the project, which will directly affect costs.

**Market Approach**

**Q. REGARDING YOUR APPLICATION OF THE MARKET APPROACH, WHAT METHODS DID YOU USE TO DETERMINE THE MARKET APPROACH RESULT?**

A. I used the market value of invested capital to net plant multiple and comparable sales methods.

**Q. PLEASE DISCUSS THE MARKET VALUE OF INVESTED CAPITAL TO NET PLANT METHOD.**

A. The market value of invested capital to net plant method applies a market value of invested capital to net plant ratio of a comparable risk group to the original cost less depreciation ("OCLD") of the subject company to derive an indicated market value. As shown on page 2 of Schedule 2 of ScottMadden's Valuation Report, market value of invested capital to net plant ratios of the water utility proxy group used to derive the weighted average cost of capital ("WACC") in the income approach range from 1.3723x to 2.4940x. Using Beaver Falls' OCLD of $5,003,844,[5] indicated values range from $6,866,665 to $12,479,523, with an average of $9,496,121 as shown on page 3 of Schedule 2 of ScottMadden's Valuation Report. Again, since Beaver Falls' assets do not reflect its full value, this measure would significantly understate the indicated value of Beaver Falls.

**Q. PLEASE DESCRIBE THE COMPARABLE SALES METHOD.**

A. I also researched transactions involving companies who acquired 100% of a water or sewer interest since 2016. That research returned 107 results from around the country, 27 of which were acquisitions in Pennsylvania, which are contained on pages 4-5 of Schedule 2 of ScottMadden's Valuation Report. A common ratio which can be used to determine Beaver Falls' market value is transaction value per equivalent domestic unit ("EDU"). The purchase price per EDU ratios for the relevant transactions are shown on page 5 of Schedule 2 of ScottMadden's Valuation Report. As shown on page 5 of Schedule 2 of ScottMadden's Valuation Report, the nationwide average purchase price to EDU is

[5] Page 2 of Schedule 1, Column [4]

approximately 4.22x, while the Pennsylvania average purchase price to EDU is 6.63x. Given the 9,392 EDUs served by Beaver Falls,[6] indicated values using this approach range from $39,667,839 to $62,260,398.

**Q. WHAT WERE THE RESULTS OF EACH ANALYSIS YOU PERFORMED?**

A. The market value of invested capital to net plant analysis produced an indicated value of $9,496,121.[7] The comparable sales method produced a result of $50,964,118.

**Q. WHICH RESULTS WERE USED TO DETERMINE YOUR MARKET APPROACH RESULT? PLEASE EXPLAIN WHY THESE RESULTS WERE USED.**

A. I applied a 90% weight to the average comparable sales method and a 10% weight to the market value of invested capital to net plant method to come to an indicated value of $46,817,319. The reason for these recommended weightings is because, as previously outlined, Beavers Falls' assets do not reflect its value and this measure would significantly understate the indicated value of Beaver Falls. Given the number of comparable sales transactions Nationwide and in Pennsylvania, the comparable sales method was determined to be most applicable in this case.

[6] Calculated as total consumption divided by the average residential consumption: 109,238,000 / 2,880 = 37,930; 356,245,793 / 37,930 = 9,392. Average residential consumption based on customers within the City of Beaver Falls.

[7] Indicated Market Value of Net Plant Based on Average Market Value Invested Capital to Net Plant Ratio.

**Income Approach**

**Q. WHAT ASSUMPTIONS DID YOU EMPLOY TO DEVELOP YOUR INCOME APPROACH RESULT?**

A. In determining the indicated value using the income approach, I made assumptions regarding Beaver Falls' operating revenue, operating expenses, and capital requirements**.**

The vast majority of Beaver Falls' revenues are tied to fees for the collection, treatment, and conveyance of wastewater for customers within the City, and fees for treatment and conveyance of wastewater for the Contributing Municipalities and Dalton. As such, revenues are dependent on two factors; population growth and rate increases.

In regard to rate increases, given capital improvements identified by Aqua, and detailed below, it was determined that yearly rate increases of 10% for the period 2022-2027 were necessary to recover those capital outlays, which I applied to Charges for Services both inside and outside the City. Subsequent to that period, I applied 3% increases for inside and outside City customers consistent with the City's ordinance authorizing yearly increases of 3% for both sewer users within Beaver Falls and for the Contributing Municipalities on December 8, 2020.[8]

General operating expenses for the City are primarily comprised of administrative, wage and benefit maintenance, operational, contractual, utility, and various miscellaneous expenses. All expenses are assumed to increase at the projected level of the Consumer Price Index[9] ("CPI").

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[8] ScottMadden applied a 3% rate increase for the years 2021 and 2022 as consistent with the Beaver Falls Ordinance; see, ScottMadden's Valuation Report, Appendix G.

[9] I employed a CPI projection of 2.25% per year, based on the long-term CPI projection published by *Blue Chip Financial Forecasts*. *See, Blue Chip Financial Forecasts*, Vol. 40, No. 12, December 1, 2021 at 14; Appendix H, at 23.

Regarding the Repairs and Maintenance expense, ScottMadden assumed this expense would be comparable to the 2019 amount due to the corrective action plan Beaver Falls is under. The expense was increased by the projected CPI through 2025, which is when the corrective action plan is scheduled to be completed. Stating in 2026, ScottMadden assumed the expense would be comparable to the 2020 level grown at the projected CPI through 2026, and subsequently grown at the projected CPI into perpetuity.

Regarding the Sewer Line Reimbursement expense, based on information from Beaver Falls, ScottMadden understood the expense to be non-operational in nature. Because it does not reflect the ongoing operations of Beaver Falls, it was removed.

For the expected system improvements for the period used in the income approach, because Beaver Falls did not have an internal capital improvement plan as noted above, I relied on the needed capital improvements as outlined by Aqua. I sought to only include projects that addressed issues of safety, compliance, and equipment failure. Those projects are outlined in Table 1 of my appraisal (also shown on page 5 of Schedule 3 of ScottMadden's Valuation Report). For the period 2022, I relied on the median yearly level of capital improvements based on Aqua's projections ($569,250). Lastly, for the period 2033, I grew the median level of capital improvements by the projected CPI through 2033 ($727,109), and subsequently into perpetuity.

**Q. WHAT DISCOUNT RATE DID YOU USE TO CALCULATE YOUR INCOME APPROACH?**

A. The discount rate is the investor-required expected rate of return on the assets. An investor in any company needs to be compensated for the risk of that investment, and a higher level

of risk equates to a higher required rate of return. The overall rate of return in this instance is defined by the WACC. I have calculated a discount rate which relates to the traditional method of financing for publicly-traded water companies, which uses an equal mix between debt and equity capital.

For the common equity cost rate, I applied the Discounted Cash Flow ("DCF"), Risk Premium ("RPM") and Capital Asset Pricing Models ("CAPM") to a proxy group of publicly-traded water companies and a group of non-regulated companies comparable in total risk to the water utility group. Application of these cost of common equity models to these groups results in an indicated cost of common equity of 10.19% which is presented in Appendix H of ScottMadden's Valuation Report.

The representative capital structure is a hypothetical capital structure based on the range of capital structures for fiscal year 2020 of the publicly-traded proxy group companies used to derive the cost of common equity.[10] For the debt cost rate used in the WACC calculation, I used a 30-day average Moody's A2 public utility bond rate of 3.04%.[11] Table 3 below illustrates the assumed WACC of an investor-owned water utility.

**Table 3: Assumed WACC for Water Utility Company**

| Type of Capital | Cost Rate | Ratio | Weighted Cost |
|---|---|---|---|
| Long-Term Debt | 3.04% | 50.00% | 1.52% |
| Common Equity | 10.19% | 50.00% | 5.10% |
| **Total** | | **100.00%** | **6.62%** |

[10] The range of equity ratios of the proxy group companies were from 40.05% to 59.28% at 2020 fiscal year end.

[11] ScottMadden Valuation Report, Appendix H, at 2.

**Q. IF YOU USED A TERMINAL VALUE IN YOUR DISCOUNTED CASH FLOW ANALYSIS WHAT IS THE NUMBER OF YEARS OVER WHICH THE CASH FLOWS ARE CONSIDERED?**

A. I considered those cash flows over 29 years (2022 – 2050).

**Q. WHAT IS THE INDICATED VALUE OF BEAVER FALLS USING THE INCOME APPROACH?**

A. Inputting the estimated revenue, expense, and capital expenditure data into the model resulted in an indicated value of $39,970,803.

## CONCLUSION

**Q. WHAT IS YOUR CONCLUSION REGARDING THE FAIR MARKET VALUE OF BEAVER FALLS' WASTEWATER OPERATIONS TO BE PURCHASED BY AQUA?**

A. The fair market value of Beaver Falls' wastewater operations is $40,199,347 as of September 7, 2022. The results of my appraisal and conclusions are summarized in the following table:

**Table 4: Conclusion of Value for Beaver Falls**

| Valuation Approach | Indicated Value | Weight | Weighted Value |
|---|---|---|---|
| Cost | $11,446,928 | 10% | $1,144,693 |
| Market | $46,817,319 | 45% | $21,067,793 |
| Income | $39,970,803 | 45% | $17,986,861 |
| **Indicated Value** | | **100%** | **$40,199,347** |

**Q. DID YOU MAKE ANY UPDATES TO YOUR APPRAISAL AFTER IT WAS SUBMITTED TO THE BUYER, AND IF SO, WHAT WAS THE UPDATE, WHEN WAS IT MADE, AND WHY WAS IT NECESSARY?**

A. I did not update or revise my appraisal after it was submitted to the Buyer.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of the proceeding.

*Attachment A: Professional Qualifications of*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

## *Summary*

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). He has served as a consultant for investor-owned and municipal utilities and authorities for 13 years. Dylan has extensive experience in rate of return analyses, class cost of service, rate design, and valuation for regulated public utilities. He has testified as an expert witness in the subjects of rate of return, cost of service, rate design, and valuation before 30 regulatory commissions in the U.S., one Canadian province, an American Arbitration Association panel, and the Superior Court of Rhode Island.

He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured.

## *Areas of Specialization*

- Regulation and Rates
- Utilities
- Mutual Fund Benchmarking
- Capital Market Risk
- Financial Modeling
- Valuation
- Regulatory Strategy
- Rate Case Support
- Rate of Return
- Cost of Service
- Rate Design

## *Recent Expert Testimony Submission/Appearances*

| *Jurisdiction* | *Topic* |
|---|---|
| Massachusetts Department of Public Utilities | Rate of Return |
| New Jersey Board of Public Utilities | Rate of Return |
| Hawaii Public Utilities Commission | Cost of Service, Rate Design |
| South Carolina Public Service Commission | Return on Common Equity |
| American Arbitration Association | Valuation |

## *Recent Assignments*

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the City
- Co-authored a valuation report on behalf of a large investor-owned utility company in response to a new state regulation which allowed the appraised value of acquired assets into rate base

## *Recent Publications and Speeches*

- Co-Author of: "Decoupling, Risk Impacts and the Cost of Capital", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal, March, 2020.
- Co-Author of: "Decoupling Impact and Public Utility Conservation Investment", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal, 130 (2019), 311-319.
- "Establishing Alternative Proxy Groups", before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum, April 4, 2019, New Orleans, LA.
- "Past is Prologue: Future Test Year", Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit, May 2, 2017, Savannah, GA.
- Co-author of: "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley, The Electricity Journal, May, 2013.
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks", before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum, April 17-18, 2013, Indianapolis, IN.

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| **Regulatory Commission of Alaska** | | | | |
| Alaska Power Company | 09/20 | Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc. | Tariff Nos. TA886-2; TA6-521; TA4-573 | Capital Structure |
| Alaska Power Company | 07/16 | Alaska Power Company | Docket No. TA857-2 | Rate of Return |
| **Alberta Utilities Commission** | | | | |
| AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 01/20 | AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 2021 Generic Cost of Capital, Proceeding ID. 24110 | Rate of Return |
| **Arizona Corporation Commission** | | | | |
| EPCOR Water Arizona, Inc. | 06/20 | EPCOR Water Arizona, Inc. | Docket No. WS-01303A-20-0177 | Rate of Return |
| Arizona Water Company | 12/19 | Arizona Water Company – Western Group | Docket No. W-01445A-19-0278 | Rate of Return |
| Arizona Water Company | 08/18 | Arizona Water Company – Northern Group | Docket No. W-01445A-18-0164 | Rate of Return |
| **Arkansas Public Service Commission** | | | | |
| CenterPoint Energy Resources Corp. | 05/21 | CenterPoint Arkansas Gas | Docket No. 21-004-U | Return on Equity |
| **Colorado Public Utilities Commission** | | | | |
| Summit Utilities, Inc. | 04/18 | Colorado Natural Gas Company | Docket No. 18AL-0305G | Rate of Return |
| Atmos Energy Corporation | 06/17 | Atmos Energy Corporation | Docket No. 17AL-0429G | Rate of Return |
| **Delaware Public Service Commission** | | | | |
| Delmarva Power & Light Co. | 11/20 | Delmarva Power & Light Co. | Docket No. 20-0149 (Electric) | Return on Equity |
| Delmarva Power & Light Co. | 10/20 | Delmarva Power & Light Co. | Docket No. 20-0150 (Gas) | Return on Equity |
| Tidewater Utilities, Inc. | 11/13 | Tidewater Utilities, Inc. | Docket No. 13-466 | Capital Structure |
| **Public Service Commission of the District of Columbia** | | | | |
| Washington Gas Light Company | 09/20 | Washington Gas Light Company | Formal Case No. 1162 | Rate of Return |
| **Federal Energy Regulatory Commission** | | | | |
| LS Power Grid California, LLC | 10/20 | LS Power Grid California, LLC | Docket No. ER21-195-000 | Rate of Return |
| **Florida Public Service Commission** | | | | |
| Tampa Electric Company | 04/21 | Tampa Electric Company | Docket No. 20210034-EI | Return on Equity |
| Peoples Gas System | 09/20 | Peoples Gas System | Docket No. 20200051-GU | Rate of Return |
| Utilities, Inc. of Florida | 06/20 | Utilities, Inc. of Florida | Docket No. 20200139-WS | Rate of Return |
| **Hawaii Public Utilities Commission** | | | | |
| Launiupoko Irrigation Company, Inc. | 12/20 | Launiupoko Irrigation Company, Inc. | Docket No. 2020-0217 / Transferred to 2020-0089 | Capital Structure |
| Lanai Water Company, Inc. | 12/19 | Lanai Water Company, Inc. | Docket No. 2019-0386 | Cost of Service / Rate Design |
| Manele Water Resources, LLC | 08/19 | Manele Water Resources, LLC | Docket No. 2019-0311 | Cost of Service / Rate Design |
| Kaupulehu Water Company | 02/18 | Kaupulehu Water Company | Docket No. 2016-0363 | Rate of Return |
| Aqua Engineers, LLC | 05/17 | Puhi Sewer & Water Company | Docket No. 2017-0118 | Cost of Service / Rate Design |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| Hawaii Resources, Inc. | 09/16 | Laie Water Company | Docket No. 2016-0229 | Cost of Service / Rate Design |
| **Illinois Commerce Commission** | | | | |
| Utility Services of Illinois, Inc. | 02/21 | Utility Services of Illinois, Inc. | Docket No. 21-0198 | Rate of Return |
| Ameren Illinois Company d/b/a Ameren Illinois | 07/20 | Ameren Illinois Company d/b/a Ameren Illinois | Docket No. 20-0308 | Return on Equity |
| Utility Services of Illinois, Inc. | 11/17 | Utility Services of Illinois, Inc. | Docket No. 17-1106 | Cost of Service / Rate Design |
| Aqua Illinois, Inc. | 04/17 | Aqua Illinois, Inc. | Docket No. 17-0259 | Rate of Return |
| Utility Services of Illinois, Inc. | 04/15 | Utility Services of Illinois, Inc. | Docket No. 14-0741 | Rate of Return |
| **Indiana Utility Regulatory Commission** | | | | |
| Aqua Indiana, Inc. | 03/16 | Aqua Indiana, Inc. Aboite Wastewater Division | Docket No. 44752 | Rate of Return |
| Twin Lakes, Utilities, Inc. | 08/13 | Twin Lakes, Utilities, Inc. | Docket No. 44388 | Rate of Return |
| **Kansas Corporation Commission** | | | | |
| Atmos Energy | 07/19 | Atmos Energy | 19-ATMG-525-RTS | Rate of Return |
| **Kentucky Public Service Commission** | | | | |
| Duke Energy Kentucky, Inc. | 06/21 | Duke Energy Kentucky, Inc. | 2021-00190 | Return on Equity |
| Bluegrass Water Utility Operating Company | 10/20 | Bluegrass Water Utility Operating Company | 2020-00290 | Return on Equity |
| **Louisiana Public Service Commission** | | | | |
| Southwestern Electric Power Company | 12/20 | Southwestern Electric Power Company | Docket No. U-35441 | Return on Equity |
| Atmos Energy | 04/20 | Atmos Energy | Docket No. U-35535 | Rate of Return |
| Louisiana Water Service, Inc. | 06/13 | Louisiana Water Service, Inc. | Docket No. U-32848 | Rate of Return |
| **Maryland Public Service Commission** | | | | |
| Washington Gas Light Company | 08/20 | Washington Gas Light Company | Case No. 9651 | Rate of Return |
| FirstEnergy, Inc. | 08/18 | Potomac Edison Company | Case No. 9490 | Rate of Return |
| **Massachusetts Department of Public Utilities** | | | | |
| Unitil Corporation | 12/19 | Fitchburg Gas & Electric Co. (Elec.) | D.P.U. 19-130 | Rate of Return |
| Unitil Corporation | 12/19 | Fitchburg Gas & Electric Co. (Gas) | D.P.U. 19-131 | Rate of Return |
| Liberty Utilities | 07/15 | Liberty Utilities d/b/a New England Natural Gas Company | Docket No. 15-75 | Rate of Return |
| **Minnesota Public Utilities Commission** | | | | |
| Northern States Power Company | 11/20 | Northern States Power Company | Docket No. E002/GR-20-723 | Rate of Return |
| **Mississippi Public Service Commission** | | | | |
| Atmos Energy | 03/19 | Atmos Energy | Docket No. 2015-UN-049 | Capital Structure |
| Atmos Energy | 07/18 | Atmos Energy | Docket No. 2015-UN-049 | Capital Structure |
| **Missouri Public Service Commission** | | | | |
| Spire Missouri, Inc. | 12/20 | Spire Missouri, Inc. | Case No. GR-2021-0108 | Return on Equity |
| Indian Hills Utility Operating Company, Inc. | 10/17 | Indian Hills Utility Operating Company, Inc. | Case No. SR-2017-0259 | Rate of Return |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| Raccoon Creek Utility Operating Company, Inc. | 09/16 | Raccoon Creek Utility Operating Company, Inc. | Docket No. SR-2016-0202 | Rate of Return |
| **Public Utilities Commission of Nevada** | | | | |
| Southwest Gas Corporation | 08/20 | Southwest Gas Corporation | Docket No. 20-02023 | Return on Equity |
| **New Hampshire Public Utilities Commission** | | | | |
| Aquarion Water Company of New Hampshire, Inc. | 12/20 | Aquarion Water Company of New Hampshire, Inc. | Docket No. DW 20-184 | Rate of Return |
| **New Jersey Board of Public Utilities** | | | | |
| Middlesex Water Company | 05/21 | Middlesex Water Company | Docket No. WR21050813 | Rate of Return |
| Atlantic City Electric Company | 12/20 | Atlantic City Electric Company | Docket No. ER20120746 | Return on Equity |
| FirstEnergy | 02/20 | Jersey Central Power & Light Co. | Docket No. ER20020146 | Rate of Return |
| Aqua New Jersey, Inc. | 12/18 | Aqua New Jersey, Inc. | Docket No. WR18121351 | Rate of Return |
| Middlesex Water Company | 10/17 | Middlesex Water Company | Docket No. WR17101049 | Rate of Return |
| Middlesex Water Company | 03/15 | Middlesex Water Company | Docket No. WR15030391 | Rate of Return |
| The Atlantic City Sewerage Company | 10/14 | The Atlantic City Sewerage Company | Docket No. WR14101263 | Cost of Service / Rate Design |
| Middlesex Water Company | 11/13 | Middlesex Water Company | Docket No. WR1311059 | Capital Structure |
| **New Mexico Public Regulation Commission** | | | | |
| Southwestern Public Service Company | 01/21 | Southwestern Public Service Company | Case No. 20-00238-UT | Return on Equity |
| **North Carolina Utilities Commission** | | | | |
| Piedmont Natural Gas Co.Inc. | 03/21 | Piedmont Natural Gas Co., Inc. | Docket No. G-9, Sub 781 | Return on Equity |
| Duke Energy Carolinas, LLC | 07/20 | Duke Energy Carolinas, LLC | Docket No. E-7, Sub 1214 | Return on Equity |
| Duke Energy Progress, LLC | 07/20 | Duke Energy Progress, LLC | Docket No. E-2, Sub 1219 | Return on Equity |
| Aqua North Carolina, Inc. | 12/19 | Aqua North Carolina, Inc. | Docket No. W-218 Sub 526 | Rate of Return |
| Carolina Water Service, Inc. | 06/19 | Carolina Water Service, Inc. | Docket No. W-354 Sub 364 | Rate of Return |
| Carolina Water Service, Inc. | 09/18 | Carolina Water Service, Inc. | Docket No. W-354 Sub 360 | Rate of Return |
| Aqua North Carolina, Inc. | 07/18 | Aqua North Carolina, Inc. | Docket No. W-218 Sub 497 | Rate of Return |
| **North Dakota Public Service Commission** | | | | |
| Northern States Power Company | 11/20 | Northern States Power Company | Case No. PU-20-441 | Rate of Return |
| **Public Utilities Commission of Ohio** | | | | |
| Aqua Ohio, Inc. | 05/16 | Aqua Ohio, Inc. | Docket No. 16-0907-WW-AIR | Rate of Return |
| **Pennsylvania Public Utility Commission** | | | | |
| Vicinity Energy Philadelphia, Inc. | 04/21 | Vicinity Energy Philadelphia, Inc. | Docket No. R-2021-3024060 | Rate of Return |
| Delaware County Regional Water Control Authority | 02/20 | Delaware County Regional Water Control Authority | Docket No. A-2019-3015173 | Valuation |
| Valley Energy, Inc. | 07/19 | C&T Enterprises | Docket No. R-2019-3008209 | Rate of Return |
| Wellsboro Electric Company | 07/19 | C&T Enterprises | Docket No. R-2019-3008208 | Rate of Return |
| Citizens' Electric Company of Lewisburg | 07/19 | C&T Enterprises | Docket No. R-2019-3008212 | Rate of Return |
| Steelton Borough Authority | 01/19 | Steelton Borough Authority | Docket No. A-2019-3006880 | Valuation |
| Mahoning Township, PA | 08/18 | Mahoning Township, PA | Docket No. A-2018-3003519 | Valuation |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| SUEZ Water Pennsylvania Inc. | 04/18 | SUEZ Water Pennsylvania Inc. | Docket No. R-2018-000834 | Rate of Return |
| Columbia Water Company | 09/17 | Columbia Water Company | Docket No. R-2017-2598203 | Rate of Return |
| Veolia Energy Philadelphia, Inc. | 06/17 | Veolia Energy Philadelphia, Inc. | Docket No. R-2017-2593142 | Rate of Return |
| Emporium Water Company | 07/14 | Emporium Water Company | Docket No. R-2014-2402324 | Rate of Return |
| Columbia Water Company | 07/13 | Columbia Water Company | Docket No. R-2013-2360798 | Rate of Return |
| Penn Estates Utilities, Inc. | 12/11 | Penn Estates, Utilities, Inc. | Docket No. R-2011-2255159 | Capital Structure / Long-Term Debt Cost Rate |
| **South Carolina Public Service Commission** | | | | |
| Blue Granite Water Co. | 12/19 | Blue Granite Water Company | Docket No. 2019-292-WS | Rate of Return |
| Carolina Water Service, Inc. | 02/18 | Carolina Water Service, Inc. | Docket No. 2017-292-WS | Rate of Return |
| Carolina Water Service, Inc. | 06/15 | Carolina Water Service, Inc. | Docket No. 2015-199-WS | Rate of Return |
| Carolina Water Service, Inc. | 11/13 | Carolina Water Service, Inc. | Docket No. 2013-275-WS | Rate of Return |
| United Utility Companies, Inc. | 09/13 | United Utility Companies, Inc. | Docket No. 2013-199-WS | Rate of Return |
| Utility Services of South Carolina, Inc. | 09/13 | Utility Services of South Carolina, Inc. | Docket No. 2013-201-WS | Rate of Return |
| Tega Cay Water Services, Inc. | 11/12 | Tega Cay Water Services, Inc. | Docket No. 2012-177-WS | Capital Structure |
| **Tennessee Public Utility Commission** | | | | |
| Piedmont Natural Gas Company | 07/20 | Piedmont Natural Gas Company | Docket No. 20-00086 | Return on Equity |
| **Public Utility Commission of Texas** | | | | |
| Southwestern Public Service Company | 02/21 | Southwestern Public Service Company | Docket No. 51802 | Return on Equity |
| Southwestern Electric Power Company | 10/20 | Southwestern Electric Power Company | Docket No. 51415 | Rate of Return |
| **Virginia State Corporation Commission** | | | | |
| Virginia Natural Gas, Inc. | 04/21 | Virginia Natural Gas, Inc. | PUR-2020-00095 | Return on Equity |
| Massanutten Public Service Corporation | 12/20 | Massanutten Public Service Corporation | PUE-2020-00039 | Return on Equity |
| Aqua Virginia, Inc. | 07/20 | Aqua Virginia, Inc. | PUR-2020-00106 | Rate of Return |
| WGL Holdings, Inc. | 07/18 | Washington Gas Light Company | PUR-2018-00080 | Rate of Return |
| Atmos Energy Corporation | 05/18 | Atmos Energy Corporation | PUR-2018-00014 | Rate of Return |
| Aqua Virginia, Inc. | 07/17 | Aqua Virginia, Inc. | PUR-2017-00082 | Rate of Return |
| Massanutten Public Service Corp. | 08/14 | Massanutten Public Service Corp. | PUE-2014-00035 | Rate of Return / Rate Design |

***Valuation Engagements:***

| SPONSOR | DATE | ASSETS VALUED | DESCRIPTION |
|---|---|---|---|
| City of York, PA | 06/2021 | Wastewater Operations | Authored Valuation Report, which will be a part of an Act 12 Filing |

| SPONSOR | DATE | ASSETS VALUED | DESCRIPTION |
|---|---|---|---|
| Aqua New Jersey, Inc. | 05/2021 | Confidential Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 05/2021 | Confidential Water and Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Ohio, Inc. | 05/2021 | Confidential Water Operations in OH | Authored Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 04/2021 | Confidential Wastewater Operations in PA | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 04/2021 | Confidential Wastewater Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Pennsylvania, Inc. | 02/2021 | Confidential Wastewater Operations in PA | Authored Valuation Report for internal purposes |
| Artesian Water Company, Inc. | 01/2021 | Wastewater Operations for Delaware City, DE | Authored valuation report for internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Fiber Optic Cable Assets | Fiber optic cable available for lease for Internal purposes |
| EPCOR Distribution and Transmission, Inc., Alberta Canada | 12/2020 | Duct Bank Assets | Duct banks available for lease for Internal purposes |
| Borough of Lewistown, PA | 08/2020 | Water Operations | Authored valuation report for internal purposes |
| Artesian Water Company, Inc. | 06/2020 | Wastewater Operations for Town of Frankford, DE | Authored valuation report for internal purposes |
| Foster Township, PA | 04/2020 | Water Operations | Authored valuation report for internal purposes |
| City of Erie, PA | 04/2020 | Water Operations | Authored valuation report for internal purposes |
| Delaware County Regional Water Quality Control Authority | 02/2020 | Wastewater Operations | Authored Valuation Report, which will be a part of an Act 12 Filing |
| Aqua North Carolina, Inc. | 02/2020 | Confidential Water Operations in NC | Authored Valuation Report for internal purposes |
| Aqua New Jersey, Inc. | 02/2020 | Confidential Water Operations in NJ | Authored Valuation Report for internal purposes |
| Aqua Ohio, Inc. | 11/2019 | Confidential Wastewater Operations in OH | Authored Valuation Report for internal purposes |
| Steelton Water Authority | 06/2018 | Water Operations | Authored Valuation Report, which will be a part of an Act 12 Filing |
| Sara Golvinveaux McGinnes Trust | 04/2018 | Electric Operations of Block Island Power Company | Authored Valuation Report for Superior Court Trial |
| Mahoning Township, PA | 09/2017 | Water and Sewer Assets | Authored Valuation Report, which is part of an Act 12 Filing |
| Atmos Energy Corporation | 09/2016 | Intrastate Natural Gas Pipeline | Authored Valuation for internal purposes. |
| Springfield Township, PA | 08/2014 | Water and Sewer Assets | Co-Authored Valuation Report, which was part of House Bill 1379 Filing (similar to PA Act 12) |
| Aqua Illinois, Inc. | 07/2014 | Village of Glenview, IL (North Maine Utilities) Sewer Assets | Co-Authored Valuation report for internal purposes |
| Erie City Water Authority, Erie, PA | 12/2013 | Water Assets | Sponsored Valuation Testimony in Arbitration Hearing |
| City of Allentown, PA | 12/2012 | Water and Sewer Assets | Assisted in the generation of Valuation Report |

# EXHIBIT Z

# CITY OF BEAVER FALLS
# BEAVER FALLS, PENNSYLVANIA

DIRECT TESTIMONY
OF
HAROLD WALKER, III

FAIR MARKET VALUE APPRAISAL

CITY OF BEAVER FALLS
WASTEWATER SYSTEM ASSETS

February 2023

Prepared by:

GANNETT FLEMING

# TABLE OF CONTENTS

**INTRODUCTION** ..... **2**

**QUALIFICATION AS UTILITY VALUATION EXPERT** ..... **4**

**FEES PAID FOR UTILITY VALUATION EXPERT SERVICES** ..... **8**

**FAIR MARKET VALUATION OF WASTEWATER SYSTEM ASSETS** ..... **10**

**Cost Approach** ..... **17**

**Income Approach** ..... **19**

**Market Approach** ..... **25**

**CONCLUSION** ..... **28**

**APPENDIX A** ..... **A-1**

## INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

**A.** My name is Harold Walker III, and my business address is 1010 Adams Avenue, Audubon, Pennsylvania.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

**A.** I am employed by Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") as Manager, Financial Studies.

**Q. WOULD YOU DESCRIBE BRIEFLY GANNETT FLEMING?**

**A.** Yes. Since 1915, Gannett Fleming and its predecessors have been helping clients in public pricing policy and related financial matters for managerial purposes, before regulatory commissions and courts of law. Gannett Fleming is registered as a Utility Valuation Expert ("UVE") in the Commonwealth of Pennsylvania. Gannett Fleming is also a registered Municipal Advisor with the United States Securities and Exchange Commission ("SEC") and I am a licensed Municipal Advisor Representative (Series 50) with the Municipal Securities Rulemaking Board ("MSRB") and the Financial Industry Regulatory Authority ("FINRA"). Gannett Fleming is a subsidiary of Gannett Fleming, Inc.

**Q. WHAT ARE YOUR RESPONSIBILITIES AS MANAGER, FINANCIAL STUDIES OF GANNETT FLEMING?**

**A.** I supervise and develop financial and economic studies on behalf of investor-owned and municipally owned water, wastewater, electric, natural gas distribution and transmission, oil pipeline, and telephone utilities, as well as resource-recovery companies.

**Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE?**

**A.** My educational background, business experience and qualifications are provided in a Curriculum Vitae included as **Appendix A**.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION?**

**A.** Yes. I have testified before the Pennsylvania Public Utility Commission ("Commission" or "PUC"), as well as other state regulatory commissions, on many occasions, as shown on **Appendix A**.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

**A.** My testimony describes and explains the fair market value appraisal of the City of Beaver Falls ("City") wastewater system assets ("Wastewater System") that I and staff, working under my direction, performed. Gannett Fleming was engaged by the City to perform this appraisal. Our report is entitled "City of Beaver Falls Wastewater System Assets Fair Market Value Appraisal at December 31, 2021" ("Gannett Fleming Appraisal Report"). The appraisal and its report were developed to meet the criteria established in Section 1329

of the Pennsylvania Public Utility Code ("Code"), 66 Pa. C.S. § 1329 ("Determination of the fair market value of water and wastewater assets").

In its 2015-2016 legislative session, the Pennsylvania Legislature passed Act 12 of 2016 and Governor Wolf signed Act 12 into law adding Section 1329 of the Code which established the legislative requirements facilitating the acquisition of municipal and authority water and wastewater systems by private investor-owned utilities and other entities which are rate-regulated by the Commission. This legislation was intended to facilitate the acquisition of water and wastewater systems in order to facilitate capital improvements to the water and wastewater properties.

## QUALIFICATION AS UTILITY VALUATION EXPERT

**Q. IS GANNETT FLEMING ON THE COMMISSION'S REGISTRY OF UTILITY VALUATION EXPERTS?**

**A.** Yes. Gannett Fleming is a UVE in the Commonwealth of Pennsylvania approved by the PUC (Utility Code 9919244).

**Q. PLEASE DESCRIBE THE PROCESS BY WHICH GANNETT FLEMING WAS PLACED ON THE COMMISSION'S REGISTRY OF UTILITY VALUATION EXPERTS.**

**A.** After passage of Section 1329 of the Code, the Commission established an application process by which the Commission would approve and designate firms to be placed on the Commission's "Registry of Utility Valuation Experts." To be included on the registry, the UVEs must establish their qualifications. Gannett Fleming submitted its original

application and the required proof of experience in September of 2016 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in December of 2016. Renewal of inclusion on the Commission's UVE Registry must be done annually. Gannett Fleming submitted its 2018 renewal application and the required proof of experience in December of 2017 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in January of 2018. In 2018, Gannett Fleming submitted its 2019 renewal application and the required proof of experience in December of 2018 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in January of 2019. Again in 2019, Gannett Fleming submitted its 2020 renewal application and the required proof of experience in December of 2019 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in January of 2020. In 2020, Gannett Fleming submitted its 2021 renewal application and the required proof of experience in December of 2020 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in February of 2021. Gannett Fleming submitted its 2022 renewal application and the required proof of experience in December of 2021 and received confirmation and approval from the Commission of Gannett Fleming's placement on the Commission's UVE Registry in March of 2022.

**Q. HAVE YOU EVER HAD YOUR PROFESSIONAL CREDENTIALS REVOKED OR SUSPENDED?**

**A.** No.

**Q. DO YOU HAVE SPECIFIC EXPERIENCE WITH THE VALUATION AND APPRAISAL OF UTILITY ASSETS?**

**A.** Yes. In addition to serving as an expert witness on various financial and economic matters before utility regulatory commissions for over 35 years, I have also provided valuations of utility asset services for more than 20 years. In that capacity I have testified on valuation matters before the Commission and sponsored or adopted Gannett Fleming's UVE appraisals under Section 1329 of the Code in the New Garden Township proceeding, the Limerick Township proceeding, the East Bradford Township proceeding, the Mahoning Township (water) proceeding, the Mahoning Township (wastewater) proceeding, the Exeter Township proceeding, the Cheltenham Township proceeding, the East Norriton Township proceeding, the Kane Borough proceeding, the Delaware County Regional Water Quality Control Authority proceeding, the Borough of Royersford proceeding, the Valley Township (water) proceeding, the Valley Township (wastewater) proceeding, the Upper Pottsgrove proceeding, the Lower Makefield Township proceeding, the East Whiteland Township proceeding, the Willistown Township proceeding, and the Shenandoah Borough proceeding. In addition to testifying in Section 1329 proceedings, I have also testified and filed reports on valuation matters in California, Illinois, New Hampshire, and Pennsylvania in courts of law and regulatory commissions.[1]

[1] An electronic link to the PUC Dockets where I have testified in the last two years is provided in response to Section 1329 Application Standard Data Request 15-d. All other testimony relating to valuation is more than two years old and, therefore, is not provided.

**Q. HAVE YOU OR GANNETT FLEMING OR ANY OF ITS STAFF DERIVED ANY MATERIAL FINANCIAL BENEFIT FROM THE SALE OF THE WASTEWATER SYSTEM ASSETS OTHER THAN FEES FOR YOUR SERVICES RENDERED?**

**A.** No.

**Q. ARE YOU OR GANNETT FLEMING OR ANY OF ITS STAFF AN IMMEDIATE FAMILY MEMBER OF A DIRECTOR, OFFICER, OR EMPLOYEE OF EITHER AQUA PENNSYLVANIA WASTEWATER, INC. ("AQUA") OR THE CITY?**

**A.** No.

**Q. IS GANNETT FLEMING IN COMPLIANCE WITH APPLICABLE PENNSYLVANIA LAWS?**

**A.** Yes.

**Q. DOES GANNETT FLEMING HAVE THE FINANCIAL AND TECHNICAL FITNESS, INCLUDING PROFESSIONAL LICENSES AND TECHNICAL CERTIFICATIONS, TO PERFORM A FAIR MARKET VALUATION OF THE WASTEWATER ASSETS OF THE CITY?**

**A.** Yes, to be placed on the Commission's "Registry of Utility Valuation Experts" Gannett Fleming had to establish its qualifications.

**Q. ARE YOU AWARE OF ANY FACT, INCLUDING BUT NOT LIMITED TO ANY POTENTIAL CONFLICT OF INTEREST THAT WOULD CAST DOUBT UPON**

**YOUR ABILITY TO PROVIDE A THOROUGH, OBJECTIVE, UNBIASED, AND FAIR VALUATION IN THIS PROCEEDING?**

**A.** No.

**Q. HAVE YOU CORRESPONDED WITH BUYER'S UVE WITH REGARD TO ITS RESPECTIVE FAIR MARKET VALUE APPRAISAL OF THE ASSETS AT ISSUE IN THIS CASE?**

**A.** No.

**Q. DO YOU HAVE ANY AFFILIATION WITH EITHER THE SELLING UTILITY OR THE ACQUIRING PUBLIC UTILITY?**

**A.** No. Other than the current assignment to provide the subject appraisal, and similar assignments to provide appraisals of other utility systems, I have no business or personal relationships with any party to the proposed acquisition.

## FEES PAID FOR UTILITY VALUATION EXPERT SERVICES

**Q. WHAT IS THE GANNETT FLEMING FEE ARRANGEMENT TO DELIVER THE APPRAISAL?**

**A.** Gannett Fleming is being compensated on an hourly basis. Our fee arrangement is included as Exhibit S2 to Aqua's Application. True, correct, and complete copies of Gannett Fleming's invoices to the City for this matter, as of the date of Aqua's Application filing, are also included in Exhibit S2.

**Q. WHAT IS THE ESTIMATED TOTAL COMPENSATION THAT GANNETT FLEMING WILL RECEIVE FOR ITS SERVICES IN THIS MATTER?**

**A.** The estimated total compensation that Gannett Fleming will receive for its services in this matter as of the date of Aqua's Application filing is approximately $34,000, which represents approximately 0.08% of the fair market valuation. I estimate our fee will total $75,000 if this proceeding is fully litigated, which represents approximately 0.18% of the fair market valuation.

**Q. PLEASE DESCRIBE THE PROCESS BY WHICH THIS COMPENSATION WAS NEGOTIATED?**

**A.** Gannett Fleming submitted a proposal to provide the required services in October 2020, which the City accepted. The City sent us an official notice to begin our work in June 2022.

**Q. ARE THESE FEES CONSISTENT WITH COMPENSATION RECEIVED FOR SIMILAR SERVICES PROVIDED TO OTHER CLIENTS?**

**A.** Yes.

**Q. WILL GANNETT FLEMING RECEIVE ITS FEE REGARDLESS OF WHETHER THE COMMISSION APPROVES THE PROPOSED TRANSACTION OR WHETHER IT CLOSES?**

**A.** Yes. 66 Pa.C.S. § 1329(a)(3) mandates that I comply with the Uniform Standards of Professional Appraisal Practice ("USPAP") when developing an appraisal. Under the

USPAP, I cannot perform the appraisal with bias, and acceptance of a fee contingent on a particular outcome, like closing or Commission approval, would violate the Ethics Rule.

**Q. ARE YOU ADVOCATING FOR ANY PARTY OR OUTCOME?**

**A.** No. The Ethics Rule of the USPAP, applicable here pursuant to 66 Pa.C.S. § 1329(a)(3), requires that I perform the appraisal with impartiality, objectivity, and independence, and without accommodation of personal interests. I have not performed this appraisal assignment with bias, and I am not advocating the cause or interest of any party or issue. Further, I have not accepted this or any assignment that includes the reporting of predetermined opinions and conclusions.

## FAIR MARKET VALUATION OF WASTEWATER SYSTEM ASSETS

**Q. PLEASE IDENTIFY EXHIBIT R TO AQUA'S APPLICATION IN THIS PROCEEDING?**

**A.** Exhibit R of Aqua's application includes Gannett Fleming's appraisal report dated August 10, 2022.

**Q. HOW DO YOU RECOGNIZE IT?**

**A.** I personally prepared, and also directed and supervised Gannett Fleming personnel in preparing, the report, and recognize it as Gannett Fleming's work product.

**Q. IS EXHIBIT R A TRUE, COMPLETE, AND ACCURATE COPY OF THE GANNETT FLEMING APPRAISAL REPORT?**

**A.** Yes, and I incorporate it into my direct testimony as if set forth in its entirety.

**Q. PLEASE DESCRIBE THE PROCESS BY WHICH YOU PREPARED THE GANNETT FLEMING APPRAISAL REPORT.**

**A.** In accordance with Section 1329 of the Code, the City engaged Gannett Fleming to prepare the fair market valuation report of the Wastewater System. The City provided financial statements and budget statements regarding the Wastewater System and a copy of the Engineering Assessment[2] as required by Section 1329(a)(4). In addition, Gannett Fleming reviewed the assets, reviewed additional information provided by the City and conducted additional research regarding the City and the Wastewater System, including a site visit. After those activities and data gathering, we developed the appraisal.

The appraisal contains a letter of transmittal; a table of contents detailing all the sections of the report and work papers; and a narrative report explaining our methodology and conclusions.

The intent of the valuation report is to provide the appraisal results, as well as the entire appraisal work file, in sufficient detail to satisfy the parties' and Commission's review requirements of Section 1329 and the Commission's Final Implementation Order, *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (Order Entered October 27, 2016), and Final Supplemental Implementation Order, *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (Order Entered February 28, 2019). In addition to a copy of the appraisal report, I have provided supporting work papers for the appraisal report in Exhibit R of

[2] "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets," dated June 9, 2022, and related files prepared by Gannett Fleming, Inc.

Aqua's Application. The relevant work papers have also been submitted to the Commission and provided to the public advocates in **CONFIDENTIAL** live electronic format.

**Q. IS THERE ANYTHING THAT YOU WOULD CHANGE IN THE GANNETT FLEMING APPRAISAL REPORT SINCE ITS PREPARATION?**

**A.** No.

**Q. WAS THE FAIR MARKET VALUATION OF THE WASTEWATER SYSTEM ASSETS DETERMINED IN COMPLIANCE WITH USPAP?**

**A.** Yes. Our fair market valuation was determined in compliance with USPAP 2020-2021 Edition. On February 19, 2021, the Appraisal Foundation's Appraisal Standards Board ("ASB") announced that the current edition of the USPAP would be extended by one year. The 2020-2021 USPAP is now effective until December 31, 2022.

**Q. DID YOU EMPLOY THE COST, MARKET, AND INCOME APPROACHES IN PREPARING YOUR VALUATION?**

**A.** Yes.

**Q. DID YOU INCLUDE ANY EXTRAORDINARY ASSUMPTIONS OR HYPOTHETICAL CONDITIONS IN DEVELOPING YOUR APPRAISAL?**

**A.** No.

**Q. DID YOU INCLUDE ANY LIMITING CONDITIONS IN DEVELOPING YOUR APPRAISAL?**

**A.** Yes. We accepted all information and data provided by the City as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verified any data, engineering assessment, financial record or operating data provided for this assignment. We assumed all title to all assets included in the appraisal is good and marketable and no hazardous conditions or materials exist which could affect the assets. We have not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.

The economic and industry information and data included in our Appraisal have been obtained from various printed or electronic reference sources that we believe to be reliable. We have not performed any corroborating procedures to substantiate that information and data.

**Q. PLEASE SUMMARIZE YOUR RESULTS OF THE APPLICATION OF THE COST, MARKET, AND INCOME APPROACHES.**

**A.** Please see the below table:

| Approach | Indicated Value | Weight | Weighted Value |
|---|---|---|---|
| Cost Approach | $32,994,154 | 25.00% | $8,248,539 |
| Market Approach | 50,664,671 | 37.50% | 18,999,252 |
| Income Approach | 45,450,675 | 37.50% | 17,044,003 |
| | | 100% | $44,291,794 |
| | | | |
| Conclusion | | | $44,292,000 |

**Q. PLEASE FURTHER DESCRIBE EACH APPROACH IN THE DEVELOPMENT OF YOUR APPRAISAL.**

**A.** We developed our appraisal utilizing the cost, income, and market approaches as required by USPAP and Section 1329 of the Code. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

The results from the market multiple discounted cash flow method and the capitalization discounted cash flow method form the basis for our Income Approach. Our Market Approach is supported by the market multiples method and selected transactions method. The results from the original cost method form the basis for our replacement cost method, and both methods form the basis for our Cost Approach. These approaches are summarized below.

*Cost Approach.* The cost approach utilized the original cost method and replacement cost method. The original cost method determined the original cost of the assets when "new" or first constructed based on the information contained in the Engineering Assessment. The original cost new inventory was then trended using the Handy Whitman Index of Public Utility Construction Costs for the water industry to produce the trended cost, or reproduction cost, and was converted to replacement cost new after obsolescence was factored. The calculated accrued depreciation was determined for the original cost new and for the replacement cost new as of December 31, 2021. The calculated accrued depreciation was based on the assets' attained ages, and the service life

of the assets. The cost basis of depreciable assets was reduced annually by the accumulated depreciation to reflect the loss in the service value of the assets since being constructed. All land and land rights were valued at original cost.

*Income Approach.* The income approach utilized the capitalization of earnings (cash flow) method and two discounted cash flow methods. The capitalization of earnings method converted a single base economic income number to a value by dividing it by a capitalization rate. The discounted cash flow methods used estimates of future debt free net cash flow and discounted them to arrive at a present value or price of the cash flows. The capitalization rate and the discount rate were developed based on market debt and equity rates at the appraisal date. The discounted cash flow methods reflected two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model (market multiple discounted cash flow method) and a capitalization of terminal value model (capitalization discounted cash flow method).[3]

*Market Approach.* The market approach was developed based on the market multiples method and the selected transactions method. The market multiples method was based on the market price data of publicly traded corporations engaged in the same or a similar line of business as the Wastewater System. The market price data of these comparable publicly traded corporations was used to calculate the market multiples for the comparable publicly traded corporations at the appraisal date. The selected transactions method used certain public information relating to the purchase or sale of businesses involved in the same or a similar business line as the Wastewater System to calculated market multiples at the time of transaction (sale/purchase). The calculated market

[3] "EBIT" is earnings before interest and taxes and "EBITDA" is earnings before interest, tax, depreciation, and amortization.

multiples determined by the market multiples method and the selected transactions method were then multiplied by the corresponding Wastewater System financial and operating statistic to produce an indicated value for the Wastewater System.

**Q. PLEASE STATE THE NUMBER OF CUSTOMERS YOU USED IN DEVELOPING YOUR APPRAISAL AND THE SOURCE OF THAT NUMBER.**

**A.** The number of customers I used was 3,259. This customer count number was provided by the City. The Wastewater System's 3,259 customers include seven wholesale customers (Big Beaver Borough, Eastvale Borough, North Sewickley Township, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township) who provide service to 3,760 customers ("ultimate wholesale customers"). In total, the Wastewater System provides wastewater service directly and indirectly to 7,019 customers ("ultimate customers").

**Q. DID YOU MAKE ANY UPDATES TO YOUR APPRAISAL AFTER IT WAS SUBMITTED TO THE SELLER, AND IF SO, WHAT WAS THE UPDATE, WHEN WAS IT MADE, AND WHY WAS IT NECESSARY?**

**A.** No.

**Q. DID YOU PERFORM AN ON-SITE INSPECTION OF THE WASTEWATER SYSTEM?**

**A.** Wastewater engineers from our parent company viewed or observed the Wastewater System's facilities on February 26, 2021, August 20, 2021, and January 28, 2022.

**Q. DID YOU RELY UPON A LICENSED ENGINEER'S ASSESSMENT OF THE TANGIBLE ASSETS OF THE WASTEWATER SYSTEM IN PERFORMING YOUR VALUATION?**

**A.** Yes. The City provided a copy of the Engineering Assessment and this information was incorporated into our Cost Approach in our appraisal.

**Cost Approach**

**Q. DID YOU USE THE REPRODUCTION COST OR THE REPLACEMENT COST IN YOUR COST APPROACH?**

**A.** We utilized the original cost new ("OCN") to calculate the trended original cost ("TOC") measures, or the reproduction cost of the depreciable assets by multiplying the OCN by specific cost indices. We converted reproduction cost new to replacement cost new after factoring in obsolescence. We used the TOC method because the mandated use of the Engineering Assessment's original cost essentially dictates the use of TOC over the reproduction cost or the replacement cost methods.

**Q. WHAT INDEX, IF ANY, DID YOU USE FOR THAT METHOD?**

**A.** The original cost new inventory was trended using the Handy Whitman Index of Public Utility Construction Costs for the water industry to produce the reproduction cost new.

**Q. UNDER YOUR APPLICATION OF THE COST APPROACH WHAT ASSETS DID YOU VALUE OR TREND DIFFERENTLY FROM OTHER ASSETS AND WHY WAS THAT NECESSARY?**

**A.** We did not trend land and land rights. That is, all land and land rights were valued at original cost. Plant accounts were trended mainly using the Handy Whitman plant account indices. In limited instances, when Handy Whitman plant account indices were not available, we used the U.S. Bureau of Labor Statistics, Producer Price Index which best matches the assets being trended.[4]

**Q. UNDER YOUR APPLICATION OF THE COST APPROACH, WHAT YEAR-END DATE DID YOU USE FOR CALCULATING THE DEPRECIATION RESERVE?**

**A.** We used the date of December 31, 2021.

**Q. HOW DID YOU DETERMINE THE DEPRECIATION PARAMETERS OF SURVIVAL/RETIREMENT CHARACTERISTICS AND SERVICE LIVES FOR THE UTILITY PROPERTY UNDER THE COST APPROACH?**

**A.** We determined the average service lives of depreciable assets based on the materials used for construction and how long the depreciable assets are likely to meet service demands.

**Q. WHY ARE THOSE PARAMETERS APPROPRIATE?**

[4] The plant accounts for which Handy Whitman indices were not available included: 390.00 Office Furniture and Equipment; 390.70 Computers; 391.70 Transportation Equipment; 392.70 Stores Equipment; 393.70 Tools, Shop and Garage Equipment; 394.70 Laboratory Equipment; 395.70 Power Operated Equipment; 396.00 Communication Equipment; and 397.70 Miscellaneous Equipment.

**A.** We believe our average service lives of depreciable assets are appropriate based on our experience of having determined average service lives for numerous other water and wastewater utilities and given the fact they resemble those used by other Pennsylvania wastewater companies.

**Income Approach**

**Q. REGARDING YOUR APPLICATION OF THE INCOME APPROACH, WHAT METHOD DID YOU USE TO DETERMINE THE INCOME APPROACH RESULT?**

**A.** We used the Market Multiple Discounted Cash Flow Method ("Market Multiple DCF"), and Capitalization Discounted Cash Flow Method ("Capitalization DCF") to determine the Income Approach result. We refer to the Market Multiple DCF and the Capitalization DCF collectively as the DCF method. We used the capitalization of earning method to estimate value under current ownership and operations. The capitalization of earning method was not used to determine the Income Approach result.

**Q. WHAT ASSUMPTIONS DID YOU EMPLOY TO DEVELOP YOUR INCOME APPROACH RESULT?**

**A.** All general assumptions are listed on page 3 of Exhibit 12, and page 6 of Exhibits 13, 14, 15 and 16.[5]

[5] Exhibit references herein are to the Exhibits in the Gannett Fleming Appraisal Report.

**Q. DID YOU USE AQUA'S CAPITALIZATION RATE OR THEIR DISCOUNT RATE IN YOUR INCOME APPROACH TO VALUATION?**

**A.** No. Use of Aqua's capitalization rate or their discount rate in an income approach to valuation is not consistent with the standard of value of fair market value because the "buyer" under the standard of value of fair market value is not a specific entity (i.e., Aqua), but rather a hypothetical buyer. Use of Aqua's capitalization rate or their discount rate in an income approach to valuation is only used under the standard of value of investment value.[6] In accordance with Section 1329 of the Code, the standard of value is fair market value, not investment value.

**Q. PLEASE EXPLAIN THE CAPITALIZATION RATE AND THE DISCOUNT RATE USED IN YOUR INCOME APPROACH TO VALUATION.**

**A.** The capitalization rate used in the capitalization of earnings method and the discount rate used in the DCF method are related. The discount rate is the opportunity cost rate related to the risk of the cash flows. The capitalization rate is simply the discount rate minus the expected growth rate. If no growth is assumed, the capitalization rate is equal to the discount rate.

As explained previously, under the standard of value of fair market value the "buyer" is not a specific entity (i.e., Aqua), but rather a hypothetical buyer. Accordingly, the hypothetical bidder/buyer may range from large regional municipal authorities ("MUNI") to investor-owned utilities ("IOU"). For a MUNI, the appropriate discount rate is the current municipal revenue bond yield on December 31, 2021 of 2.85%. The

[6] Pratt, Shannon P. "Defining Standards of Value." Valuation 34, no. 2, June 1989. http://www.appraisers.org/docs/default-source/college-of-fellows-articles/defining-standards-of-value.pdf.

appropriate IOU discount rate is the current net of tax overall cost of capital (weighted average cost of capital) on December 31, 2021 and ranges from 6.59% to 8.50%.[7]

For a MUNI, the appropriate discount rate is the current municipal revenue bond yield, 2.85%, because debt is the only major source of capital available to finance an acquisition (developed on Exhibit 22, pages 2-5). Although a MUNI likely carries equity on their books (balance sheet), all existing equity is already invested in other assets and therefore, cannot be used to finance an acquisition.[8] For valuation purposes, an embedded cost of debt, or the historical cost of all debt issuances outstanding is not used because this capital is already invested in assets. Whereas the marginal cost of debt, 2.85%, at the valuation date is used in accordance with accepted valuation practice and used for market valuation purposes.

As discussed previously, for an IOU, the appropriate discount rate is the net of tax overall cost of capital (weighted average cost of capital), 6.59% to 8.50% (Exhibit 22, pages 2-8). In this instance, the net of tax overall cost of capital (weighted average cost of capital) is based on the Comparable Group's market value capital structure of 22.7% debt and 77.3% equity, a market cost of debt of 3.08% and a range of market cost of equity of 7.87% to 10.35%.[9] The Comparable Group's net of tax overall cost of capital (weighted average cost of capital) is used as a proxy to conform to the "hypothetical buyer" or

[7] Both the American Society of Appraisers, ASA Business Valuation Standards, 2009, and the National Association of Certified Valuation Analysts, Professional Standards, 2007, use the same definition: "Weighted Average Cost of Capital (WACC). The cost of capital (discount rate) is determined by the weighted average, at market values, of the cost of all financing sources in the business enterprise's capital structure."

[8] For example, when a municipal or government entity, such as the Commonwealth of Pennsylvania, finances construction of a road or bridge, they only consider the marginal debt cost despite having "equity" reflected on their books (balance sheet).

[9] For an example of the net of tax overall cost of capital, see http://www.investinganswers.com/financial-dictionary/financial-statement-analysis/weighted-average-cost-capital-wacc-2905. Also see http://www.wallstreetmojo.com/weighted-average-cost-capital-wacc/, or http://accountingexplained.com/misc/corporate-finance/wacc.

"hypothetical seller" of fair market valuation. Use of the buyer's net of tax overall cost of capital (weighted average cost of capital) would produce an investment valuation, not a fair market valuation. The supporting documentation for the development of the MUNI and IOU discount rates is shown on pages 2 to 8 of Exhibit 22.

**Q. WHY IS THE NET OF TAX OVERALL COST OF CAPITAL APPROPRIATE TO USE?**

**A.** The net of tax overall cost of capital is appropriate because the cash flows being discounted are after tax, or net of tax. The income approach uses estimates of future free cash flow and discounts them to arrive at a present value or price of the cash flows. Generally, this analysis begins with an estimate of the Debt Free Net Cash Flow over the next five to twenty years along with a terminal value. In each year, the Debt Free Net Cash Flow is comprised of projected EBIT, minus income taxes, plus projected depreciation and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures.

**Q. WHAT IS THE BASIS FOR THE GROWTH RATE USED TO CALCULATE THE CAPITALIZATION RATE USED IN THE INCOME APPROACH?**

**A.** The growth rate used to calculate the capitalization rate reflects the growth in the Debt Free Net Cash Flow after the terminal value year. For the City, a growth rate of 0.1% was used based on the current level of cash flow and rates. Under both MUNI and IOU ownership a growth rate of 0.1% was used based on the projected growth in population (0.3%), projected inflation (3.0%) and the actual growth in the Debt Free Net Cash Flow in the

years prior to the terminal value year. Under MUNI ownership the average growth in the Debt Free Net Cash Flow for the last two years prior to the terminal value year was 0.1% and 0.1% under IOU ownership. A growth of 0.1% was deemed reasonable based on the aforesaid.

**Q. WHAT UTILITY EARNINGS REPORT WAS USED TO CREATE THE CAPITAL STRUCTURE USED IN YOUR APPRAISAL?**

**A.** As documented previously in footnotes 6 and 8, book value capitalization is not used in fair market valuation determination. Therefore, we did not use the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation because a "hypothetical buyer" cannot finance an acquisition at such a rate and, therefore, its use would provide a meaningless result. The Comparable Group's 6.15% DSIC related cost was determined based on the Comparable Group's book value capital structure of 48.1% debt and 51.9% equity, a cost of debt of 3.08% and a DSIC cost of equity of 9.80% based on the June 2021 Earnings Report (public meeting October 7, 2021). However, we note the 6.15% Comparable Group's DSIC related net of tax overall cost of capital falls below the 6.59% to 8.50% range of discount rates used in our Income Approach.

If we used the 6.15% Comparable Group's DSIC related net of tax overall cost of capital in our valuation shown on Exhibit 16, the results of the Capitalization DCF would show a value for Wastewater System of $41.5 million. Further, the results of the Market Multiple DCF would show a value of $59.5 million and collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of

$50.6 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of $49.6 million and the DCF method based on the IOU ownership scenario using DSIC indicates a value of $50.6 million. Collectively, the DCF method indicates a value of $50.1 million when DSIC is considered.

**Q. IF YOU USED A TERMINAL VALUE IN YOUR DISCOUNTED CASH FLOW ANALYSIS WHAT IS THE NUMBER OF YEARS OVER WHICH THE CASH FLOWS ARE CONSIDERED?**

A. The use of a "terminal value" in a Discounted Cash Flow analysis is reasonable and is in accordance with accepted valuation practice. Simply put, the "terminal value" is a mathematical shortcut to avoid having to show and/or calculate annual Debt Free Net Cash Flows for hundreds of time periods, or hundreds of years. Within the Discounted Cash Flow analysis, the "terminal value" is simply a point in time in which the growth in annual Debt Free Net Cash Flows changes from multiple growth rates to a constant growth rate. For example, in our Discounted Cash Flow analysis, the growth rate of annual Debt Free Net Cash Flows during time periods 1 through 20 changes multiple times due to the various general assumptions listed in the Gannett Fleming Appraisal Report. After time period 20, the growth in annual Debt Free Net Cash Flows is a constant growth rate. Accordingly, period 20, or year 20, is the "terminal value" year in our DCF method.

**Market Approach**

**Q. REGARDING YOUR APPLICATION OF THE MARKET APPROACH, WHAT METHODS DID YOU USE TO DETERMINE THE MARKET APPROACH RESULT?**

**A.** I used the market multiples method and the selected transaction method.

**Q. WHAT ASSUMPTIONS, ANALYSES, AND/OR ADJUSTMENTS DID YOU MAKE UNDER EACH METHOD?**

**A.** The general assumptions used for the market multiples method are listed on page 1 of Exhibit 17. No assumptions were made under the selected transaction method.

**Q. REGARDING YOUR APPLICATION OF THE MARKET MULTIPLES METHOD, DID YOU LIMIT YOUR PROXY GROUP USED FOR CALCULATING MARKET VALUE TO ONLY COMPANIES WHICH ENGAGE IN PENNSYLVANIA FAIR MARKET VALUE ACQUISITIONS?**

**A.** No.

**Q. REGARDING YOUR APPLICATION OF THE COMPARABLE SALES USED TO ESTABLISH THE VALUATION, DID YOU LIMIT THE TRANSACTIONS SELECTED TO THOSE THAT YOU PREVIOUSLY APPRAISED?**

**A.** No.

**Q. PLEASE STATE THE COMPARABLE TRANSACTIONS YOU USED IN DEVELOPING YOUR MARKET APPROACH.**

**A.** Please see Aqua's Application Exhibit R (the Gannett Fleming appraisal), Exhibit 18, pages 2 and 3, which shows that we reviewed the following transactions[10] in developing the selected transactions method:

- Sale of the City of McKeesport Wastewater system to Pennsylvania-American Water Company in 2017.
- Sale of New Garden Township Sewer Authority to Aqua Pennsylvania in 2017.
- Sale of Limerick Township Wastewater system to Aqua Pennsylvania in 2017.
- Sale of East Bradford Township Wastewater system to Aqua Pennsylvania in 2018.
- Sale of Mahoning Township Water system to Suez Water Pennsylvania in 2018.
- Sale of Mahoning Township Wastewater system to Suez Water Pennsylvania in 2018.
- Sale of Sadsbury Township Wastewater system to Pennsylvania-American Water Company in 2018.
- Sale of Exeter Township Wastewater system to Pennsylvania-American Water Company in 2019.
- Sale of Steelton Borough Authority Water system to Pennsylvania-American Water Company in 2019.

[10] The years listed indicate when the applicant sought approval or when the Commission approved each of the transactions.

- Sale of Cheltenham Township Wastewater system to Aqua Pennsylvania in 2019.
- Sale of East Norriton Township Wastewater system to Aqua Pennsylvania in 2019.
- Sale of Kane Borough Authority Wastewater system to Pennsylvania-American Water Company in 2020.
- Sale of Royersford Borough Authority Wastewater system to Pennsylvania-American Water Company in 2021.
- Sale of Upper Pottsgrove Township Wastewater system to Pennsylvania-American Water Company in 2021.
- Sale of Valley Township Wastewater system to Pennsylvania-American Water Company in 2021.
- Sale of Valley Township Water system to Pennsylvania-American Water Company in 2021.
- Sale of Upper Pottsgrove Township Wastewater system to Pennsylvania-American Water Company in 2020.
- Sale of York City Sewer Authority Wastewater system to Pennsylvania-American Water Company in 2021.
- Sale of Lower Makefield Township Wastewater system to Aqua Pennsylvania in 2021.
- Sale of Willistown Township Wastewater system to Aqua Pennsylvania in 2021.

- Sale of East Whiteland Township Wastewater system to Aqua Pennsylvania in 2021.

As a check on the transactions I studied, that are listed above, I also reviewed the purchase of Connecticut Water Service, Inc. by SJW Group (Exhibit 19 page 2), which was approved in 2019 and the purchase of New England Service Company, Inc. ("NESC") by Aquarion Company, parent of Aquarion Water Company (Exhibit 19 page 3), approved in 2021.[11]

**Q. WHAT WERE THE RESULTS OF THE MARKET APPROACH ANALYSIS YOU PERFORMED?**

**A.** The results of the market multiples method and the results of the selected transactions method are shown on Exhibit 20. The conclusion regarding the Market Approach analysis is explained on pages 50 and 51 of our appraisal.

## CONCLUSION

**Q. WHAT IS YOUR CONCLUSION REGARDING THE FAIR MARKET VALUE OF THE WASTEWATER SYSTEM'S ASSETS TO BE PURCHASED BY AQUA?**

**A.** Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."[12]

[11] NESC was the sole stockholder of four regulated water companies operating in three separate states.
[12] The International Glossary of Business Valuation Standards.

Based on our analysis, as described in our appraisal report, the estimate of the fair market value of the Wastewater System as of December 31, 2021 is $44,292,000 (rounded). The results of the analyses and calculations are summarized in Table 1 for the Wastewater System as follows:

| Valuation Approach | Indicated Value |
|---|---|
| Cost Approach | $32,994,154 |
| Income Approach | 45,450,675 |
| Market Approach | 50,664,671 |

**Table 1**

We considered the results of each approach as an indicator of value individually, or as independent indicators of value. Therefore, all three approaches to valuation were given consideration in arriving at our estimate of the fair market value conclusion. We gave less weight to the Cost Approach due to our concerns stated on pages 31 to 33 of our appraisal. At a minimum, we believe the Cost Approach does not fully account for the intangible value of ultimate wholesale customers. We gave equal weight to the indicated values produced by the two economic approaches, Income and Market, as they best capture the intrinsic value of the ultimate wholesale customers. Based on these facts, our conclusion regarding the fair market value is $44.3 million. Our conclusion regarding the fair market value can be described by the weights and the specific results of the three approaches to valuation that are shown on Exhibit 21. The results of our analyses, shown on Exhibit 21,

indicate a range of value for the Wastewater System of $33.0 million to $50.7 million and collectively indicate a fair market value of $44,292,000 for the Wastewater System.

**Q. GENERALLY SPEAKING, IS IT COMMON FOR DIFFERENT APPRAISERS TO REACH VARYING OPINIONS OF FAIR MARKET VALUE?**

**A.** Yes. I do not think the underlying results of the models employed for valuation purposes are ever the same from one appraiser to another appraiser. Further, the conclusion of value from one appraiser to another appraiser usually differs as well. I believe these are some of the reasons the results of the conclusion of value from two different UVEs are averaged under Section 1329, 66 Pa.C.S. § 1329.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A.** Yes. However, I reserve the right to supplement my testimony as additional issues or facts arise during the course of this proceeding.

# APPENDIX A

Professional Qualifications
of
Harold Walker, III
Manager, Financial Studies
Gannett Fleming Valuation and Rate Consultants, LLC.

## EDUCATION

Mr. Walker graduated from Pennsylvania State University in 1984 with a Bachelor of Science Degree in Finance. His studies concentrated on securities analysis and portfolio management with an emphasis on economics and quantitative business analysis. He has also completed the regulation and the rate-making process courses presented by the College of Business Administration and Economics Center for Public Utilities at New Mexico State University. Additionally, he has attended programs presented by The Institute of Chartered Financial Analysts (CFA).

Mr. Walker was awarded the professional designation "Certified Rate of Return Analyst" (CRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience, and the successful completion of a comprehensive examination. He is also a member of the Society of Utility and Regulatory Financial Analysts (SURFA) and has attended numerous financial forums sponsored by the Society. The SURFA forums are recognized by the Association for Investment Management and Research (AIMR) and the National Association of State Boards of Accountancy for continuing education credits.

Mr. Walker is also a licensed Municipal Advisor Representative (Series 50) by Municipal Securities Rulemaking Board (MSRB) and Financial Industry Regulatory Authority (FINRA).

## BUSINESS EXPERIENCE

Prior to joining Gannett Fleming Valuation and Rate Consultants, LLC., Mr. Walker was employed by AUS Consultants - Utility Services. He held various positions during his eleven years with AUS, concluding his employment there as a Vice President. His duties included providing and supervising financial and economic studies on behalf of investor owned and municipally owned water, wastewater, electric, natural gas distribution and transmission, oil pipeline and telephone utilities as well as resource recovery companies.

In 1996, Mr. Walker joined Gannett Fleming Valuation and Rate Consultants, LLC. In his capacity as Manager, Financial Studies and for the past twenty years, he has continuously studied rates of return requirements for regulated firms. In this regard, he supervised the preparation of rate of return studies in connection with his testimony and in the past, for other individuals. He also assisted and/or developed dividend policy studies, nuclear prudence studies, calculated fixed charge rates for avoided costs involving cogeneration projects, financial decision studies for capital budgeting purposes and developed financial models for determining future capital requirements and the effect of those requirements on investors and ratepayers, valued utility property and common stock for acquisition and divestiture, and assisted in the private placement of fixed capital securities for public utilities.

Head, Gannett Fleming GASB 34 Task Force responsible for developing Governmental Accounting Standards Board (GASB) 34 services and educating Gannett Fleming personnel and Gannett Fleming clients on GASB 34 and how it may affect them. The GASB 34 related services include inventory of assets, valuation of assets, salvage estimation, annual depreciation rate determination, estimation of depreciation reserve, asset service life determination, asset condition assessment, condition assessment documentation, maintenance estimate for asset preservation, establishment of condition level index, geographic information system (GIS) and data management services, management discussion and analysis (MD&A) reporting, required supplemental information (RSI) reporting, auditor interface, and GASB 34 compliance review.

In 2004, Mr. Walker was elected to serve on the Board of Directors of SURFA. Previously, he served as an ex-officio director as an advisor to SURFA's existing President. In 2000, Mr. Walker was elected President of SURFA for the 2001-2002 term. Prior to that, he was elected to serve on the Board of Directors of SURFA during the period 1997-1998 and 1999-2000. He also previously served on the Pennsylvania Municipal Authorities Association, Electric Deregulation Committee.

**EXPERT TESTIMONY**

Mr. Walker has submitted testimony or been deposed on various topics before regulatory commissions and courts in 26 states including: Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, Nevada, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia. His testimonies covered various subjects including: fair market value, the taking of natural resources, appropriate capital structure and fixed capital cost rates, depreciation, fair rate of return, purchased water adjustments, synchronization of interest charges for income tax purposes, valuation, cash working capital, lead-lag studies, financial analyses of investment alternatives, benchmarking, and fair value. The following tabulation provides a listing of the electric power, natural gas distribution, telephone, wastewater, and water service utility cases in which he has been involved as a witness.

| Client | Docket No. | |
|---|---|---|
| Alpena Power Company | U-10020 | |
| Armstrong Telephone Company - Northern Division | 92-0884-T-42T | |
| Armstrong Telephone Company - Northern Division | 95-0571-T-42T | |
| Artesian Water Company, Inc. | 90 10 | |
| Artesian Water Company, Inc. | 06 158 | |
| Aqua Illinois Consolidated Water Divisions and Consolidated Sewer Divisions | 11-0436 | |
| Aqua Illinois Hawthorn Woods Wastewater Division | 07 0620/07 0621/08 0067 | |
| Aqua Illinois Hawthorn Woods Water Division | 07 0620/07 0621/08 0067 | |
| Aqua Illinois Kankakee Water Division | 10-0194 | |
| Aqua Illinois Kankakee Water Division | 14-0419 | |
| Aqua Illinois Vermilion Division | 07 0620/07 0621/08 0067 | |
| Aqua Illinois Willowbrook Wastewater Division | 07 0620/07 0621/08 0067 | |
| Aqua Illinois Willowbrook Water Division | 07 0620/07 0621/08 0067 | |
| Aqua Pennsylvania, Inc | A-2022-3034143 | * |
| Aqua Pennsylvania Wastewater Inc | A-2016-2580061 | * |
| Aqua Pennsylvania Wastewater Inc | A-2017-2605434 | * |
| Aqua Pennsylvania Wastewater Inc | A-2018-3001582 | * |
| Aqua Pennsylvania Wastewater Inc | A-2019-3008491 | * |
| Aqua Pennsylvania Wastewater Inc | A-2019-3009052 | * |
| Aqua Pennsylvania Wastewater Inc | A-2019-3015173 | * |
| Aqua Pennsylvania Wastewater Inc | A-2021-3024267 | * |
| Aqua Pennsylvania Wastewater Inc | A-2021-3026132 | * |
| Aqua Pennsylvania Wastewater Inc | A-2021-3027268 | * |
| Aqua Virginia - Alpha Water Corporation | Pue-2009-00059 | |
| Aqua Virginia - Blue Ridge Utility Company, Inc. | Pue-2009-00059 | |
| Aqua Virginia - Caroline Utilities, Inc. (Wastewater) | Pue-2009-00059 | |
| Aqua Virginia - Caroline Utilities, Inc. (Water) | Pue-2009-00059 | |
| Aqua Virginia - Earlysville Forest Water Company | Pue-2009-00059 | |
| Aqua Virginia - Heritage Homes of Virginia | Pue-2009-00059 | |
| Aqua Virginia - Indian River Water Company | Pue-2009-00059 | |

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|---|---|---|
| Aqua Virginia - James River Service Corp. | Pue-2009-00059 | |
| Aqua Virginia - Lake Holiday Utilities, Inc. (Wastewater) | Pue-2009-00059 | |
| Aqua Virginia - Lake Holiday Utilities, Inc. (Water) | Pue-2009-00059 | |
| Aqua Virginia - Lake Monticello Services Co. (Wastewater) | Pue-2009-00059 | |
| Aqua Virginia - Lake Monticello Services Co. (Water) | Pue-2009-00059 | |
| Aqua Virginia - Lake Shawnee | Pue-2009-00059 | |
| Aqua Virginia - Land'or Utility Company (Wastewater) | Pue-2009-00059 | |
| Aqua Virginia - Land'or Utility Company (Water) | Pue-2009-00059 | |
| Aqua Virginia - Mountainview Water Company, Inc. | Pue-2009-00059 | |
| Aqua Virginia - Powhatan Water Works, Inc. | Pue-2009-00059 | |
| Aqua Virginia - Rainbow Forest Water Corporation | Pue-2009-00059 | |
| Aqua Virginia - Shawnee Land | Pue-2009-00059 | |
| Aqua Virginia - Sydnor Water Corporation | Pue-2009-00059 | |
| Aqua Virginia - Water Distributors, Inc. | Pue-2009-00059 | |
| Atlantic City Sewerage Company | WR21071006 | |
| Berkshire Gas Company | 18-40 | |
| Berkshire Gas Company | 22-20 | |
| Borough of Hanover | R-2009-2106908 | |
| Borough of Hanover | R-2012-2311725 | |
| Borough of Hanover | R-2014-242830 | |
| Borough of Hanover | R-2021-3026116 | |
| Borough of Hanover | P-2021-3026854 | |
| Borough of Royersford | A-2020-3019634 | * |
| Chaparral City Water Company | W 02113a 04 0616 | |
| California-American Water Company | CIVCV156413 | * |
| Connecticut-American Water Company | 99-08-32 | |
| Connecticut Water Company | 06 07 08 | |
| Citizens Utilities Company Colorado Gas Division | - | |
| Citizens Utilities Company Vermont Electric Division | 5426 | |
| Citizens Utilities Home Water Company | R 901664 | |
| Citizens Utilities Water Company of Pennsylvania | R 901663 | |

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|---|---|---|
| City of Bethlehem - Bureau of Water | R-00984375 | |
| City of Bethlehem - Bureau of Water | R 00072492 | |
| City of Bethlehem - Bureau of Water | R-2013-2390244 | |
| City of Bethlehem - Bureau of Water | R-2020-3020256 | |
| City of Dubois – Bureau of Water | R-2013-2350509 | |
| City of Dubois – Bureau of Water | R-2016-2554150 | |
| City of Lancaster Sewer Fund | R-00005109 | |
| City of Lancaster Sewer Fund | R-00049862 | |
| City of Lancaster Sewer Fund | R-2012-2310366 | |
| City of Lancaster Sewer Fund | R-2019-3010955 | |
| City of Lancaster Sewer Fund | R-2019-3010955 | |
| City of Lancaster Water Fund | R-00984567 | |
| City of Lancaster Water Fund | R-00016114 | |
| City of Lancaster Water Fund | R 00051167 | |
| City of Lancaster Water Fund | R-2010-2179103 | |
| City of Lancaster Water Fund | R-2014-2418872 | |
| City of Lancaster Water Fund | R-2021-3026682 | |
| Coastland Corporation | 15-cvs-216 | |
| Consumers Pennsylvania Water Company | | |
| Roaring Creek Division | R-00973869 | |
| Consumers Pennsylvania Water Company | | |
| Shenango Valley Division | R-00973972 | |
| Country Knolls Water Works, Inc. | 90 W 0458 | |
| East Resources, Inc. - West Virginia Utility | 06 0445 G 42T | |
| Elizabethtown Water Company | WR06030257 | |
| Forest Park, Inc. | 19-W-0168 & 19-W-0269 | |
| Hampton Water Works Company | DW 99-057 | |
| Hidden Valley Utility Services, LP | R-2018-3001306 | |
| Hidden Valley Utility Services, LP | R-2018-3001307 | |
| Illinois American Water Company | 16-0093 | |
| Illinois American Water Company | 22-0210 | |
| Indian Rock Water Company | R-911971 | |
| Indiana Natural Gas Corporation | 38891 | |
| Jamaica Water Supply Company | - | |
| Kane Borough Authority | A-2019-3014248 | * |
| Kentucky American Water Company, Inc. | 2007 00134 | |

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|---|---|---|
| Middlesex Water Company | WR 89030266J | |
| Millcreek Township Water Authority | 55 198 Y 00021 11 | * |
| Missouri-American Water Company | WR 2000-281 | |
| Missouri-American Water Company | SR 2000-282 | |
| Mount Holly Water Company | WR06030257 | |
| Nevada Power Company d/b/a NV Energy | 20-06003 | |
| New Jersey American Water Company | WR 89080702J | |
| New Jersey American Water Company | WR 90090950J | |
| New Jersey American Water Company | WR 03070511 | |
| New Jersey American Water Company | WR-06030257 | |
| New Jersey American Water Company | WR08010020 | |
| New Jersey American Water Company | WR10040260 | |
| New Jersey American Water Company | WR11070460 | |
| New Jersey American Water Company | WR15010035 | |
| New Jersey American Water Company | WR17090985 | |
| New Jersey American Water Company | WR19121516 | |
| New Jersey American Water Company | WR22010019 | |
| New Jersey Natural Gas Company | GR19030420 | |
| New Jersey Natural Gas Company | GR21030679 | |
| Newtown Artesian Water Company | R-911977 | |
| Newtown Artesian Water Company | R-00943157 | |
| Newtown Artesian Water Company | R-2009-2117550 | |
| Newtown Artesian Water Company | R-2011-2230259 | |
| Newtown Artesian Water Company | R-2017-2624240 | |
| Newtown Artesian Water Company | R-2019-3006904 | |
| North Maine Utilities | 14-0396 | * |
| Northern Indiana Fuel & Light Company | 38770 | |
| Oklahoma Natural Gas Company | PUD-940000477 | |
| Palmetto Utilities, Inc. | 2020-281-S | |
| Palmetto Wastewater Reclamation, LLC | 2018-82-S | |
| Pennichuck Water Works, Inc. | DW 04 048 | * |
| Pennichuck Water Works, Inc. | DW 06 073 | |
| Pennichuck Water Works, Inc. | DW 08 073 | |
| Pennsylvania Gas & Water Company (Gas) | R-891261 | |
| Pennsylvania Gas & Water Co. (Water) | R 901726 | |
| Pennsylvania Gas & Water Co. (Water) | R-911966 | |
| Pennsylvania Gas & Water Co. (Water) | R-22404 | |

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|---|---|---|
| Pennsylvania Gas & Water Co. (Water) | R-00922482 | |
| Pennsylvania Gas & Water Co. (Water) | R-00932667 | |
| Philadelphia Gas Works | R-2020-3017206 | |
| Public Service Company of North Carolina, Inc. | G-5, Sub 565 | |
| Public Service Electric and Gas Company | ER181010029 | |
| Public Service Electric and Gas Company | GR18010030 | |
| Presque Isle Harbor Water Company | U-9702 | |
| Sierra Pacific Power Company d/b/a NV Energy | 19-06002 | |
| Sierra Pacific Power Company d/b/a NV Energy | 22-06014 | |
| St. Louis County Water Company | WR-2000-844 | |
| Suez Water Delaware, Inc. | 19-0615 | |
| Suez Water Idaho, Inc. | SUZ-W-20-02 | |
| Suez Water New Jersey, Inc. | WR18050593 | |
| Suez Water New Jersey, Inc. | WR20110729 | |
| Suez Water Owego-Nichols, Inc. | 17-W-0528 | |
| Suez Water Pennsylvania, Inc. | R-2018-3000834 | |
| Suez Water Pennsylvania, Inc. | A-2018-3003519 | * |
| Suez Water Pennsylvania, Inc. | A-2018-3003517 | * |
| Suez Water Rhode Island, Inc. | Docket No. 4800 | |
| Suez Water Owego-Nichols, Inc. | 19-W-0168 & 19-W-0269 | |
| Suez Water New York, Inc. | 19-W-0168 & 19-W-0269 | |
| Suez Westchester, Inc. | 19-W-0168 & 19-W-0269 | |
| Town of North East Water Fund | 9190 | |
| Township of Exeter | A-2018-3004933 | * |
| United Water New Rochelle | W-95-W-1168 | |
| United Water Toms River | WR-95050219 | |
| Upper Pottsgrove Township | A-2020-3021460 | * |
| Valley Township (water) | A-2020-3019859 | * |
| Valley Township (wastewater) | A-2020-3020178 | * |
| Valley Water Systems, Inc. | 06 10 07 | |
| Virginia American Water Company | PUR-2018-00175 | |
| Virginia American Water Company | PUR-2021-00255 | |
| West Virginia-American Water Company | 15-0676-W-42T | |
| West Virginia-American Water Company | 15-0675-S-42T | |
| Wilmington Suburban Water Corporation | 94-149 | |
| York Water Company | R-901813 | |
| York Water Company | R-922168 | |

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|---|---|
| York Water Company | R-943053 |
| York Water Company | R-963619 |
| York Water Company | R-994605 |
| York Water Company | R-00016236 |
| Young Brothers, LLC | 2019-0117 |

* - Testimony related to valuation

# SUPPLEMENTAL EXHIBIT U

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 1 SUPP**

# SUPPLEMENTAL DIRECT TESTIMONY OF WILLIAM C. PACKER

**With Regard To**
**Updates to Appendix A**
**Reasonableness Review Ratio**
**Section 507 and 508**

**March 2024**

**TABLE OF CONTENTS**


I. INTRODUCTION ..... 1
II. UPDATED APPENDIX A ..... 2
III. REASONABLENESS REVIEW RATIO ..... 2
IV. SECTIONS 507 AND 508 ..... 4
V. CONCLUSION ..... 5

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. Are you the same William C. Packer that has provided direct testimony in this proceeding?**

A. Yes

**Q. What is the purpose of your supplemental direct testimony?**

A. The purpose of my supplemental direct testimony is to update Appendix A to my testimony and withdraw Aqua's request to the Commission to modify the existing agreements between the City of Beaver Falls ("City" or "Beaver Falls") and the Contributing Municipalities due to a settlement of the Civil Action filed by Patterson Township, Patterson Heights Borough, White Township and West Mayfield Borough ("Litigating Municipalities").

**Q. Are you sponsoring any Exhibits with your supplemental direct testimony?**

A. Yes. Attached to my testimony as Appendix A is an updated schedule showing the revenue deficiency and overall impact on customers.

**Q. Except for the below changes, do you agree with your previous direct testimony submitted in this proceeding?**

A. Yes.

## II. UPDATED APPENDIX A

**Q. You previously testified that in *McCloskey*, the Commonwealth Court concluded that the Commission must address rate impact "in a general fashion" when deciding whether there is substantial public benefit. Please address the rate impact of the Proposed Transaction.**

A. The current average bill of a residential customer in Beaver Falls, is approximately $100.13 per quarter. As my calculations in Appendix A show the average bill could increase to approximately $265.96 per quarter or a 165.61% increase, which assumes that one hundred percent of the revenue requirement deficiency is borne by the acquired customers of Beaver Falls. This is due to the intervening increases applied by Beaver Falls since the initial Application was filed with the Commission.

## III. REASONABLENESS REVIEW RATIO

**Q. Are you aware that the Commission has issued a Tentative Supplemental Implementation Order[1] ("TSIO") regarding the implementation of Section 1329 of the Public Utility Code?**

A. Yes.

[1] *Valuation of Acquired Municipal Water & Wastewater System – Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 (Feb. 7, 2024).

**Q. Do you believe the Reasonableness Review Ratio ("RRR") as set forth in the TSIO and what will be determined by the Commission in a final order should apply to this Proposed Transaction?**

A. No. The City issued its request for bids ("RFB") in July 2021. The Asset Purchase Agreement between Aqua and the City was signed n October 2021. Aqua, the City, and the Litigating Municipalities have worked diligently to arrive at a settlement that to allow this transaction to move through the Commission's approval process. The Commission itself has stated:

> The Commission would acknowledge that some transactions may be in the midst of negotiations, and as such, provide due consideration to the timing of the initial RRR release and any initial Section 1329 applications under this proposal. This would particularly be emphasized in the instance where an asset purchase agreement may be completed in close proximity to the issuance of the initial RRR.[2]

The City, Aqua, and the Litigating Municipalities have spent significant time and energy to move this Proposed Transaction forward, and therefore, this Proposed Transaction should be grandfathered.

[2] TISO at 8.

## IV. SECTIONS 507 AND 508

**Q. You previously testified that Aqua has developed a pro-forma agreement to negotiate with the Contributing Municipalities. Has Aqua entered into a new wastewater service agreement with the Contributing Municipalities?**

A. Yes. In Aqua's effort to settle the civil proceeding filed by the Litigating Municipalities, and to ensure that all the Contributing Municipalities have treatment agreements on substantially similar terms, Aqua has developed and negotiated new Wastewater Service Agreements with all of the Contributing Municipalities. I will note as I previously testified, several of the Contributing Municipalities did not have a written agreement prior to Aqua's involvement with the City and the Contributing Municipalities through the proposed transaction.

**Q. You previously testified that Aqua was requesting that to the extent necessary the Commission amend certain provisions of the prior agreements under Section 508 of the Public Utility Code and that those Contributing Municipalities that do not have an existing agreement be charged the Bulk Rate as set forth in Aqua's tariff. Is the Company still requesting this modification?**

A. No. Since new Wastewater Service Agreements have been negotiated and entered into between Aqua and the Contributing Municipalities, no amendment is needed under Section 508 of the Public Utility Code.

## V. CONCLUSION

**Q. Does this conclude your supplemental direct testimony?**

A. Yes it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

***Aqua Pennsylvania Wastewater, Inc.***
***City of Beaver Falls - Wastewater***

**1.)** **City of Beaver Falls - Wastewater**

| | | 2025 Year 1 | Notes |
|---|---|---|---|
| Revenue | $ | 2,534,808 | |
| O&M | | 1,462,000 | |
| Depreciation | | 1,307,096 | ****3.09% Composite Depreciation Rate* |
| Taxes Other | | 74,383 | |
| Income Taxes | $ | (294,741) | ******21% Federal & 8.99% State* |
| **Operating Income** | **$** | **(13,929)** | |
| Rate Base at Fair Market Value | $ | 41,250,000 | |
| Capital Investments *(Year 1)* | $ | 1,050,834 | |
| Rate Base *(Including Capital Investments less depreciation year 1)* | $ | 40,993,739 | |
| Interest Expense ^ | | 755,105 | |
| *^ Includes Interest Expense syncronized with rate base* | | | |
| **Required Operating Income *(Rate Base x Rate of Return)*** | **$** | **2,966,717** | |
| **Operating Income Deficiency** | **$** | **2,980,646** | |
| Gross Revenue Conversion Factor | | 1.408541 | |
| **Revenue Deficiency (Excess) $** | **$** | **4,198,000** | |
| **Revenue Deficiency (Excess) %** | | **165.61%** | |
| **Increase applied to Acquired (Authority) customers 80% Cost of Service** | **$** | **2,851,438** | |
| **Increase %** | | **112.49%** | |
| **Increase applied to Acquired (Authority) customers 100%** | **$** | **4,198,000** | |
| **Increase %** | | **165.61%** | |
| **Increase applied to Acquired (Authority) customers 50%** | **$** | **2,099,000** | |
| **Increase %** | | **82.81%** | |
| **Increase applied to Existing (Company Wastewater) customers 50%** | **$** | **2,099,000** | |
| **Increase %** | | **3.02%** | |
| **Increase applied to Existing (Company Water) customers 20% - Cost of S** | **$** | **1,346,562** | |
| **Increase %** | | **0.24%** | |

| | Avg. Usage / Kgal | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential (Domestic) - 80% Cost of Service | 9.49 | $ 112.64 | 112.49% |
| Commercial - 80% Cost of Service | 39.87 | $ 410.35 | 112.49% |
| Industrial - 80% Cost of Service | 96.71 | $ 322.43 | 112.49% |
| Public - 80% Cost of Service | 69.26 | $ 698.35 | 112.49% |
| Bulk - 80% Cost of Service | 6,354.46 | $ 33,453.67 | 112.49% |
| Bulk Other (Dalton) - 80% Cost of Service | 440.53 | $ 7,499.42 | 112.49% |
| Residential - 100% Revenue Deficiency | 9.49 | $ 165.83 | 165.61% |
| Commercial - 100% Revenue Deficiency | 39.87 | $ 604.13 | 165.61% |
| Industrial - 100% Revenue Deficiency | 96.71 | $ 474.70 | 165.61% |
| Public - 100% Revenue Deficiency | 69.26 | $ 1,028.14 | 165.61% |
| Bulk - 100% Revenue Deficiency | 6,354.46 | $ 49,251.81 | 165.61% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ 11,040.94 | 165.61% |
| Residential - 50% Revenue Deficiency | 9.49 | $ 82.92 | 82.81% |
| Commercial - 50% Revenue Deficiency | 39.87 | $ 302.07 | 82.81% |
| Industrial - 50% Revenue Deficiency | 96.71 | $ 237.35 | 82.81% |
| Public - 50% Revenue Deficiency | 69.26 | $ 514.07 | 82.81% |
| Bulk - 50% Revenue Deficiency | 6,354.46 | $ 33,453.67 | 165.61% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ 5,520.47 | 82.81% |
| Impact Existing Customers (Company Wastewater) - Residential - 50% | 4.00 | $ 2.54 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Commercial - 50% | 8.33 | $ 4.05 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Industrial - 50% | 1.50 | $ 1.38 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Public - 50% | 8.33 | $ 4.05 | 3.02% |
| Impact Existing Customers (Company Water) - Residential - 20% Cost of Ser | 4.00 | $ 0.18 | 0.24% |
| Impact Existing Customers (Company Water) - Commercial - 20% Cost of Se | 33.38 | $ 1.06 | 0.24% |
| Impact Existing Customers (Company Water) - Industrial - 20% Cost of Servi | 200.15 | $ 5.14 | 0.24% |
| Impact Existing Customers (Company Water) - Public - 20% Cost of Service | 33.38 | $ 1.06 | 0.24% |

**2.)** **Rate of Return**

| | Ratio | Cost Rate | WACC |
|---|---|---|---|
| Debt | 46.05% | 4.00% | 1.84% |
| Equity | 53.95% | 10.00% | 5.40% |
| | 100.00% | | 7.24% |

**3.)** **Gross Revenue Conversion Factor**

| | | |
|---|---|---|
| Dollar of Revenue | | 1.0000000 |
| Less: Gross Receipts (Revenue) Tax | 0.00% | 0.0000000 |
| Less: Reg Assesments | 0.62% | 0.0062419 |
| Less: Bad Debts | 1.17% | 0.0117050 |
| State Taxable Income | | 0.9820531 |
| State Income Tax | 8.4900% | 0.0833763 |
| Federal Taxable Icome | | 0.8986768 |
| Federal Tax Rate | 21.00% | |
| Federal Income Tax | | 0.1887221 |
| Net Revenue Dollar | | 0.7099547 |
| Gross Revenue Conversion Factor | | 1.4085406 |
| EFT | 27.7071% | |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Present Revenues***

| *Address Type* | *Service* | *Billed Dollars* | *Quarterly Minimum Fee Up to 3 Kgal* | *Rate per Kgal* | *Customers* | *EDUs* | *Total Usage* | *Average Usage* | *Average Quarterly Bill* | *Average Monthly Bill* |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic | Wastewater | $1,153,108 | $43.64 | $8.71 | 2,879 | 3,078 | 109,238,000 | | | |
| **Domestic/Residential Total** | | **$1,153,108** | | | **2,879** | **3,078** | **109,238,000** | **9,486** | **$ 100.13** | **$ 33.38** |
| Commercial | Wastewater | $402,719 | $43.64 | $8.71 | 276 | 376 | 44,017,000 | | | |
| **Commercial Total** | | **$402,719** | | | **276** | **376** | **44,017,000** | **39,870** | **$ 364.78** | **$ 121.59** |
| Industrial | Wastewater | $24,077 | $43.64 | $8.71 | 7 | 7 | 2,708,000 | | | |
| **Industrial Total** | | **$24,077** | | | **7** | **7** | **2,708,000** | **96,714** | **$ 859.89** | **$ 286.63** |
| Public | Wastewater | $42,215 | $43.64 | $8.71 | 17 | 17 | 4,710,000 | | | |
| **Public Total** | | **$42,215** | | | **17** | **17** | **4,710,000** | **69,265** | **$ 620.81** | **$ 206.94** |
| Bulk | Wastewater | $832,689 | | $4.68 | 7 | 3,767 | 177,925,000 | | | |
| **Bulk Total** | | **$832,689** | | | **7** | **3,767** | **177,925,000** | **6,354,464** | **$ 29,738.89** | **$ 9,912.96** |
| Bulk Other | Wastewater | $80,000 | | $4.68 | 1 | 1 | 1,762,115 | | | |
| **Bulk Total** | | **$80,000** | | | **1** | **1** | **1,762,115** | **440,529** | **$ 20,000.00** | **$ 6,666.67** |
| **Total Service Revenue** | | **$2,534,808** | | | **3,187** | **7,246** | **340,360,115** | | | |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Operating and Maintenance Expenses***

| | **2023** |
|---|---|
| *OPERATING AND MAINTENANCE EXPENSES:* | *Year 1* |
| O&M Labor Exp Reg | $ 435,000 |
| O&M Labor Exp OT | 20,000 |
| O&M Employee Benefits | 260,000 |
| O&M Sludge Removal | 62,000 |
| O&M Purchased Power | 125,000 |
| O&M Chemicals | 33,000 |
| O&M Mgmt Fees | 126,000 |
| O&M Cust Ops ACO (@ $10.00 per customer) | 70,000 |
| O&M OS Engineering | 25,000 |
| O&M OS Lab Testing | 15,000 |
| O&M OS Operations | - |
| O&M OS Maintenance | 215,000 |
| O&M Supplies | 16,000 |
| O&M Supplies | 60,000 |
| Total O&M Expenses => | $1,462,000 |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Taxes Other Than Income***

| *TAXES OTHER THAN INCOME (PRE-RATE CA* | *Rate* | | *Year 1* |
|---|---|---|---|
| Payroll Taxes (FICA, FUTA, SUTA) | 8.000% | $ | 34,800 |
| Property Taxes / (Purta) | 0.890% | $ | 22,560 |
| Regulatory Assessments | 0.672% | $ | 17,023 |
| Total | | $ | 74,383 |

**Assessment Rates**

| | |
|---|---|
| *Public Utility Commission* | *0.47%* |
| *Consumer Advocate* | *0.16%* |
| *Small Business Advocate* | *0.03%* |
| *Damage Prevention Committee* | *0.01%* |

Docket No. R-2021-3027385
Exhibit 1-A(a)

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Metered: | | | | | | | |
| 2 | Residential | 398,180 | 400,887 | 401,624 | 402,361 | 402,250 | - | 111 |
| 3 | Commercial | 22,385 | 22,521 | 22,492 | 22,463 | 22,463 | - | - |
| 4 | Industrial | 740 | 728 | 728 | 728 | 728 | - | - |
| 5 | Public | 1,184 | 1,184 | 1,184 | 1,184 | 1,184 | - | - |
| 6 | Bulk Water | - | - | - | - | - | - | - |
| 7 | Private Fire Protection | 5,449 | 5,550 | 5,550 | 5,550 | 5,550 | - | - |
| 8 | Sales to Water Utilities | 10 | 13 | 13 | 13 | 13 | - | - |
| 9 | Total Metered Customers | 427,948 | 430,883 | 431,591 | 432,299 | 432,188 | - | 111 |
| 10 | Other: | | | | | | | |
| 11 | Unmetered | 2,801 | 2,246 | 2,246 | 2,246 | 2,229 | - | 17 |
| 12 | Availability Charge | - | - | - | - | - | - | - |
| 13 | Public Fire Protection | 268 | 267 | 267 | 267 | 267 | - | - |
| 14 | Private Fire Protection | 863 | 868 | 868 | 868 | 868 | - | - |
| 15 | Total Customers | 431,880 | 434,264 | 434,972 | 435,680 | 435,552 | - | 128 |

Docket No. R-2021-3027386
Exhibit 1-B through 1-G

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA WASTEWATER, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Residential | 31,411 | 37,986 | 38,078 | 38,170 | 37,829 | 70 | 271 |
| 2 | Commercial | 1,715 | 2,227 | 2,227 | 2,227 | 2,226 | - | 1 |
| 3 | Industrial | 9 | 9 | 9 | 9 | 9 | - | - |
| 4 | Public | 60 | 62 | 62 | 62 | 62 | - | - |
| 5 | Miscellaneous | - | - | - | - | - | - | - |
| 6 | Availability Charge | - | - | - | - | - | - | - |
| 7 | Total Customers | 33,195 | 40,284 | 40,376 | 40,468 | 40,126 | 70 | 272 |

| | | | |
|---|---|---|---|
| ADD | Lower Makefield | Res | 10,916 |
| | | Com | 235 |
| | | Ind | - |
| | East Whiteland | Res/Com | 3,895 |
| | | **Total Existing WW Customers** | **55,514** |

| | |
|---|---|
| Wastewater Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-B through 1-G APWW Rate Case => | $ 55,789,513 |
| Add Lower Makefield WW - Appendix A | $ 10,038,836 |
| Add East Whiteland Revenue - Appendix A | $ 3,769,536 |
| Total Existing Revenues | **$ 69,597,885** |

Docket No. R-2021-3027385

| | |
|---|---|
| Water Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-A APW Rate Case => | $ 561,514,060 |
| Add Shenandoah Water Revenue Revenue - Appendix A => | $ 1,927,789 |
| Residential | $ 366,237,202 |
| Commercial | $ 140,860,462 |
| Industrial Revenues | $ 22,537,674 |
| Other Revenues | $ 33,806,511 |
| Total Existing Revenues (Res, Com, & Ind classes) | **$ 563,441,849** |

Docket No. R-2021-3027385

AQUA PENNSYLVANIA, INC.

1-A WATER AND 1-B WASTEWATER REVENUE REQUIREMENT - SUMMARY

| | | | Total Company | Water Operations | Wastewater Base Operations | Wastewater Limerick | Wastewater East Bradford | Wastewater Cheltenham | Wastewater East Norriton | Wastewater New Garden | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Present Rate Revenue | | | $ 548,225,086 | $ 511,148,592 | $ 19,011,761 | $ 3,978,573 | $ 1,014,569 | $ 7,258,740 | $ 2,923,770 | $ 2,889,080 | |
| Additional Revenue Requirement | | | 69,078,487 | 39,108,336 | 15,595,716 | 5,573,913 | 776,166 | 2,747,284 | 2,736,794 | 2,540,277 | $ 67,046,644 |
| Act 11 Allocatic | (1) | *16.79%* | (0) | 11,257,132 | (8,773,183) | (2,308,940) | (127,958) | 2,032,232 | (1,079,811) | (999,471) | |
| Proposed Revenues | | | $ 617,303,573 | $ 561,514,060 | $ 25,834,295 | $ 7,243,546 | $ 1,662,778 | $ 12,038,256 | $ 4,580,752 | $ 4,429,886 | |
| Rate Increase/(Decrease) - $ | | | $ 69,078,487 | $ 50,365,468 | $ 6,822,533 | $ 3,264,973 | $ 648,209 | $ 4,779,516 | $ 1,656,983 | $ 1,540,806 | |
| Rate Increase/(Decrease) - % | | | 12.60% | 9.85% | 35.89% | 82.06% | 63.89% | 65.84% | 56.67% | 53.33% | |
| | | | | | -25.35% | -24.17% | -7.15% | 20.31% | -19.08% | -18.41% | |

**Notes:**

(1) The allocation between wastewater operations and water operations is achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

**Aqua Pennsylvania Wastewater, Inc.**
**Residential Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bil | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | 4,000 | $ 64.47 | $ 95.47 | $ 31.00 | 48.08% | 16,347 | 16,359 |
| RZ 10 - East Norriton | 10 | 10 | 4,000 | $ 38.52 | $ 66.47 | $ 27.95 | 72.55% | 52,639 | 55,124 |
| RZ 10 - East Norriton - Whitpain | 10 | 10 | 4,000 | $ 31.66 | $ 66.47 | $ 34.81 | 109.95% | 66 | 66 |
| RZ 11 - New Garden | 11 | 11 | 4,000 | $ 73.03 | $ 138.50 | $ 65.47 | 89.65% | 6,080 | 6,080 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | 4,000 | $ 59.01 | $ 95.47 | $ 36.46 | 61.79% | 25,609 | 27,588 |
| RZ 1B - Penn Township | 1B | 1 | 4,000 | $ 64.05 | $ 95.47 | $ 31.42 | 49.06% | 9,953 | 9,953 |
| RZ 2 - Emlenton, Rivercrest, White Haven | 2 | 2 | 4,000 | $ 71.82 | $ 101.80 | $ 29.98 | 41.74% | 11,088 | 20,435 |
| RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | 4,000 | $ 84.00 | $ 115.03 | $ 31.03 | 36.94% | 26,224 | 26,224 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | 4,000 | $ 118.02 | $ 150.30 | $ 32.28 | 27.35% | 6,415 | 6,415 |
| RZ 5 - Newlin Green | 5 | 5 | 4,000 | $ 147.00 | $ 150.30 | $ 3.30 | 2.24% | 588 | 588 |
| RZ 5 - Sage Hill | 5 | 5 | 4,000 | $ 189.00 | $ 150.30 | $ (38.70) | -20.48% | 252 | 264 |
| RZ 6 - Masthope | 6 | 6 | 4,000 | $ 45.82 | $ 70.59 | $ 24.77 | 54.05% | 16,452 | 16,488 |
| RZ 7 - Limerick | 7 | 7 | 4,000 | $ 39.73 | $ 78.53 | $ 38.80 | 97.67% | 61,094 | 61,094 |
| RZ 8 - East Bradford - Single Family Home | 8 (Unmetered) | 8 (Metered) | 4,000 | $ 71.49 | $ 104.56 | $ 33.06 | 46.25% | 4,596 | 4,596 |
| RZ 8 - East Bradford - Townhome | 8 (Unmetered) | 8 (Metered) | 4,000 | $ 55.36 | $ 104.56 | $ 49.20 | 88.88% | 9,663 | 9,663 |
| RZ 9 - Cheltenham | 9 | 9 | 4,000 | $ 36.53 | $ 61.82 | $ 25.29 | 69.23% | 117,807 | 117,807 |
| RZ 3 - Links of Gettysburg, Thornhurst Div, Laurel Lakes, Woodloch Springs Unmetered | 3 | 3 | Unmetered | $ 71.50 | $ 115.03 | $ 43.53 | 60.88% | 11,496 | 11,496 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | Unmetered | $ 105.00 | $ 133.35 | $ 28.35 | 27.00% | 23,389 | 23,389 |
| RZ 7 - Limerick (Unmetered) | 7 (Unmetered) | 7 (Unmetered) | Unmetered | $ 29.75 | $ 61.08 | $ 31.33 | 105.34% | 6,078 | 6,078 |

**Weighted Average Residential Bill (Metered & Unmetered) => $ 84.33** **** @ 4,000 Average Consumption***

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania Wastewater, Inc.**
**Commercial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bill | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 9 - Cheltenham | 9 | 9 | 3,200 | $ 33.40 | $ 54.95 | $ 21.55 | 64.52% | 84,326 | 84,326 |
| RZ 7 - Limerick | 7 | 7 | 5,800 | $ 51.89 | $ 93.24 | $ 41.35 | 79.70% | 21,828 | 22,260 |
| RZ 10 - East Norriton | 10 | 10 | 24,500 | $ 220.00 | $ 220.90 | $ 0.89 | 0.41% | 2,938 | 3,202 |
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | 39,400 | $ 346.96 | $ 504.71 | $ 157.74 | 45.46% | 3,660 | 3,684 |
| RZ 11 - New Garden | 11 | 11 | 39,400 | $ 939.43 | $ 1,855.35 | $ 915.92 | 97.50% | 1,281 | 1,281 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | 39,400 | $ 293.18 | $ 504.71 | $ 211.52 | 72.15% | 729 | 789 |
| RZ 1B - Penn Township | 1B | 1 | 39,400 | $ 484.58 | $ 504.71 | $ 20.13 | 4.15% | 480 | 504 |
| RZ 2 - Emlenton, Rivercrest, White Haven (Kidder) | 2 | 2 | 39,400 | $ 372.90 | $ 542.05 | $ 169.15 | 45.36% | 623 | 3,745 |
| RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | 39,400 | $ 399.95 | $ 539.89 | $ 139.95 | 34.99% | 1,476 | 3,425 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | 39,400 | $ 785.65 | $ 982.83 | $ 197.18 | 25.10% | 42 | 42 |
| RZ 6 - Masthope | 6 | 6 | 39,400 | $ 82.99 | $ 165.27 | $ 82.28 | 99.14% | 96 | 108 |
| RZ 8 - East Bradford | 8 | 8 | 44,500 | $ 335.21 | $ 569.71 | $ 234.49 | 69.95% | 416 | 416 |
| RZ 5 - Avon Grove School District | 5 | 5 | Flat | $ 8,695.31 | $ 10,925.36 | $2,230.05 | 25.65% | 12 | 12 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | Unmetered (Per EDU) | $ 105.00 | $ 133.35 | $ 28.35 | 27.00% | 1,559 | 7,427 |

| | |
|---|---|
| **Weighted Average COMMERCIAL Bill (Metered & Unmetered) =>** | **$ 134.14** |
| **Weighted Average COMMERCIAL Consumption (Metered ) =>** | **8,328.23** |

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania Wastewater, Inc.**
**Industrial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bil | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Media | 1 | 1 | 3,700 | $ 62.08 | $ 90.30 | $ 28.22 | 45.47% | 12 | 12 |
| RZ 9 - Cheltenham | 9 | 9 | 1,250 | $ 25.78 | $ 40.88 | $ 15.10 | 58.57% | 108 | 108 |

| | |
|---|---|
| **Weighted Average INDUSTRIAL Bill (Meterd & Unmetered) =>** | **$ 45.82** |
| **Weighted Average INDUSTRIAL Consumption (Meterd & Unmetered) =>** | **1,495.00** |

Where applicable, present rates includes DSIC at 5.00%

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania, Inc.**
**Residential Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills | Consumption | Average Gallons |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | 4,000 | $ 69.35 | $ 77.51 | $ 8.16 | 11.77% | 4,433,841 | 190,268,063 | 4,291 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | 4,000 | $ 56.16 | $ 77.51 | $ 21.35 | 38.02% | 11,125 | 437,656 | 3,934 |
| Beech Mountain | 1* | 1* | 5/8" | 4,000 | $ 33.82 | $ 45.14 | $ 11.32 | 33.48% | 11,304 | 385,051 | 3,406 |
| Bristol Township | 1* | 1* | 5/8" | 4,000 | $ 40.85 | $ 54.81 | $ 13.96 | 34.17% | 5,168 | 222,802 | 4,311 |
| Mifflin Township | 1* | 1 | 5/8" | 4,000 | $ 53.75 | $ 77.51 | $ 23.76 | 44.21% | 5,815 | 184,250 | 3,169 |
| Mt. Jewett | 1* | 1 | 5/8" | 4,000 | $ 65.14 | $ 77.51 | $ 12.37 | 18.99% | 4,796 | 143,987 | 3,002 |
| Robin Hood Lakes | 1* | 1 | 5/8" | 4,000 | $ 56.33 | $ 77.51 | $ 21.18 | 37.60% | 2,413 | 74,484 | 3,087 |
| Chalfont | 2 | 2 | 5/8" | 4,000 | $ 65.14 | $ 77.51 | $ 12.37 | 18.99% | 26,538 | 1,120,730 | 4,223 |
| Concord Park | 2 | 2* | 5/8" | 4,000 | $ 46.66 | $ 62.77 | $ 16.12 | 34.55% | 1,964 | 77,374 | 3,940 |
| Superior | 2 | 2 | 5/8" | 4,000 | $ 69.35 | $ 77.51 | $ 8.16 | 11.77% | 51,088 | 2,393,598 | 4,685 |
| Treasure Lake | 2 | 2* | 5/8" | 4,000 | $ 42.70 | $ 57.33 | $ 14.63 | 34.26% | 25,628 | 828,948 | 3,235 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | 4,000 | $ 69.35 | $ 79.43 | $ 10.08 | 14.54% | 65,052 | 1,424,213 | 2,189 |
| Bunker Hill | Bunker Hill | Bunker Hill | 5/8" | 4,000 | $ 27.95 | $ 38.44 | $ 10.49 | 37.53% | 829 | 40,581 | 4,895 |
| Sun Valley | Sun Valley | Sun Valley | 5/8" | 4,000 | $ 20.96 | $ 38.00 | $ 17.04 | 81.28% | 765 | 30,588 | 3,998 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 4,000 | $ 15.33 | $ 22.66 | $ 7.33 | 47.78% | 5,502 | 212,940 | 3,870 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 4,000 | $ 62.33 | $ 62.33 | | | 2,702 | 89,931 | 3,328 |
| | | **Weighted Average RESIDENTIAL Bill @ 4,000 Avg. Gallons =>** | | | | **$ 77.23** | | | | | |

Based on 5/8" meter and an average consumption of 4,000 per month.

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Commercial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | 33,900 | $ 414.74 | $ 453.75 | $ 39.01 | 9.41% | 273,458 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | 32,100 | $ 340.27 | $ 470.46 | $ 130.19 | 38.26% | 32 |
| Beech Mountain | 1* | 1* | 5/8" | 45,200 | $ 182.86 | $ 298.85 | $ 116.00 | 63.44% | 60 |
| Bristol Township | 1* | 1* | 5/8" | 11,400 | $ 125.97 | $ 180.30 | $ 54.34 | 43.13% | 1,797 |
| Mifflin Township | 1* | 1 | 5/8" | 16,000 | $ 156.95 | $ 234.57 | $ 77.62 | 49.46% | 351 |
| Mt. Jewett | 1* | 1 | 5/8" | 33,900 | $ 414.74 | $ 453.75 | $ 39.01 | 9.41% | 4,796 |
| Chalfont | 2 | 1 | 5/8" | 6,000 | $ 96.11 | $ 104.61 | $ 8.51 | 8.85% | - |
| Concord Park | 2 | 1* | 4" | 434,800 | $ 3,277.12 | $ 5,130.10 | ######## | 56.54% | 24 |
| Superior | 2 | 1 | 5/8" | 6,000 | $ 96.11 | $ 104.61 | $ 8.51 | 8.85% | 2,810 |
| Treasure Lake | 2 | 1* | 5/8" | 33,500 | $ 214.90 | $ 328.84 | $ 113.95 | 53.02% | 386 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | 14,100 | $ 240.89 | $ 261.45 | $ 20.57 | 8.54% | 1,044 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 19,100 | $ 60.63 | $ 89.70 | $ 29.07 | 47.95% | 829 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 13,794 | $ 100.49 | $ 100.49 | | | 2,652 |
| | | **WA Consumption =>** | | **33,382** | **WA Bill =>** | **$ 443.57** | | | |

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Industrial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 | 1 | 1 | 5/8" | 201,400 | $ 1,976.42 | $ 2,162.72 | $ 186.30 | 9.43% | 9,057 |
| Rate Zone 2 | 2 | 1 | 2" | 201,400 | $ 2,053.29 | $ 2,306.21 | $ 252.93 | 12.32% | 60 |
| Rate Zone 3 | 3 | 3 | 5/8" | 36,800 | $ 452.53 | $ 491.00 | $ 38.47 | 8.50% | 12 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 3,600 | $ 14.13 | $ 20.88 | $ 6.75 | 47.76% | 48 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 55,701 | $ 221.18 | $ 221.18 | | | 5 |
| | | **WA Consumption =>** | | **200,150** | **WA Bill =>** | **$ 2,149.22** | | | |

Where applicable, present rates includes DSIC at 7.50%.

# SUPPLEMENTAL
# EXHIBIT W
# (CONFIDENTIAL Version)

**CONFIDENTIAL VERSION – HIGHLY CONFIDENTIAL INFORMATION REDACTED**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 3 SUPP**

**SUPPLEMENTAL DIRECT TESTIMONY OF**
**ZACH MARTIN**

**With Regard To**
**Operations**
**Customer Service**
**Public Benefits**

**March 2024**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS ..... 4
III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM ..... 10
A. GENERAL SYSTEM ASSESSMENT ..... 10
B. HAZARDOUS GAS ..... 20
C. ADDITIONAL SAFETY AND SECURITY ISSUES ..... 27
D. ASSET MANAGEMENT ..... 36
IV. CONCLUSION ..... 39

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Please provide a brief description of your education and work experience.**

A. I graduated from the Kent State University with an Associate of Science degree in 2009 and then a Bachelor of Business Administration in 2021. I have worked in the water and wastewater industry for nineteen years. I began my career in the utility industry in the spring of 2004 with the City of North Canton, Ohio as a water plant operator where I secured my Class III Water Supply Certification from the Ohio EPA. I moved into a leadership role in early 2009 as the Regional Water Superintendent for Portage County Water Resources where I was responsible for managing plant and distribution employees in the county operations of three water systems. I also served as backup to the wastewater superintendent there for the 13 wastewater treatment plants and 113 lift stations. In 2010, I moved to Aqua Ohio, Inc. as the Production Manager for the Struthers Division. There I was responsible for the operations and maintenance of the large surface water system including the 5 million gallon per day ("MGD") surface water treatment plant and the five

source water lakes and their six dams. In 2013, I was promoted in Aqua PA as the Assistant Division / Production Manager and later a Plant Manager II in 2017, and I held that position through 2021. During those eight years I was responsible for all aspects of production, treatment, and distribution facilities of the eight drinking water systems in Western PA. In 2021, I was promoted to the position of Area Manager II. In total I have worked for the Aqua subsidiaries of Essential Utilities, Inc. ("Essential") (*f/k/a* Aqua America, Inc.) for 13 years. I am responsible for leading a team of employees delivering drinking water to customers and returning treated wastewater back to the environment in nine counties of Western Pennsylvania. I am involved in all aspects of operations including budgeting, planning, employee relations, and process control. I am also involved in the business development functions in my area of operations. I am also a veteran of Operation Iraqi Freedom III and served in the U.S. Army and Ohio Army National Guard.

**Q. Do you hold any professional licenses or certifications?**

A. Yes. I hold three environmental operator certifications in two states. I am a Class-A certified water and Class-A certified wastewater operator in Pennsylvania with 18 subclasses in total. I am also a Class 3 water supply licensed operator in the state of Ohio. I have maintained operational laboratory certifications in both states as well.

**Q. Have you previously testified before the Pennsylvania Public Utility Commission ("PUC" or the "Commission")?**

A. Yes. I previously submitted Direct Testimony in this proceeding, and I have submitted testimony in Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") acquisition of Greenville Sanitary Authority.

**Q. You stated you filed Direct Testimony in this proceeding, what is the purpose of your Supplemental Direct Testimony?**

A. The purpose of my Supplemental Direct Testimony is to supplement my Direct Testimony and provide additional discussion regarding operations of the City of Beaver Falls ("City" or "Beaver Falls") wastewater system ("the System") and to discuss the public benefits of this transaction.

**Q. Are you sponsoring any Exhibits associated with the Company's filing as a part of your Supplemental Direct Testimony?**

A. Yes. I am sponsoring ZM-SUPP Appendix A, which contains CONFIDENTIAL and HIGHLY CONFIDENTIAL portions that have been marked as such.

## II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS

**Q. In your direct testimony, do you describe the location of Aqua's operations in relation to the System and how Aqua will integrate the System into its operations?**

A. Yes.

**Q. Is there further information that you can provide at this time about how Aqua will integrate the System into its operations?**

A. Yes. As discussed in my Direct Testimony, the operation of the System will be managed from Aqua PA's Western Area office in Sharon, PA. Management, customer service, regulatory compliance, engineering, financial, and ancillary services will be provided seamlessly from there with support from our Southeastern Headquarters office. Aqua plans to offer employment to seven current employees of the City to address the day-to-day operations of the System. The existing employees coupled with the over 30 front line employees and management staff located within 40 miles of Beaver Falls provide significant resiliency and improves operational support for the System. Combining System and Aqua PA employees in conjunction with Aqua PA's "One PA" program creates purposeful knowledge sharing opportunities for employees across all sectors of the Company. In concert with the One PA program, Aqua has for more than a decade, a corporate -wide "One Company Initiative" which solicits knowledge sharing from all areas of Aqua which benefits all employees. By extension, Aqua PA's One PA philosophy and the One Company Initiative benefits customers of both the System, Aqua PA and Aqua by

creating a platform for sharing of best practices, table-top exercises, sharing of standard operating procedures ("SOPs"), sharing of existing or new equipment such as generators, lessons learned that may include new operating techniques or technologies, safety practices and more.

Further, Aqua has significant equipment that can be shared with the System, including for operation (vehicles, excavation, heavy haul), portable generators, common supplies and material storage, and mobile safety systems that can be moved between locations. While physical connection of the collection systems is not anticipated, connection of security and computer systems will occur. Aqua has an integrated Supervisory Control and Data Acquisition ("SCADA") system used to operate and monitor operating systems such as pumps, treatment units and status alarms, such as chlorine gas alarms. Aqua's SCADA system allows our operators to have better insights into the operations of the system at all hours of the day and to be proactively alerted of any issues. Currently, Beaver Falls does not have a full scale SCADA system. Aqua also maintains an integrated security system that allows physical security to be observed in different locations around the state. In the case of the Beaver Falls System, once systems are installed and integrated with Aqua's security system, the physical security alarms will notify operations staff at the Company's water treatment plant in Sharon, PA which is staffed 24/7/365. In addition, security alarms from Aqua PA's Sharon, PA water treatment plant will be shared at Beaver Falls which will alert those operators of possible problems in Sharon, thus providing mutual assistance to both system's customers. This will ensure safety of operations and personnel, as well as nearby residents and the environment.

**Q. In addition to what you have explained in your Direct Testimony, how else will other Aqua PA employees assist in the operation of the System, if needed?**

A. In addition to the information provided in my Direct Testimony, the support of Aqua PA employees, electricians, mechanics, laboratory staff, and instrument technicians, will benefit both the Beaver Fall's employees and customers. Aqua has 12 wastewater operators in the Western PA Area, many holding dual water and wastewater certifications, who may be called upon to assist in the operations of the system. There are also 20 certified water operators in the Western PA Area who are familiar with treatment systems and can follow SOP if needed. These operators are also supported by Aqua PA employees, which will benefit customers through engineering and field service functions as well as electricians, mechanics, laboratory staff, and instrument technicians, which will benefit both the Beaver Fall's employees and customers.

A few examples of operational support that will be provided by Aqua to the Beaver Falls System (which support does not exist today for the System) include:

(1) Environmental Compliance Audits conducted by staff that do not report to the operation management group;

(2) Safety teams that conduct "housekeeping" and safety audits that seek to find and eliminate potential dangers;

(3) A "Near-Miss" program that allows any employee to report an observed safety concern and a process that ensures the issue is resolved timely;

(4) A full-time Aqua PA One-Call management team (Damage Prevention) that ensures the requirements of Act 50 of 2017 are met, and that staff receive regular training;

(5) Mapping updates by an in-house Geographic Information System (GIS) team;

(6) Wastewater process experts that will review the processes for targeted parameters and if needed, assist in resolving any process upset situations;

(7) Emergency response support in the form of "national contracted vendors", fleet operations, and access to the approximately 600 Aqua PA employees who can deploy to the location in support of Western PA operations, all orchestrated through Aqua PA's Emergency Response and Communications process.

It is equally beneficial and important to note that eventually Beaver Falls employees will be called upon to assist in others areas of Western PA operations. In so doing, continued cross-training benefits the Systems as well customers of Beaver Falls and Aqua. This sharing of employees from new acquisitions and existing systems is a mainstay of our southeastern Pennsylvania wastewater operations where we have integrated wastewater employees for Cheltenham, East Norriton and Lower Makefield. This integration ensures operator familiarity with these systems and ensures continuity of operations during normal and emergency operations. This type of planning and integration also ensures that Beaver Falls will not be in the situation it is now – no supervisory personnel or adequate backup personnel.

**Q. Please describe how the Beaver Falls employees will be integrated into and develop their careers at Aqua.**

A. Following acquisition of the Beaver Falls System, Aqua will implement site-specific training, as well as off-site cross training in other Aqua facilities to promote continuous improvement and optimization, and to introduce compliance metrics to shift the plant into high performance operations.

**Q. In your Direct Testimony, you indicated that the System is similar to other systems owned and operated by Aqua. Is that the case?**

A. Yes, it remains the case. However, after further investigation and review of the System, as described below, the System is troubled, distressed and in need of significant investment and operations review.

**Q. Do you believe that Aqua is technically fit to own and operate the system?**

A. Yes.

**Q. Are there any further reasons why Aqua has demonstrated itself to be fit to operate this system after conducting additional investigation and review?**

A. As noted in my direct testimony, Aqua has experience replacing wastewater infrastructure while also navigating strict Pennsylvania Department of Environmental Protection ("DEP") regulations to install chemical treatment systems and optimize the plant for copper removal to benefit an impaired receiving stream as defined by Section 303(d) of the Clean Water Act. The improvements to this watershed were recently recognized by the DEP following stream assessments in 2022 and 2023 which identified material improvements to the stream eco-systems downstream of its outfall. This experience will assist Aqua in addressing the additional issues identified with respect to this system.

**Q. How does Aqua maintain and enforce safety, compliance, and security programs throughout its operations?**

A. Aqua requires a high level of employee training and monitors completion of training requirements. Most safety programs are trained initially and reinforced through annual refresher trainings. Aqua employs internal safety experts, internal compliance experts, and routinely conducts internal audits of operations. Aqua also contracts with external experts to perform random inspections and audits of employee and contractor operations. These cover operations throughout the system, including maintenance and construction activities in immediate contact with the community.

**Q. Can Aqua provide adequate wastewater treatment capacity to meet present and future customer demands?**

A. Yes. Through the existing facilities, coupled with the planned upgrades to the WWTP, which are discussed in the Direct Testimony of Mark Bubel, Sr. (Aqua Statement No. 2), Aqua can provide adequate treatment capacity for present and future customers. Aqua will continue to make improvements to the System, as may be required, to ensure any future customer demands are met.

**Q. Please summarize why you believe Aqua is technically fit to own and operate the System.**

A. My explanation of Aqua's current operations, the System's similarity to other systems operated by Aqua, and operational support that will be provided by Aqua, an experienced

wastewater utility, all support a finding that Aqua is technically fit to own and operate the System, and that ownership of the System by Aqua is in the public interest. In addition to this, I detail below the current areas for improvement needed in the System, as well as the additional process improvements identified that will be remedied by Aqua, and capital improvement needs of the System. Aqua's planned improvements in this regard establish substantial affirmative public benefits. Moreover, these capital and operational improvements have not been addressed by Beaver Falls, nor is Beaver Falls in a position to do so as explained by Mr. Jones (Aqua Statement No. 4-Supp.) in his Supplemental Direct Testimony.

## III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM

### A. GENERAL SYSTEM ASSESSMENT

**Q. Since Aqua submitted its Direct Testimony, has it further analyzed the System and its current operations?**

A. Yes, it has. Below, I will provide supplemental detail on Aqua's assessment of the system generally and Aqua's identification of specific issues that evidence the System is currently troubled. These issues include hazardous gas problems, safety and security problems, and the lack of an asset management plan or computerized maintenance management system. I also identify how Aqua would address these issues as the owner and operator of the System, and how such ownership and operation will result in significant public benefits.

**Q. Did you visit the facilities?**

A. Yes, multiple times. Specifically, the Company conducted initial due diligence and post-agreement in-depth review to assess the operations, facilities, personnel, standard operating procedures, compliance, safety, and security of the System.

**Q. How old is the original WWTP?**

A. The wastewater treatment plant was built in 1938. While some work has been done over the years, the original WWTP is over 80 years old. The system is troubled, distressed and in significant need of attention.

**Q. Based on your experience in visiting the plant, did you feel safe and would you feel safe allowing Aqua employees to work at the WWTP under the current conditions?**

A. No. I did not feel safe and we would not allow Aqua employees to work at the WWTP under the current conditions. I note that these observations were made over the course of approximately ten visits during various seasons, and most recently in October 2023. I will further expand on this, highlighting the issues I saw while visiting the WWTP.

**Q. Please describe your findings and areas that can be improved by Aqua's ownership of the System.**

A. The System is currently under a Corrective Action Plan ("CAP") under the DEP. Under the City's ownership, significant quantities of raw sewage and/or partially treated wastewater have entered into the receiving Beaver River where fishing and recreation

occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley.

**Q. Can you please further describe why you believe this system is troubled, distressed and in need of attention?**

A. Based on my site visits, discussions with operations personnel, and observation of plant activities, I note the following areas of concern for future safe, adequate, and reliable wastewater utility service for the Beaver Falls System:

- Lack of Licensed Operators, Access to Training, and Redundancy of Operators;
- Limited or Lacking Process Control Testing;
- Laboratory Sample System Management;
- Permit Compliance Issues;
- Lack of Emergency Preparedness Planning;
- Lacking Safety & Security Equipment & Training;
- Hazardous Chemical Storage, Labeling, and Safety;
- Compliance with Federal EPA Risk Management Program regulations for extremely hazardous chemicals;
- WWTP Ventilation Issues creating health and safety risk for employees;
- WWTP physical safety measures;
- WWTP Security deficiencies;

- Inadequate SCADA and operator alarm systems;
- Use of homemade patchwork of physical assets;
- Insufficient emergency/standby power generation; and
- Non-use of Asset Management or Compliance Management Software Systems.

**Q. Can you explain the current staffing of the Beaver Falls WWTP, and any related challenges experienced?**

A. Based on my experience, the team operating the WWTP lacks experience, training, struggles to operate the System and are in danger based on the safety issues that I observed. The System should be operated with a team consisting of 3 maintenance mechanics, 2 licensed operators, a WWTP manager, and an administrative employee. When the Company visited the facility in October 2023 there were a total of four (4) employees. The WWTP superintendent was on medical leave for the past several months and had recently taken a disability retirement and was not expected to return. There was one experienced maintenance foreman, however, the foreman is unfamiliar with wastewater treatment process control, an unlicensed operator with less than one year experience, one mechanic with less than two years' experience, and an administrative employee. The three operator/maintenance staff cover the WWTP seven (7) days a week and are continuously on-call. These employees cover for each other when one may not be available to respond.

City officials shared their difficulty securing labor to work at the WWTP. There are no internal wastewater experts to assist at the City and any assistance would have to come from consultants, which had not been planned for or implemented as of our visit.

Assistance from consultants regarding operations is not budgeted for by the City. The loss of the WWTP manager shows that there is no redundancy, succession or contingency plan should such a vacancy occur. The Company compliments the skeleton staff on the work they are doing with limited experienced labor and resources. However, this clearly indicates that additional expertise is needed to ensure reliable and compliant operations for the long term which is a benefit specific to Aqua's acquisition of this system. The City has been unable to obtain experienced workers to fill the open positions.

**Q. What wastewater treatment process control and treatment operations did you observe at the WWTP?**

A. Process control and SOPs were significantly lacking. Many of the processes were well beyond normal acceptable operating conditions, possibly leading to future violations. For example, the primary clarifiers had floating trash in/on them, and the skimmers were not operating at all. The primary clarifiers were black in color indicating septic conditions. See Appendix A, Section 1.[1] This creates odor issues and more significantly prevents the naturally occurring processes from happening in an efficient manner. While all the tanks were on-line, flow coming out of the tanks was only at 50% of design capacity which suggests something very wrong and a clear operational inefficiency. The extra on-line tankage creates long hydraulic retention times coupled with lower than ideal sludge

[1] Portions of Appendix A to Statement No. 3-Supp contain confidential, non-public information and have been designated as such.

wasting and black, odorous septic conditions. It also creates additional costs because the WWTP is powering more equipment than necessary.

**Q. Please expand on further concerns of process control and treatment operations.**

A. Also of significant concern is that there were no air blowers online to supply aeration and/or mixing to any process tanks. These tanks can contain hydrogen sulfide and other gases that displace oxygen that are very hazardous. Proper aeration and mixing is vital for safety reasons. The trickling filter facility at a wastewater treatment plant consistently moves wastewater and pushes it to the bottom of the facility. Upon review the trickling filter facility had excessive biomass growth reducing its effectiveness. See Appendix A, Section 2.

**Q. Please further expand upon your concerns when visiting the WWTP.**

A. There are floating solids atop the secondary clarification tanks. This accumulation was also on the surface of the chlorine contact tank where disinfection of the process stream should have been occurring. See Appendix A, Section 3. This is not where floating solids should appear. All tanks were extremely turbid (dense, murky) and it was difficult to see more than a couple inches into the water column. This is not a good sign for a tank, especially near final treatment. Most protrusions from the tanks, channels, launderers, and flumes were coated with excessive solids accumulation. Again, not a good sign. Sludge wasting, which is an important tool in the normal operational process, seemed to be limited to periodic and nonspecific volume instances. All of this is an indication of the need to have

a fully staffed system along with a knowledgeable and engaged lead operator, supervision, and qualified backups to the same.

**Q. How would Aqua address the staffing challenges and the concerns regarding the condition of the System identified above?**

A. Aqua maintains a staff of compliance and operations experts that will implement changes upon closing of the transaction to ensure SOPs are in place and followed. We also have robust preventative and corrective maintenance programs with asset and process based minimum standards of service that will be discussed in detail later in this testimony for mechanical and maintenance personnel to adopt. We incentivize operators to secure DEP operating licenses, and support that with continuing education assistance. In addition, our corporate resources and local operations management are skilled at operating wastewater facilities. Also, Aqua has been successful in attracting talent across Pennsylvania for all our systems. We have robust onboarding and training programs for supervisors and operators that encompass all facets of operations from safety to process control. Since Aqua filed its initial application, the City has had vacancies at the WWTP that have not been filled as of the date of this Supplemental Direct Testimony.

**Q. What else would Aqua do to correct the troubled and distressed nature of the Beaver Falls system?**

A. The Beaver Falls system would receive an intensive review by our engineers, process control specialists, and infusion of experienced operators and leadership to establish the

operating protocols and bring the plant back to normal operating conditions quickly. This should occur within 30 days of the start of operations. Process control testing criteria, including adequate laboratory equipment will be provided on-site and operators trained to perform tests and interpret the results, from which process control adjustments can be made with confidence. The Aqua-owned state certified laboratory in Bryn Mawr will support this facility from the start with certified analytical results and a quick turnaround time. Continued observation of the process by both on site personnel and broader Aqua resources would be a constant through operations, allowing independent evaluation of the process to ensure nothing is being missed.

Maintenance activities would immediately improve under our defined asset management program with proactive work orders issued for the plant, equipment, and collections system. Maintenance staff would be supported by outside services and vendors to ensure the specialty elements of maintenance program undertaken correctly. Aqua's workforce development program from recruitment through continued education, supported by management and technology, is a significant benefit to Beaver Falls ensuring plant reliability, environmental compliance, protection of receiving waterways, and elimination of the odors for the plant experienced by the public.

**Q. Please expand upon why treatment and process controls are so important for the community in Beaver Falls and the surrounding communities downstream.**

A. Adequate treatment and timely process control decisions are necessary to ensure adequately treated wastewater safely reaches the discharge of the WWTP, which ultimately

reaches the Beaver River where recreation occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley. The Company has proven its expertise in optimizing treatment in wastewater systems like the Beaver Falls system to protect drinking water sources from diseases such as hepatitis A and cholera, scum discharge, and the Company excels at maintaining optimum oxygen levels and minimized regulated compounds in treated water outfalls which helps protect the environment and our watersheds. The Beaver and Ohio Rivers are home to 159 species of fish alone. Effluent water quality from this system is paramount. While the WWTP is currently compliant with DEP requirements, Aqua has significant concerns that proper process controls and treatment are not in place which can further degrade the WWTP and lead to future violations.

**Q. Does the Beaver Falls staff perform adequate process control testing?**

A. No. The City only performs the bare minimum for sampling and analysis for the WWTP. Aqua will require the additional routine process control testing analysis above the regulatory requirements of the DEP to the discharge permit parameters to include alkalinity, suspended solids, biological oxygen demand ("BOD"), settleable solids, pH, nutrients like ammonia and phosphorus, and dissolved oxygen analysis of the trickling filter effluent. Aqua will also monitor (i) total suspended solids, dissolved oxygen, and sludge age in the process; (ii) total suspended solids in the mixed liquor, and (iii)

microscope analysis of the process bacteria. Aqua will increase the frequency of analysis in the effluent to include chlorine, ammonia, and phosphorus.

The addition and/or increased frequencies of the testing of the above parameters will facilitate optimization of the facility and processes, which will allow operators to make educated decisions and meet the permit effluent requirements. These process enhancements will also drive towards the optimization and cost control of the WWTP, which will directly benefit the environment and the community meeting the principal objectives of the Clean Water Act – fishable, swimmable, and drinkable waterways.

**Q. Does the City employ a laboratory information management system ("LIMS") to track analytical results and compliance with critical standards in its laboratory space?**

A. No, it does not. Physical bench sheets are used with common spreadsheet applications (*e.g.*, excel) for reporting of testing results. These bench sheets are not capable of being audited and lack critical access controls and compliance adherence. This means that any changes to the data are not automatically logged to a unique user, and justification may not be required to submit a change in testing results.

**Q. Please explain how Aqua will address this issue of data tracking and confidence.**

Aqua will implement its LIMS program to ensure that analytical data follows processes and procedures, including quality assurance and quality control standards. Data that is entered into LIMS includes the regulatory and process control data which includes sample

results and plant process key performance indicators. The data will be tracked and is fully auditable as each employee will have individual credentials so that any entries are tied to that specific user with process checks in place so that any changes to results must be authorized and notes provided to explain the change. Internal and external laboratory analysis will be cataloged in the LIMS system.

**B. HAZARDOUS GAS**

**[BEGIN HIGHLY CONFIDENTIAL]**

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[**END HIGHLY CONFIDENTIAL**]

**Q. Are there other examples of general safety issues in the System?**

A. Yes. Throughout the Beaver Falls facility there are multiple safety deficiencies of low to moderate risk. By way of example, most pumping systems are missing guards on the rotating equipment creating unsafe conditions that could cause workers to be pulled into the rotating equipment or hands crushed. There are missing railings or railing components like toe or kick plates to prevent a slip/trip and fall from becoming an immersion into the process tanks. There are numerous locations where employees use temporary ladders to access equipment that circumvent fall protection.

Chemicals were not stored properly at the WWTP. There are no containment devices for the chemical drums. Drums in service were propped up on blocks to permit emptying, but this leaves the heavy drums unstable and teetering in common areas of the

WWTP near floor drains. There is a general lack of labeling throughout the facility and no evidence of the exit signage nor emergency lighting. Multiple fire extinguisher hooks were empty.

There are several roofed structures that are accessible by stairway that do not have any fall protection devices, railings, lighting, or signage to ensure occupant awareness. There are also confined spaces without any signage and no evidence of a program, nor regulatory compliance for the documentation of training and entry. See Appendix A, Section 6.

**Q. How will Aqua address these general safety issues?**

A. These issues will be cataloged and will become a part of Aqua's already robust capital and operational plan to be addressed within Year 1 of Aqua ownership. Our safety teams and operational management will make these items a priority in Year 1 by educating our new employees in the safety requirements of Aqua, investing to correct deficiencies, and provide on-going safety housekeeping, near miss reporting, and safety audits on a regular basis. Safety of our employees, most who are members of the community, is priority so they return safely home. The public benefits of this cannot be measured.

**Q. Is there a system in place at Beaver Falls to document near-misses?**

A. No. Aqua, however, implements a Near Miss program (a.k.a. "Safety Learning Opportunities") where all employees are encouraged to look for and report potential and real unsafe conditions so they can be addressed in a timely manner. This program is key

to both creating a safe working environment and a culture of safety. The employees have little support in the way of safety programing currently, and this program will be beneficial both to them, their families, and the community at large.

[**BEGIN HIGHLY CONFIDENTIAL**]

[redacted]

[redacted]

[**END HIGHLY CONFIDENTIAL**]

**Q. Does the facility have emergency/standby power generation on site?**

A. Yes, however, it is not clear what equipment in the WWTP is supplied with emergency power from backup generators. Only critical pumping systems are supported by the back-up generator and even those systems are not completely supported. There is limited operation of secondary treatment and pumping operations. There is no emergency power supplied to the aeration processes meaning these systems will not operate during a power failure and it is unclear as to the capabilities of that emergency power for supplying the

chemical feed systems and limited process monitoring equipment. These shortfalls mean that while wastewater will continue to enter the WWTP, it will not be fully treated and enter the receiving stream. This will be fully assessed as part of Aqua's ongoing capital improvement processes and addressed through capital projects identified.

## D. ASSET MANAGEMENT

**Q. Does Beaver Falls have an asset management plan or computerized maintenance management system ("CMMS") in place and what is Aqua's plan for post-Closing asset management?**

A. The team at Beaver Falls maintains a basic calendar and spreadsheet to track preventative maintenance needs. Some written records are maintained to track assets over time. Aqua will implement several layered approaches to asset management through financial modules. Aqua will also implement a CMMS system to schedule and automate preventative maintenance schedules for the employees. This system will also capture reactive and corrective maintenance tasks for all aspects of the System. Aqua will work with the Beaver Falls team to fully document existing SOPs and to employ Aqua SOPs where none exist through these work order systems to record tacit knowledge and improve succession planning and operational consistency.

**Q. Are there specific examples of assets and processes that are not operating correctly due to lack of maintenance or expertise? If so, does Aqua have a plan to remedy the situation?**

A. Yes. Aqua personnel witnessed a complete absence of aeration in the WWTP. There is also evidence of incomplete or insufficient maintenance of the trickling filters. The distribution spray arms rotate continuously. The employees noted that it is common practice for them to create their own parts to maintain and patch operations of these large assets for this critical and continuously operating equipment. To avoid this patchwork approach, Aqua would engage manufacturers and experts to ensure that the correct parts are installed, and specialists are utilized to ensure this large rotating equipment is correctly balanced.

**[BEGIN CONFIDENTIAL]**

**Q. Did you observe the condition of the concrete at the WWTP?**

A. Yes.

**Q. What concerns are presented by the condition of the structures?**

A. The WWTP structures are concrete and steel. There was evidence of deterioration of the concrete throughout the WWTP in the form of cracks, spalling and other defects. See Appendix A, Section 7. Due to the freeze thaw conditions experienced at this WWTP, the concrete will begin to accelerate its deterioration if not addressed. There appears to be no plan to invest to address this situation based on conversations with Beaver Falls and the lack of any evidence of recent work being done.

**Q. How does Aqua plan to address these concerns?**

A. As part of Aqua's standard maintenance program and capital improvement plan, maintenance of structures is considered and implemented. Aqua's engineers will evaluate the WWTP and undertake a program to stabilize the concrete deterioration as they deem appropriate.

**Q. How will Aqua's plan benefit customers?**

A. This proactive approach would reduce the need for any large-scale replacements of very expensive structures, which could also cause interruption of normal treatment process while the structure is removed from service. This supports the long-term reliability of the facilities and proper control of expenditures to sustain the WWTP and level of service to the customers and the larger community.

**[END CONFIDENTIAL]**

**Q. Does Beaver Falls utilize any compliance assurance software?**

A. No. To address this, Aqua will implement its current compliance assurance software. This software system generates compliance-focused work orders for regulated wastewater system processes and functions. Employees will be assigned a combination of daily, weekly, monthly, quarterly, annual, and less frequent work orders to ensure that critical compliance requirements are completed on time and in a manner that is well documented. The system will generate monthly, quarterly, and annual regulatory reports for consistency

of calculations and to Aqua's standards. These systems will support the staff of Beaver Falls in the rapid adaptation to the operational excellence for which Aqua is known.

## IV. CONCLUSION

**Q. Does this conclude your Supplemental Direct Testimony?**

A. Yes, it does. However, I reserve the right to supplement my Supplemental Direct Testimony as additional issues and facts arise during the course of this proceeding.

# APPENDIX A

# (CONFIDENTIAL Version)

CONTAINS CONFIDENTIAL INFORMATION

# City of Beaver Falls WWTP

## SECTION 1

**March 3, 2021 – Primary Clarifier**



**September 19, 2023 – Primary Clarifier**



# SECTION 2

**March 3, 2021 – West Trickling Filter**



**September 19, 2023 – West Trickling Filter**



# SECTION 3

**March 3, 2021 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



# SECTION 4

**[BEGIN CONFIDENTIAL]**

**March 3 2021 – Chlorine Gas Room (Extremely Hazardous Chemical)**

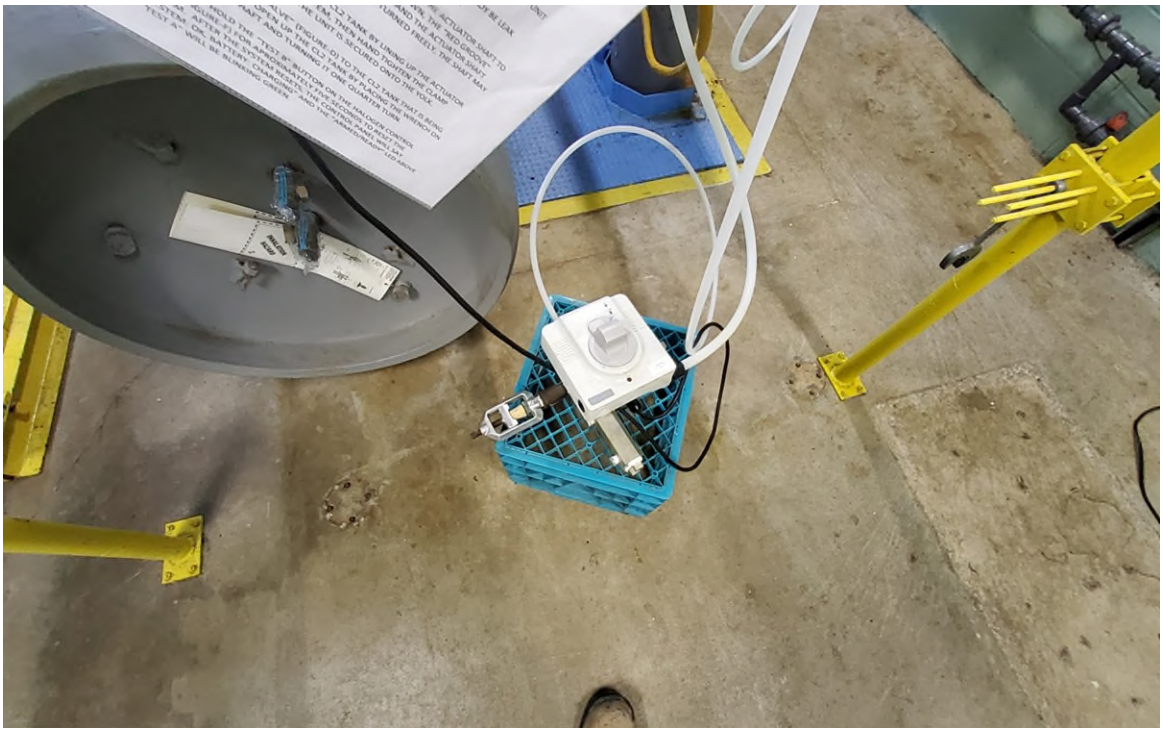


**Ton cylinder scale showing full 2,000 pound cylinder loaded.**





**Four additional 150 pound cylinders of chlorine gas on site. Total 2,600 pounds of gas on site.**



**Ton cylinder valves sealed but left unprotected and unconnected.**




**Two chlorinators and flow tubing installed on West and South wall of chlorine room. Note exhaust fan that is not gasketed and severely corroded. Corrosion in a chlorine room is an indication of leaks as chlorine is a very aggressive oxidant.**



**Chlorinator. Note tag is dated 2017 for last service. The tubing is marked with a 2016 date on this unit. These should be serviced annually and tubing should be replaced annually at minimum. Note discolored braided hose on the hypochlorous acid lines that is not rated for that service and severely discolored. The electrical junction box of this chlorinator is left open and severely corroded.**




**This chlorinator is newer, however had no dated service tag on it. There was one tag hanging from the tubing in the left of the photo that merely warned of proper use. There were no dates indicated on any of this gas tubing. Note the vacuum gauge at the top of the equipment is almost at the minimum limit which indicates injector fouling and a lack of preventative maintenance. This newer unit is still severely corroded.**



**Exterior of chlorine gas room looking East. Chlorine crane shown.**

Chlorine gas comments:

- Federal EPA Violation
  - This facility does not have a Risk Management Program ("RMP") filed with the U.S. EPA. The facility is operating with more than 2,500 pounds of chlorine gas on site which is the threshold for RMP regulations.
- Maintenance
  - Equipment maintenance is significantly overdue on critical equipment that must operate continuously. Tubing and hoses are severely aged and pose an increased risk of leaks.
  - An RMP would require formal maintenance programs and record keeping for these functions.
  - Electrical connections are left exposed subjecting equipment to corrosion and defeating the seal of the room.
  - The robotic isolation valve is powered by a residential office style battery backup hanging from the hazardous gas piping.
  - There is no labeling on the piping to indicate contents for first responders in an emergency.
- HVAC
  - The exhaust fan is not gasketed to seal and prevent gas from escaping the chlorine room.

    - There are no audio or visual indicators in the interior or exterior of the chlorine gas room for employees or first responders to be aware a gas leak is occurring.
- Lifting equipment
    - The crane beam is not labeled with a rated capacity.
    - The trolley is not labeled with a rated capacity.
    - The lifting bar is not labeled with a rated capacity.
    - There is no evidence of annual inspection and service by a certified inspector.
- Additional Safety
    - The heavy ton cylinder protective cover is hung from the wall over sensitive plastic piping carrying extremely hazardous chemicals.
    - There is no emergency lighting in this area.
    - There is no exit sign.
    - The large doors do not have panic hardware on them and bolt shut to the floor.
    - Milk crate is used to house sensitive hazardous gas feed equipment on the floor.
    - There is no indication of the water shutoff valve that would be necessary to stop the vacuum generation from the eductors and stop the withdrawal of chlorine from the cylinders.
    - None of the plastic tubing nor valves are labeled as approved for chlorine service.
    - There are no traps on the floor drain piping to prevent a leak from exiting this room and entering another through the floor drains.
    - Slips trips and falls.
        - There are cords and equipment left strewn on the floor. Anyone working in this room should be wearing an air purifying respirator which will limit visibility and range of motion of the head. It is critical that this room be kept free from obstructions.

**[END CONFIDENTIAL]**

# SECTION 5

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Headworks**



**Inside below grade headworks. Note blue tarp covering opening over screening/grit hopper. Note gas fired torpedo heater on extension cord in classified electrical space. Significant explosion hazard.**



**Northern end of headworks looking South. Note exposed bar rack in floor to process tank.**



**Exposed bar rack at Northern end of headworks room without railings or protective surface.**



**Exposed bar rack behind screen at Southern end of headworks room.**



**Screen equipment with exposed hydraulic drive with missing guards and mismatched hoses. Note the creative rigging on the dumpster to lift it from this hazardous space overhead to the parking lot.**



**East wall of headworks room. Note draped extension cords and outlets that are not explosion proof. No labeling on pipes, conduits, or hoses.**



**South influent pump suction well that was offline during visit. Note scum and floating debris. Note wooden railing modifications around the base.**



**North influent pump suction well that was online during visit. Note turbulence and consider ability to enter tank through exposed bar racks and absent grating.**

Influent / Headworks comments:

- Explosion hazards
  - This entire space is below grade and only accessible by an inclined set of stairs. This space is subject to anything that enters the sewage system and is a classified space, requiring explosion proof electrical equipment.
  - There is a fuel powered open flame torpedo heater placed in this explosive space. This is like holding a lit match over a case of dynamite.
  - There are extension cords and temporary wiring draped throughout the space. There are light fixtures and outlets that are not explosion proof.
  - The only major ventilation in this area was covered by a blue tarp during our visit.
- Slip, trip, and fall hazards
  - There are railings that prevent a fall into some of the process tanks. But there are also several exposed bar racks in the common walkways that would permit someone to fall into the process flows and into the influent pump station pump suction piping below.
  - The grating is mismatched and poorly supported in work areas like around the screen equipment.
- Maintenance
  - Through mechanical screening equipment and past multiple iterations of passive bar racks, there was still floating debris and solids accumulation in the headworks tanks.
  - Hoses and cording left strewn and draped throughout the space. Some hoses left to dangle in pump suction wells.
- General
  - No exit signs
  - No fire extinguishers
  - No emergency exit lighting
  - No atmospheric monitoring in the room
  - No E-Stops for the mechanical screening equipment no influent pumps

**[END CONFIDENTIAL]**

# SECTION 6

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Thickener, Digester, and building exterior**



**Thickener tank, digester tank, and building from the North.**



**Top of thickener and digester tanks.**



**Looking onto top of floating lid. East tank.**




**Exterior of thickener / digester building. Gas detector with failing screen and negative reading.**

Thickener tank, digester tank, and building exterior comments:

- Stairway provides easy and unrestricted access to the concrete area and tops of the tanks.
    - There is no railing around the work area to prevent a fall into the tanks onto the floating lids.
    - These floating lids are confined spaces, with sloped surfaces, and can hold hazardous gases that are heavier than oxygen.
    - The area around the perimeter of the lid is not sealed to the walls and provides exposed to sludge to create hazardous atmospheric conditions.
    - There are multiple trip hazards on this working surface that we were escorted up on to.
- Exterior wall gas detector.
    - This gas monitor had a faded screen and no calibration tags.
    - The display was reading a negative value during our visit.
- Structures
    - There are multiple cracks in the concrete on and around the cylindrical tanks.

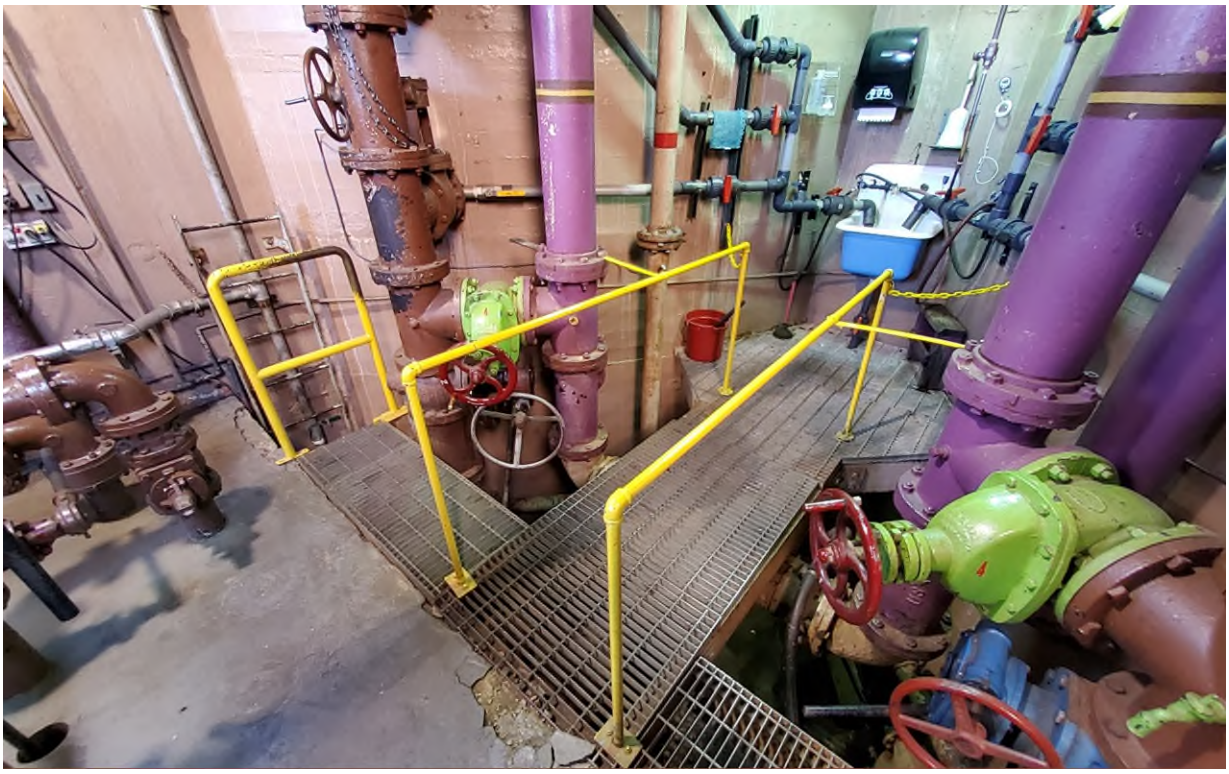
**March 3, 2021 – Thickener, digester, and building interior.**



**Inside of thickener / digester building from Northeast door.**



**Inside of thickener / digester building from main floor and Northeast corner of room.**



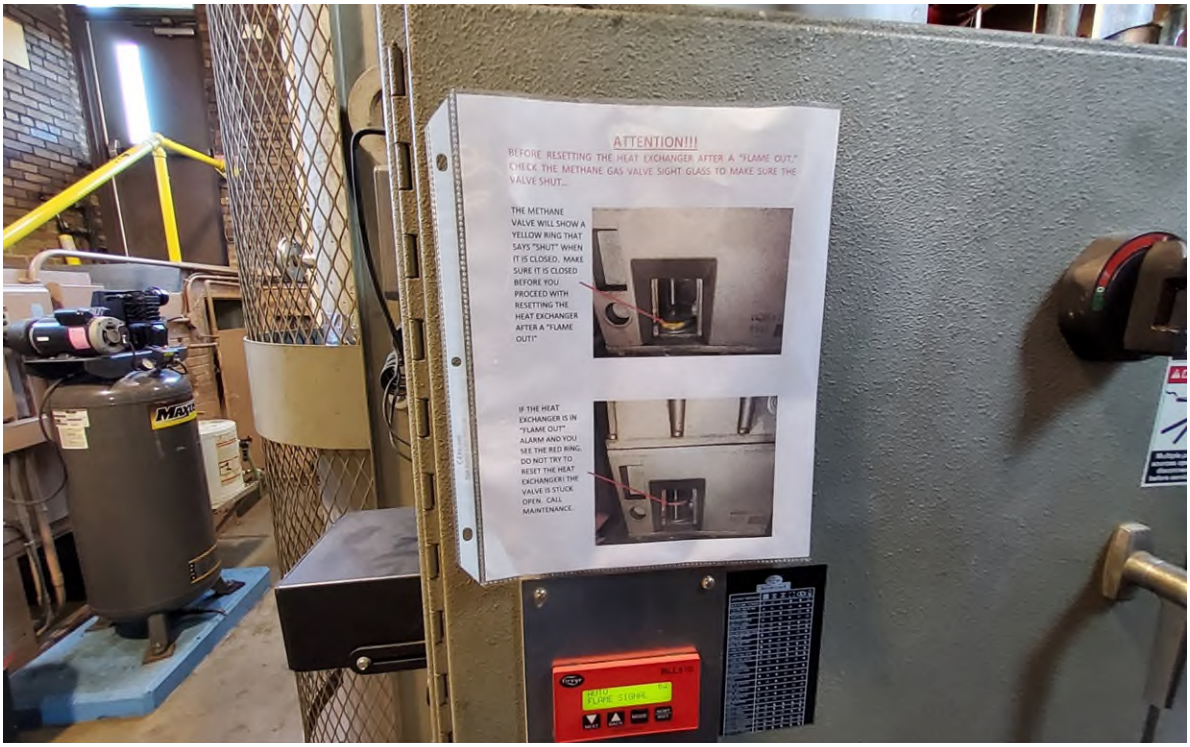
**South end of the thickener / digester building between the two tanks.**



**South end of the thickener / digester building between the two tanks.**




**Gas fired sludge heat exchanger. Note extensive modifications to electrical enclosure.**




**Gas fired heat exchanger warning sign. Note residential air compressor in background.**

Thickener / Digester building interior comments:

- Explosion hazards
    - This space is a classified space as the thickener and digester tanks produce methane and other combustible gases under the floating lids.
    - The gas detector on the exterior of the structure appears to be in a non-operational state preventing warning and/or alarm of employees.
    - The electrical enclosure on the gas fired heat exchanger shows multiple signs of bolt-on and add-on equipment modifications with no UL labeling to certify the integrity of the cabinet is maintained. This creates potential for spark for an explosion.
    - Note that the some of the motors are TEFC (totally enclosed fan cooled), however, none of the motors in this room were explosion proof. The air compressor for maintenance use is residential in nature and has several electrical capacitors exposed on top of the motor. This is another explosion hazard.
    - Note the handmade sign on the gas fired heat exchanger warning employees to not ignite the heat exchanger if the gas valve is not closed. There is no signage to indicate the gas valve.
    - There are no E-stops in this building.
- Trip and fall hazards.
    - Note the handmade railings on the elevated bridge between the tanks. It is bolted to the grated platform. There are no middle rail or toe board to prevent tools from being knocked into the workspace below.
    - There are multiple locations where railings do not exist between the tanks that would permit a fall to the area below.
- Structure
    - Note the crumbling concrete around the grated bridge between the tanks. This also creates slip, trip, and fall hazard.
- General
    - No fire extinguishers in this room
    - No exits signs
    - No exit lighting
    - No PPE signs

**[END CONFIDENTIAL]**

**March 3, 2021 – Grease Skimmer**




**Grease skimmer from North side on concrete floor.**




**Grease skimmer from platform.**

Grease skimmer comments:

- No railing to prevent employee from falling into the process vessel.
    - Step added to platform to reduce the height of the side wall making a fall into the vessel easier
- No E-Stop within reach of exposed moving equipment
    - Exposed chain drive
    - Exposed auger
    - Multiple pinch points unguarded

**March 3, 2021 – Belt Filter Press**



**Belt filter press from North side of room.**




**Belt filter press from North side close.**



**Belt filter press from West side of room.**




**Belt filter press room West wall.**

Belt filter press comments:

- Chemical Storage.
    - Note various chemical drum storage areas without labeling, spill containment, or measuring equipment.
    - Chemical drums not labeled with globally harmonized system (GHS) as required by OSHA.
    - Drum in service is tipped up on end by a stone and left balancing that could easily topple, spill, and cause injury.
    - It was unclear if the chemical drums were compatible with each other should a spill occur without separate containment.
- Platform / working surfaces.
    - Note the pooling/ponding water around the process equipment and electrical cabinets.
    - The platform around the press has a ladder on it that would make it easy to overtop the railing and fall to the concrete floor.
    - The platform is also installed elevating the worker higher than the yellow safety E-stop cable. This cable should be at waist level and easily accessible. If an employee was to get entangled in this moving equipment, the safety cable for the E-stop is at their ankles and out of reach.
    - Notice that the railing only exists on the outside perimeter of the work platform, permitting unobstructed fall potential into the moving equipment.
    - There are no guards on the pinch points of the equipment.
- Building
    - No exit signs
    - No emergency exit lighting
    - No fire extinguishers
    - Inadequate chemical storage signage
    - No signs for personal protective equipment requirements

# SECTION 7

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Primary Clarifier Tank**



**Southeast corner of primary clarification tanks.**



**Northwest corner of primary clarification tanks.**



**East side of primary clarification tank.**

Clarification tank comments:

- Spalling concrete with signs of efflorescence which may indicate a leak and forecast structural failure.
- Unsupported process piping hanging from tanks.

**[END CONFIDENTIAL]**

# SUPPLEMENTAL EXHIBIT W

# (HIGHLY CONFIDENTIAL Version)

**HIGHLY CONFIDENTIAL VERSION**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 3 SUPP**

# SUPPLEMENTAL DIRECT TESTIMONY OF ZACH MARTIN

**With Regard To**
**Operations**
**Customer Service**
**Public Benefits**

**March 2024**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS ..... 4
III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM ..... 10
A. GENERAL SYSTEM ASSESSMENT ..... 10
B. HAZARDOUS GAS ..... 20
C. ADDITIONAL SAFETY AND SECURITY ISSUES ..... 27
D. ASSET MANAGEMENT ..... 36
IV. CONCLUSION ..... 39

AQUA PENNSYLVANIA WASTEWATER, INC.
SUPPLEMENTAL DIRECT TESTIMONY OF ZACH MARTIN

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Please provide a brief description of your education and work experience.**

A. I graduated from the Kent State University with an Associate of Science degree in 2009 and then a Bachelor of Business Administration in 2021. I have worked in the water and wastewater industry for nineteen years. I began my career in the utility industry in the spring of 2004 with the City of North Canton, Ohio as a water plant operator where I secured my Class III Water Supply Certification from the Ohio EPA. I moved into a leadership role in early 2009 as the Regional Water Superintendent for Portage County Water Resources where I was responsible for managing plant and distribution employees in the county operations of three water systems. I also served as backup to the wastewater superintendent there for the 13 wastewater treatment plants and 113 lift stations. In 2010, I moved to Aqua Ohio, Inc. as the Production Manager for the Struthers Division. There I was responsible for the operations and maintenance of the large surface water system including the 5 million gallon per day ("MGD") surface water treatment plant and the five

source water lakes and their six dams. In 2013, I was promoted in Aqua PA as the Assistant Division / Production Manager and later a Plant Manager II in 2017, and I held that position through 2021. During those eight years I was responsible for all aspects of production, treatment, and distribution facilities of the eight drinking water systems in Western PA. In 2021, I was promoted to the position of Area Manager II. In total I have worked for the Aqua subsidiaries of Essential Utilities, Inc. ("Essential") (*f/k/a* Aqua America, Inc.) for 13 years. I am responsible for leading a team of employees delivering drinking water to customers and returning treated wastewater back to the environment in nine counties of Western Pennsylvania. I am involved in all aspects of operations including budgeting, planning, employee relations, and process control. I am also involved in the business development functions in my area of operations. I am also a veteran of Operation Iraqi Freedom III and served in the U.S. Army and Ohio Army National Guard.

**Q. Do you hold any professional licenses or certifications?**

A. Yes. I hold three environmental operator certifications in two states. I am a Class-A certified water and Class-A certified wastewater operator in Pennsylvania with 18 subclasses in total. I am also a Class 3 water supply licensed operator in the state of Ohio. I have maintained operational laboratory certifications in both states as well.

**Q. Have you previously testified before the Pennsylvania Public Utility Commission ("PUC" or the "Commission")?**

A. Yes. I previously submitted Direct Testimony in this proceeding, and I have submitted testimony in Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") acquisition of Greenville Sanitary Authority.

**Q. You stated you filed Direct Testimony in this proceeding, what is the purpose of your Supplemental Direct Testimony?**

A. The purpose of my Supplemental Direct Testimony is to supplement my Direct Testimony and provide additional discussion regarding operations of the City of Beaver Falls ("City" or "Beaver Falls") wastewater system ("the System") and to discuss the public benefits of this transaction.

**Q. Are you sponsoring any Exhibits associated with the Company's filing as a part of your Supplemental Direct Testimony?**

A. Yes. I am sponsoring ZM-SUPP Appendix A, which contains CONFIDENTIAL and HIGHLY CONFIDENTIAL portions that have been marked as such.

## II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS

**Q. In your direct testimony, do you describe the location of Aqua's operations in relation to the System and how Aqua will integrate the System into its operations?**

A. Yes.

**Q. Is there further information that you can provide at this time about how Aqua will integrate the System into its operations?**

A. Yes. As discussed in my Direct Testimony, the operation of the System will be managed from Aqua PA's Western Area office in Sharon, PA. Management, customer service, regulatory compliance, engineering, financial, and ancillary services will be provided seamlessly from there with support from our Southeastern Headquarters office. Aqua plans to offer employment to seven current employees of the City to address the day-to-day operations of the System. The existing employees coupled with the over 30 front line employees and management staff located within 40 miles of Beaver Falls provide significant resiliency and improves operational support for the System. Combining System and Aqua PA employees in conjunction with Aqua PA's "One PA" program creates purposeful knowledge sharing opportunities for employees across all sectors of the Company. In concert with the One PA program, Aqua has for more than a decade, a corporate -wide "One Company Initiative" which solicits knowledge sharing from all areas of Aqua which benefits all employees. By extension, Aqua PA's One PA philosophy and the One Company Initiative benefits customers of both the System, Aqua PA and Aqua by

creating a platform for sharing of best practices, table-top exercises, sharing of standard operating procedures ("SOPs"), sharing of existing or new equipment such as generators, lessons learned that may include new operating techniques or technologies, safety practices and more.

Further, Aqua has significant equipment that can be shared with the System, including for operation (vehicles, excavation, heavy haul), portable generators, common supplies and material storage, and mobile safety systems that can be moved between locations. While physical connection of the collection systems is not anticipated, connection of security and computer systems will occur. Aqua has an integrated Supervisory Control and Data Acquisition ("SCADA") system used to operate and monitor operating systems such as pumps, treatment units and status alarms, such as chlorine gas alarms. Aqua's SCADA system allows our operators to have better insights into the operations of the system at all hours of the day and to be proactively alerted of any issues. Currently, Beaver Falls does not have a full scale SCADA system. Aqua also maintains an integrated security system that allows physical security to be observed in different locations around the state. In the case of the Beaver Falls System, once systems are installed and integrated with Aqua's security system, the physical security alarms will notify operations staff at the Company's water treatment plant in Sharon, PA which is staffed 24/7/365. In addition, security alarms from Aqua PA's Sharon, PA water treatment plant will be shared at Beaver Falls which will alert those operators of possible problems in Sharon, thus providing mutual assistance to both system's customers. This will ensure safety of operations and personnel, as well as nearby residents and the environment.

**Q. In addition to what you have explained in your Direct Testimony, how else will other Aqua PA employees assist in the operation of the System, if needed?**

A. In addition to the information provided in my Direct Testimony, the support of Aqua PA employees, electricians, mechanics, laboratory staff, and instrument technicians, will benefit both the Beaver Fall's employees and customers. Aqua has 12 wastewater operators in the Western PA Area, many holding dual water and wastewater certifications, who may be called upon to assist in the operations of the system. There are also 20 certified water operators in the Western PA Area who are familiar with treatment systems and can follow SOP if needed. These operators are also supported by Aqua PA employees, which will benefit customers through engineering and field service functions as well as electricians, mechanics, laboratory staff, and instrument technicians, which will benefit both the Beaver Fall's employees and customers.

A few examples of operational support that will be provided by Aqua to the Beaver Falls System (which support does not exist today for the System) include:

(1) Environmental Compliance Audits conducted by staff that do not report to the operation management group;

(2) Safety teams that conduct "housekeeping" and safety audits that seek to find and eliminate potential dangers;

(3) A "Near-Miss" program that allows any employee to report an observed safety concern and a process that ensures the issue is resolved timely;

(4) A full-time Aqua PA One-Call management team (Damage Prevention) that ensures the requirements of Act 50 of 2017 are met, and that staff receive regular training;

(5) Mapping updates by an in-house Geographic Information System (GIS) team;

(6) Wastewater process experts that will review the processes for targeted parameters and if needed, assist in resolving any process upset situations;

(7) Emergency response support in the form of "national contracted vendors", fleet operations, and access to the approximately 600 Aqua PA employees who can deploy to the location in support of Western PA operations, all orchestrated through Aqua PA's Emergency Response and Communications process.

It is equally beneficial and important to note that eventually Beaver Falls employees will be called upon to assist in others areas of Western PA operations. In so doing, continued cross-training benefits the Systems as well customers of Beaver Falls and Aqua. This sharing of employees from new acquisitions and existing systems is a mainstay of our southeastern Pennsylvania wastewater operations where we have integrated wastewater employees for Cheltenham, East Norriton and Lower Makefield. This integration ensures operator familiarity with these systems and ensures continuity of operations during normal and emergency operations. This type of planning and integration also ensures that Beaver Falls will not be in the situation it is now – no supervisory personnel or adequate backup personnel.

**Q. Please describe how the Beaver Falls employees will be integrated into and develop their careers at Aqua.**

A. Following acquisition of the Beaver Falls System, Aqua will implement site-specific training, as well as off-site cross training in other Aqua facilities to promote continuous improvement and optimization, and to introduce compliance metrics to shift the plant into high performance operations.

**Q. In your Direct Testimony, you indicated that the System is similar to other systems owned and operated by Aqua. Is that the case?**

A. Yes, it remains the case. However, after further investigation and review of the System, as described below, the System is troubled, distressed and in need of significant investment and operations review.

**Q. Do you believe that Aqua is technically fit to own and operate the system?**

A. Yes.

**Q. Are there any further reasons why Aqua has demonstrated itself to be fit to operate this system after conducting additional investigation and review?**

A. As noted in my direct testimony, Aqua has experience replacing wastewater infrastructure while also navigating strict Pennsylvania Department of Environmental Protection ("DEP") regulations to install chemical treatment systems and optimize the plant for copper removal to benefit an impaired receiving stream as defined by Section 303(d) of the Clean Water Act. The improvements to this watershed were recently recognized by the DEP following stream assessments in 2022 and 2023 which identified material improvements to the stream eco-systems downstream of its outfall. This experience will assist Aqua in addressing the additional issues identified with respect to this system.

**Q. How does Aqua maintain and enforce safety, compliance, and security programs throughout its operations?**

A. Aqua requires a high level of employee training and monitors completion of training requirements. Most safety programs are trained initially and reinforced through annual refresher trainings. Aqua employs internal safety experts, internal compliance experts, and routinely conducts internal audits of operations. Aqua also contracts with external experts to perform random inspections and audits of employee and contractor operations. These cover operations throughout the system, including maintenance and construction activities in immediate contact with the community.

**Q. Can Aqua provide adequate wastewater treatment capacity to meet present and future customer demands?**

A. Yes. Through the existing facilities, coupled with the planned upgrades to the WWTP, which are discussed in the Direct Testimony of Mark Bubel, Sr. (Aqua Statement No. 2), Aqua can provide adequate treatment capacity for present and future customers. Aqua will continue to make improvements to the System, as may be required, to ensure any future customer demands are met.

**Q. Please summarize why you believe Aqua is technically fit to own and operate the System.**

A. My explanation of Aqua's current operations, the System's similarity to other systems operated by Aqua, and operational support that will be provided by Aqua, an experienced

wastewater utility, all support a finding that Aqua is technically fit to own and operate the System, and that ownership of the System by Aqua is in the public interest. In addition to this, I detail below the current areas for improvement needed in the System, as well as the additional process improvements identified that will be remedied by Aqua, and capital improvement needs of the System. Aqua's planned improvements in this regard establish substantial affirmative public benefits. Moreover, these capital and operational improvements have not been addressed by Beaver Falls, nor is Beaver Falls in a position to do so as explained by Mr. Jones (Aqua Statement No. 4-Supp.) in his Supplemental Direct Testimony.

## III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM

### A. GENERAL SYSTEM ASSESSMENT

**Q. Since Aqua submitted its Direct Testimony, has it further analyzed the System and its current operations?**

A. Yes, it has. Below, I will provide supplemental detail on Aqua's assessment of the system generally and Aqua's identification of specific issues that evidence the System is currently troubled. These issues include hazardous gas problems, safety and security problems, and the lack of an asset management plan or computerized maintenance management system. I also identify how Aqua would address these issues as the owner and operator of the System, and how such ownership and operation will result in significant public benefits.

**Q. Did you visit the facilities?**

A. Yes, multiple times. Specifically, the Company conducted initial due diligence and post-agreement in-depth review to assess the operations, facilities, personnel, standard operating procedures, compliance, safety, and security of the System.

**Q. How old is the original WWTP?**

A. The wastewater treatment plant was built in 1938. While some work has been done over the years, the original WWTP is over 80 years old. The system is troubled, distressed and in significant need of attention.

**Q. Based on your experience in visiting the plant, did you feel safe and would you feel safe allowing Aqua employees to work at the WWTP under the current conditions?**

A. No. I did not feel safe and we would not allow Aqua employees to work at the WWTP under the current conditions. I note that these observations were made over the course of approximately ten visits during various seasons, and most recently in October 2023. I will further expand on this, highlighting the issues I saw while visiting the WWTP.

**Q. Please describe your findings and areas that can be improved by Aqua's ownership of the System.**

A. The System is currently under a Corrective Action Plan ("CAP") under the DEP. Under the City's ownership, significant quantities of raw sewage and/or partially treated wastewater have entered into the receiving Beaver River where fishing and recreation

occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley.

**Q. Can you please further describe why you believe this system is troubled, distressed and in need of attention?**

A. Based on my site visits, discussions with operations personnel, and observation of plant activities, I note the following areas of concern for future safe, adequate, and reliable wastewater utility service for the Beaver Falls System:

- Lack of Licensed Operators, Access to Training, and Redundancy of Operators;
- Limited or Lacking Process Control Testing;
- Laboratory Sample System Management;
- Permit Compliance Issues;
- Lack of Emergency Preparedness Planning;
- Lacking Safety & Security Equipment & Training;
- Hazardous Chemical Storage, Labeling, and Safety;
- Compliance with Federal EPA Risk Management Program regulations for extremely hazardous chemicals;
- WWTP Ventilation Issues creating health and safety risk for employees;
- WWTP physical safety measures;
- WWTP Security deficiencies;

- Inadequate SCADA and operator alarm systems;
- Use of homemade patchwork of physical assets;
- Insufficient emergency/standby power generation; and
- Non-use of Asset Management or Compliance Management Software Systems.

**Q. Can you explain the current staffing of the Beaver Falls WWTP, and any related challenges experienced?**

A. Based on my experience, the team operating the WWTP lacks experience, training, struggles to operate the System and are in danger based on the safety issues that I observed. The System should be operated with a team consisting of 3 maintenance mechanics, 2 licensed operators, a WWTP manager, and an administrative employee. When the Company visited the facility in October 2023 there were a total of four (4) employees. The WWTP superintendent was on medical leave for the past several months and had recently taken a disability retirement and was not expected to return. There was one experienced maintenance foreman, however, the foreman is unfamiliar with wastewater treatment process control, an unlicensed operator with less than one year experience, one mechanic with less than two years' experience, and an administrative employee. The three operator/maintenance staff cover the WWTP seven (7) days a week and are continuously on-call. These employees cover for each other when one may not be available to respond.

City officials shared their difficulty securing labor to work at the WWTP. There are no internal wastewater experts to assist at the City and any assistance would have to come from consultants, which had not been planned for or implemented as of our visit.

Assistance from consultants regarding operations is not budgeted for by the City. The loss of the WWTP manager shows that there is no redundancy, succession or contingency plan should such a vacancy occur. The Company compliments the skeleton staff on the work they are doing with limited experienced labor and resources. However, this clearly indicates that additional expertise is needed to ensure reliable and compliant operations for the long term which is a benefit specific to Aqua's acquisition of this system. The City has been unable to obtain experienced workers to fill the open positions.

**Q. What wastewater treatment process control and treatment operations did you observe at the WWTP?**

A. Process control and SOPs were significantly lacking. Many of the processes were well beyond normal acceptable operating conditions, possibly leading to future violations. For example, the primary clarifiers had floating trash in/on them, and the skimmers were not operating at all. The primary clarifiers were black in color indicating septic conditions. See Appendix A, Section 1.[1] This creates odor issues and more significantly prevents the naturally occurring processes from happening in an efficient manner. While all the tanks were on-line, flow coming out of the tanks was only at 50% of design capacity which suggests something very wrong and a clear operational inefficiency. The extra on-line tankage creates long hydraulic retention times coupled with lower than ideal sludge

[1] Portions of Appendix A to Statement No. 3-Supp contain confidential, non-public information and have been designated as such.

wasting and black, odorous septic conditions. It also creates additional costs because the WWTP is powering more equipment than necessary.

**Q. Please expand on further concerns of process control and treatment operations.**

A. Also of significant concern is that there were no air blowers online to supply aeration and/or mixing to any process tanks. These tanks can contain hydrogen sulfide and other gases that displace oxygen that are very hazardous. Proper aeration and mixing is vital for safety reasons. The trickling filter facility at a wastewater treatment plant consistently moves wastewater and pushes it to the bottom of the facility. Upon review the trickling filter facility had excessive biomass growth reducing its effectiveness. See Appendix A, Section 2.

**Q. Please further expand upon your concerns when visiting the WWTP.**

A. There are floating solids atop the secondary clarification tanks. This accumulation was also on the surface of the chlorine contact tank where disinfection of the process stream should have been occurring. See Appendix A, Section 3. This is not where floating solids should appear. All tanks were extremely turbid (dense, murky) and it was difficult to see more than a couple inches into the water column. This is not a good sign for a tank, especially near final treatment. Most protrusions from the tanks, channels, launderers, and flumes were coated with excessive solids accumulation. Again, not a good sign. Sludge wasting, which is an important tool in the normal operational process, seemed to be limited to periodic and nonspecific volume instances. All of this is an indication of the need to have

a fully staffed system along with a knowledgeable and engaged lead operator, supervision, and qualified backups to the same.

**Q. How would Aqua address the staffing challenges and the concerns regarding the condition of the System identified above?**

A. Aqua maintains a staff of compliance and operations experts that will implement changes upon closing of the transaction to ensure SOPs are in place and followed. We also have robust preventative and corrective maintenance programs with asset and process based minimum standards of service that will be discussed in detail later in this testimony for mechanical and maintenance personnel to adopt. We incentivize operators to secure DEP operating licenses, and support that with continuing education assistance. In addition, our corporate resources and local operations management are skilled at operating wastewater facilities. Also, Aqua has been successful in attracting talent across Pennsylvania for all our systems. We have robust onboarding and training programs for supervisors and operators that encompass all facets of operations from safety to process control. Since Aqua filed its initial application, the City has had vacancies at the WWTP that have not been filled as of the date of this Supplemental Direct Testimony.

**Q. What else would Aqua do to correct the troubled and distressed nature of the Beaver Falls system?**

A. The Beaver Falls system would receive an intensive review by our engineers, process control specialists, and infusion of experienced operators and leadership to establish the

operating protocols and bring the plant back to normal operating conditions quickly. This should occur within 30 days of the start of operations. Process control testing criteria, including adequate laboratory equipment will be provided on-site and operators trained to perform tests and interpret the results, from which process control adjustments can be made with confidence. The Aqua-owned state certified laboratory in Bryn Mawr will support this facility from the start with certified analytical results and a quick turnaround time. Continued observation of the process by both on site personnel and broader Aqua resources would be a constant through operations, allowing independent evaluation of the process to ensure nothing is being missed.

Maintenance activities would immediately improve under our defined asset management program with proactive work orders issued for the plant, equipment, and collections system. Maintenance staff would be supported by outside services and vendors to ensure the specialty elements of maintenance program undertaken correctly. Aqua's workforce development program from recruitment through continued education, supported by management and technology, is a significant benefit to Beaver Falls ensuring plant reliability, environmental compliance, protection of receiving waterways, and elimination of the odors for the plant experienced by the public.

**Q. Please expand upon why treatment and process controls are so important for the community in Beaver Falls and the surrounding communities downstream.**

A. Adequate treatment and timely process control decisions are necessary to ensure adequately treated wastewater safely reaches the discharge of the WWTP, which ultimately

reaches the Beaver River where recreation occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley. The Company has proven its expertise in optimizing treatment in wastewater systems like the Beaver Falls system to protect drinking water sources from diseases such as hepatitis A and cholera, scum discharge, and the Company excels at maintaining optimum oxygen levels and minimized regulated compounds in treated water outfalls which helps protect the environment and our watersheds. The Beaver and Ohio Rivers are home to 159 species of fish alone. Effluent water quality from this system is paramount. While the WWTP is currently compliant with DEP requirements, Aqua has significant concerns that proper process controls and treatment are not in place which can further degrade the WWTP and lead to future violations.

**Q. Does the Beaver Falls staff perform adequate process control testing?**

A. No. The City only performs the bare minimum for sampling and analysis for the WWTP. Aqua will require the additional routine process control testing analysis above the regulatory requirements of the DEP to the discharge permit parameters to include alkalinity, suspended solids, biological oxygen demand ("BOD"), settleable solids, pH, nutrients like ammonia and phosphorus, and dissolved oxygen analysis of the trickling filter effluent. Aqua will also monitor (i) total suspended solids, dissolved oxygen, and sludge age in the process; (ii) total suspended solids in the mixed liquor, and (iii)

microscope analysis of the process bacteria. Aqua will increase the frequency of analysis in the effluent to include chlorine, ammonia, and phosphorus.

The addition and/or increased frequencies of the testing of the above parameters will facilitate optimization of the facility and processes, which will allow operators to make educated decisions and meet the permit effluent requirements. These process enhancements will also drive towards the optimization and cost control of the WWTP, which will directly benefit the environment and the community meeting the principal objectives of the Clean Water Act – fishable, swimmable, and drinkable waterways.

**Q. Does the City employ a laboratory information management system ("LIMS") to track analytical results and compliance with critical standards in its laboratory space?**

A. No, it does not. Physical bench sheets are used with common spreadsheet applications (*e.g.*, excel) for reporting of testing results. These bench sheets are not capable of being audited and lack critical access controls and compliance adherence. This means that any changes to the data are not automatically logged to a unique user, and justification may not be required to submit a change in testing results.

**Q. Please explain how Aqua will address this issue of data tracking and confidence.**

Aqua will implement its LIMS program to ensure that analytical data follows processes and procedures, including quality assurance and quality control standards. Data that is entered into LIMS includes the regulatory and process control data which includes sample

results and plant process key performance indicators. The data will be tracked and is fully auditable as each employee will have individual credentials so that any entries are tied to that specific user with process checks in place so that any changes to results must be authorized and notes provided to explain the change. Internal and external laboratory analysis will be cataloged in the LIMS system.

**B. HAZARDOUS GAS**

**[BEGIN HIGHLY CONFIDENTIAL]**

**Q. Are there any noncompliance issues with regulations established by the EPA that you witnessed on your visits?**

A. Yes. The City System stores an extremely hazardous chemical in excess of EPA threshold and does not maintain a RMP as required.

**Q. Are there specific items of concern at the Beaver Falls WWTP relative to the extremely hazardous gaseous chemical systems and processes?**

A. Yes, throughout several due diligence visits to the WWTP, Aqua personnel identified several items of concern.[2] As an update to my Direct Testimony, the WWTP currently inventories over 2,500 pounds of chlorine gas on the property. Chlorine gas is a regulated extremely hazardous chemical that is a toxic gas relative to direct human exposure.

Based on my review, the facility does not have a compliant RMP and is not operating nor maintaining this chemical, the storage facility, nor the feed systems with

[2] The observations of Aqua's team resulting from the site visits are detailed with photographs in Appendix A.

standards that would be found in a RMP. The safety equipment is either lacking or inadequate to address a potential release of chlorine gas. See Appendix A, Section 4.

**Q. Can you please expand on this chlorine gas issue?**

A. Yes, the quantity of chlorine gas stored on-site is not supported by the daily demands (use) for the chemical. Aqua will address this issue immediately after closing the Proposed Transaction. An inventory of this magnitude creates an unnecessary and increased risk of a hazardous condition from a chlorine cylinder leak which, if it occurs, may require an evacuation of the public for a large portion of the community and even neighboring down river and/or downwind communities.

To provide more background, the EPA regulations require that if more than 2,500 pounds of a toxic gas are stored in a common location that the facility operator must have a RMP meeting the requirements of the associated regulation. The system does not have a RMP, which would require documentation of standards and policy to be reviewed and filed with the EPA every five years. The most basic RMP requires a management of change processes to prevent changes from occurring without a review from a multi-disciplined panel. The RMP also stipulates and provides site specific SOPs and documented On The Job Training for all personnel prior to their work on the chemical and related facilities. There is no evidence of quality assurance/quality controls on this hazardous gas system.

The City is a public agency and is not regulated by the Operational Safety and Health Administration ("OSHA"), and therefore, it does not have to follow the more stringent safety requirements of OSHA's Process Safety Management ("PSM") program

either. Aqua, which is subject to OSHA's PSM standard, is therefore required to have a PSM program in place that follows fourteen specific practices to ensure proper training and operations. Given the toxicity of chlorine gas, a release to the environment poses a significant risk to employees and neighbors, making training and proper equipment and maintenance of same critical. Aqua makes safety a high priority and will handle the hazardous chemical feed systems in the WWTP according to industry best practices and as part of its PSM and RMP.

**Q. What will be Aqua's first step in addressing chlorine gas at the WWTP?**

A. Aqua's operations team will immediately assess the required inventory at the WWTP to right size the inventory based upon daily usage and supply chain variables. Aqua will also assess the needs for the chlorine gas system and evaluate replacements as part of the Year 1 safety and compliance capital projects for the facilities at the WWTP. Aqua's current plans for the System include planned replacement of the chlorine gas on site by Year 5 with a Sodium Hypochlorite or Ultraviolet Light for a safer disinfection system in this facility that is unmanned for several hours a day. In the interim, Aqua will incorporate the System into its PSM program and develop and submit an RMP to the EPA. Aqua has a track record of maintaining both EPA and OSHA programs that are fully compliant with the regulations and which are consistent with industry best practices. As a general matter, Aqua routinely voluntarily adds hazardous chemicals and gases that may fall short of PSM-mandated thresholds to the PSM programs. The voluntary addition of such chemicals to PSM programs enhances (a) the safety of employees, (b) the safety of the community, and

(c) the asset management programs. Aqua has lined up internal and external resources to allow it to implement the PSM and RMP for the System within the first months of operations. The programs will establish SOPs, as well as employee and contractor training requirements for operations and minor maintenance. The programs will also establish a management of change process requiring a thorough review of any changes to the System to ensure that compatible equipment and components are used.

**Q. Does Aqua have a validated track record of OSHA PSM compliance?**

A. Yes, the Shenango Valley Drinking Water Treatment Plant in Sharon, Pennsylvania currently inventories up to 22 tons (44,000 pounds) of chlorine gas on site and is regulated under both EPA RMP and OSHA PSM programs. During the most recent OSHA audit in 2018, no comments or findings were identified for this facility in the Western Area. Aqua is very proud of this and looks forward to improving the safety in the Beaver Falls community and for the System facilities. Aqua's safety departments also push out frequent tailgate talks and supervisor talking points to constantly engage with team members providing relevant information and risk mitigation techniques. The Shenango Valley Water Treatment Plant recently celebrated a tremendous milestone of 10 years without a lost-time incident.

**Q. What other issues were observed with the chlorine gas systems during Aqua's site visits?**

A. In addition to the chlorine quantity issue, Aqua personnel noted during the site visits that there is a general lack of labeling/signage throughout the WWTP, specifically, in the chlorine gas feed system. This lack of labeling, coupled with the existence of mismatched plumbing materials and inconsistent insulation and pipe sizing in the WWTP, makes the system extremely difficult to follow and operate, which during an emergency could be catastrophic. Many of the materials used in the chemical system appear to have been replaced with materials that are not compliant with best practices for this type of System. For example, brass fittings, hoses and the associated barbed hose fittings that I witnessed in the system are not compatible materials for a hazardous gas system, yet they are prevalent in the WWTP's chlorine gas piping systems. The valves used in the process piping were not indicated as "rated for chlorine gas use" and the piping systems were not labeled as to whether they contained chlorine gas, potable water, or hypochlorous acid under pressure. The use of these materials and lack of labeling increases the risk of a leak and subsequent toxic health exposure to plant workers and the community at large including emergency response personnel such as firefighters who respond to the facility in an emergency. See Appendix A, Section 4.

**Q. What other safety issues were observed related to the chlorine gas system?**

A. Aqua also discovered that several safety systems are ineffective. For example, there are open penetrations through floors, doors, and walls that could permit gas leaks to go

unnoticed and/or to escape the confines of the facility. The exhaust fan is at the floor of the chlorine room and does not have gasketed louvres and would fail to contain gases in a leak situation. In addition, the WWTP and community is not protected by a scrubber. A best practice, as found in the RMP, is to have a chlorine gas "scrubber" which engages automatically if a leak is detected by instrumentation and pulls the escaped gas through a container that has media that neutralizes, or scrubs, the gas before discharging it to the atmosphere, ensuring safety of the surrounding public and plant workers.

The electrical system that supports the chlorine system is not labeled and is stretched across most of the piping systems creating additional hazards and limiting efficient and effective operations. None of the three chlorinators used has a solenoid on the motive water supply to permit an automatic shutdown of the system. There is a robotic valve operator to close an online cylinder, however, it is dependent upon a consumer grade battery backup device. Several of the chlorinators have exposed electrical terminations with evidence of corrosion and generating an unsafe electrical hazard. A failure of the system coupled with the inability to shut down the water supply would limit the ability to quickly contain a chlorine gas leak. Aqua will be installing the equipment to facilitate an unmanned automatic shutdown of the chlorine gas system in the event of a leak to prevent any discharge into the atmosphere.

Through poorly coordinated installations of mechanical equipment in the chlorine room and old equipment that was left in place though no longer in use, there are several physical clearance issues that could result in a higher than necessary risk for damage and

dangers to employees as well as emergency responders who may not be able to navigate the space to enter, fight fires, or retrieve downed employees. See Appendix A, Section 4.

**Q. How will Aqua address the issues you noted in the chlorine gas system?**

A. First, Aqua's approach to reduce the gas inventory both negates the cost of installing and maintaining a scrubber resulting in short- and long-term savings and achieves the public safety objective. Second, Aqua will form a Management of Change panel consistent with RMP and PSM standards to document how the System has been modified and why. This panel will also determine the correct modifications and documentation needed to both restore the System to compliance with the engineered design and meet the needs of the WWTP if changed from the original design and construction. Issues like mismatched plumbing materials, incompatible plumbing materials, and incorrectly sized plumbing materials will all be documented and changed in a methodical process with oversight of this panel of experts.

The panel will consist of a licensed professional engineer, a certificated employee health and safety specialist, and other stakeholders including control technicians, operators, and the leadership team. The panel will ensure that adequate documentation of changes occurs, that plans for training personnel on the changes are developed and carried out, and that items like protective devices, safety interlocks, labeling, color coding and other critical parts of this hazardous gas system are properly maintained to protect the staff, the customers, the environment, and the community as a whole. Within the first month of closing, Aqua will host a facility tour with first responders to include city police and fire

departments as well as the county hazardous materials response team. This is a standard practice for all Aqua facilities with extremely hazardous chemicals and is conducted on an annual basis.

## C. ADDITIONAL SAFETY AND SECURITY ISSUES

**Q. Are there examples of any other significant safety issues or violations in the System?**

A. Yes. Unfortunately, there are multiple and overlapping issues. Of most significance is the handling of raw sewage in the headworks of the WWTP. This is an enclosed area and gases can be emitted from raw sewage that can be both toxic to workers and explosive in sufficient accumulated concentration. The area where raw sewage is handled is a classified area under the National Electric Code and OSHA as an electrical space requiring specific and unique protective equipment and devices to ensure worker safety. These provisions also promote longevity of equipment by preventing corrosion of metal and electrical components, replacement of which is expensive.

In addition, the influent into the WWTP is received below grade and is only accessible via a single inclined staircase. This area of the WWTP is immediately below the chlorine gas storage/feed room and the main electrical switchgear for the entire WWTP. Ventilation in this area is inadequate and, as a result, the exterior door to this area of the main plant building is inappropriately, but out of necessity, left open, climate permitting.

**Q. Have you witnessed any issues that could be considered at a level of Immediately Dangerous to Life or Health ("IDLH")? If yes, please explain.**

A. Yes, as I described earlier in my Direct Testimony, I have witnessed very unsafe practices. During a visit in March of 2021, I witnessed the influent headworks area of the plant completely sealed with blue tarps over openings and HVAC systems and the door closed. Upon entry I found a kerosene torpedo style heater installed in this classified space. The staff was storing combustible fluids below grade, in a potentially explosive atmosphere. In addition, the staff had also provided the ignition source for their stored combustible fluids or any flammable gases or fluids that may enter the facility from the collection system. See Appendix A, Section 5.

**Q. What did you do when you witnessed a kerosene heater installed in the headworks of the plan?**

A. I immediately brought this to the attention of the plant staff, and we quickly left the area. This is a recipe for an explosive disaster similar to the Struthers WWTP incident discussed later in my testimony. Since I brought this to the attention of WWTP staff, the heater has been removed, and but for Aqua bringing it to the attention of the WWTP staff I do not think any changes would have been made. Additionally, I have not seen any improvements made to this space to address ventilation and heating needs in the winter.

**Q. Please discuss other issues that you witnessed.**

A. In addition, (i) screening equipment exposed on both the influent and effluent sides of the channel to protect employees from open and moving machinery; (ii) the grating is ill fitting around the screens and "reinforced" with lumber that is not rated for such a use; and (iii) there are no emergency stops, safety cables, or railings around the moving equipment. The screening equipment is driven by a hydraulic oil system that is pressurized and at eye level with no guarding around the system. These issues present a real danger to the staff and any visitors that enter that area of the WWTP because they could easily fall into the wastewater treatment processes. See Appendix A, Section 5.

The bar racks are installed improperly because there is no grating or railing to prevent personnel from walking into or falling into the process flow. If someone fell into the process flow and there was no one around to help them, they would likely drown because of the weight and suction of the fluid in the process flow. Additionally, the equipment in this area is not designed to be submerged, but the space showed signs of flooding that could cause equipment failures and require costly rebuilds and more frequent corrective maintenance in the hazardous surroundings. To layer an additional hazard to this single and initial process area, the operations are supported by general outlets and extension cords that are not explosion proof. Finally, the atmosphere in this area is immediately below the chlorine gas facilities for the WWTP and could be filled with hazardous chlorine gas in the event of a leak. This below grade and the neighboring influent pump room were not monitored for chlorine gas that could accumulate in these low levels. Chlorine gas is 2.5 times heavier than air. See Appendix A, Section 5.

**Q. Please describe the troubled and distressed nature of the South end of the plant, which deals with methane gas.**

A. This is another area in the WWTP which is distressed and troubled. Specifically, there are significant safety issues in the digester building on the South end of the property as part of the residuals management side of the process. I have significant safety concerns for anyone entering that part of the facility.

In the wastewater treatment process, solids are removed from the process and sent to the two digester tanks. Here, an anaerobic process breaks down solids and produces methane gas which is flammable. The building that connects the two digester tanks is filled with methane gas piping and contains a gas fired boiler to heat the sludge to sustain the process in periods of cold weather and water temperature. This is the oldest building and many of today's codes are not followed. The general lack of labeling, coupled with incorrect and hazardous combinations of electricity, ignition sources, and a potentially flammable atmosphere is an extremely dangerous combination. As referenced above, the number of these situations raises a severe concern for anyone entering the facility. See Appendix A, Section 6.

**Q. How will Aqua address these specific safety issues?**

A. Aqua plans to address these safety issues in the sewage treatment area to include proper lighting, access controls, safe ventilation, isolation of the hazardous areas from commonly occupied spaces, the installation of fixed explosive and hazardous gas monitoring,

emergency shutoffs for OSHA compliance, proper labeling and equipment identification for lock-out/tag-out and arc-flash compliance, employee training, and has planned for upgrades throughout the initial years of ownership to address the larger screen and screening and headworks shortfalls of the facility. These improvements to safety are set forth in the capital plan included in the Direct Testimony of Mark J. Bubel, Sr. (Aqua Statement No. 2).

**Q. Can you give an example of how the types of improperly installed and functioning equipment you referenced above may cause substantial injury or death to employees?**

A. Yes. In 2012, the City of Struthers, OH (which is 33 miles away from Beaver Falls) had an explosion that caused two City of Struthers employees to lose their lives. Many of the same circumstances that were cited as contributing factors in that tragedy are present in the Beaver Falls WWTP. See Appendix A, Section 4. The following ten contributing factors were cited in the OSHA incident investigation of the Struthers event:[3]

(1) The workers were exposed to hazards of fire and explosion from the ignition of methane gas.

(2) The workers were not given enough space to work away from grounded and ungrounded pipes and other equipment.

(3) The workers did not have training on electrical hazards.

(4) The workers did not de-energize gas compressor control-circuit parts before working on them.

(5) The workers did not lock or tag the circuits that energize the current-carrying parts.

[3] *See* https://vindyarchives.com/news/2012/aug/25/ohio-cites-struthers-over-fatal-explosio/.

(6) The city did not establish and provide access to written electrical energy-control procedures for maintenance workers.

(7) The workers used instruments that were not approved for use in the location where they were working.

(8) The workers were not wearing proper protective equipment.

(9) The workers were not required to use insulated tools or equipment in case of contact with current-carrying parts.

(10) Electrical switches, circuits and other equipment were not marked to warn workers of potential hazards.

Aqua will ensure that corrective actions are taken at the Beaver Falls WWTP to prevent another community from experiencing the tragic loss of life that uncorrected hazards such as those listed above can cause when present in a wastewater treatment facility.

[**END HIGHLY CONFIDENTIAL**]

**Q. Are there other examples of general safety issues in the System?**

A. Yes. Throughout the Beaver Falls facility there are multiple safety deficiencies of low to moderate risk. By way of example, most pumping systems are missing guards on the rotating equipment creating unsafe conditions that could cause workers to be pulled into the rotating equipment or hands crushed. There are missing railings or railing components like toe or kick plates to prevent a slip/trip and fall from becoming an immersion into the process tanks. There are numerous locations where employees use temporary ladders to access equipment that circumvent fall protection.

Chemicals were not stored properly at the WWTP. There are no containment devices for the chemical drums. Drums in service were propped up on blocks to permit emptying, but this leaves the heavy drums unstable and teetering in common areas of the

WWTP near floor drains. There is a general lack of labeling throughout the facility and no evidence of the exit signage nor emergency lighting. Multiple fire extinguisher hooks were empty.

There are several roofed structures that are accessible by stairway that do not have any fall protection devices, railings, lighting, or signage to ensure occupant awareness. There are also confined spaces without any signage and no evidence of a program, nor regulatory compliance for the documentation of training and entry. See Appendix A, Section 6.

**Q. How will Aqua address these general safety issues?**

A. These issues will be cataloged and will become a part of Aqua's already robust capital and operational plan to be addressed within Year 1 of Aqua ownership. Our safety teams and operational management will make these items a priority in Year 1 by educating our new employees in the safety requirements of Aqua, investing to correct deficiencies, and provide on-going safety housekeeping, near miss reporting, and safety audits on a regular basis. Safety of our employees, most who are members of the community, is priority so they return safely home. The public benefits of this cannot be measured.

**Q. Is there a system in place at Beaver Falls to document near-misses?**

A. No. Aqua, however, implements a Near Miss program (a.k.a. "Safety Learning Opportunities") where all employees are encouraged to look for and report potential and real unsafe conditions so they can be addressed in a timely manner. This program is key

to both creating a safe working environment and a culture of safety. The employees have little support in the way of safety programing currently, and this program will be beneficial both to them, their families, and the community at large.

[**BEGIN HIGHLY CONFIDENTIAL**]

**Q. Does the Beaver Falls WWTP have adequate security?**

A. No. The facility is fenced in with a bar gate closer at the entrance of the property. The WWTP sits back off the main road a fair distance on a dead-end isolated by railroad tracks. There is limited site lighting and no visibility from the road to the WWTP. There are no security systems installed on any of the buildings and none of the access points are equipped with card swipe access, and some lacked functioning locks. There are no cameras on site. There is a lack of signage to indicate restriction of access to the public, such as "keep out" or "no trespassing". Nearly all the process tanks could be fallen into by an intruder if the perimeter fence is left open or breached. It is important to reiterate that the WWTP is unmanned for a majority of each day and has no after hours or night shift coverage. This significant lack of security should be considered given the storage of chlorine gas discussed above.

**Q. How will Aqua address these security concerns?**

A. Preliminarily, Aqua's immediate plans to improve safety and security at the property include enhanced lighting, proper identification, signage, reinforcement of existing security measures (working locks, card swipe access that will log entry, and security

cameras) and the implementation of new standards and installation of new equipment to protect the facility and the community from any preventable incident.

**Q. Does the System currently employ SCADA systems?**

A. Partially, the System utilizes a very localized control system in the WWTP to control critical processes. There is no remote (control) access, only some remote monitoring, and the System is dependent upon only a couple staff members to respond. Aqua plans to act in the first and second year of ownership to integrate the System into its Enterprise SCADA system. This will allow for complete and continuous monitoring, which will occur by connecting critical process operations like chlorine and hazardous gas leak detectors, pump and power failures, and others to the Shenango Valley Drinking Water Treatment Plant that is staffed 24/7/365. The Beaver Falls operations team will be equipped with remote access to the WWTP operations with intelligent alarming and notifications as well.

[**END HIGHLY CONFIDENTIAL**]

**Q. Does the facility have emergency/standby power generation on site?**

A. Yes, however, it is not clear what equipment in the WWTP is supplied with emergency power from backup generators. Only critical pumping systems are supported by the back-up generator and even those systems are not completely supported. There is limited operation of secondary treatment and pumping operations. There is no emergency power supplied to the aeration processes meaning these systems will not operate during a power failure and it is unclear as to the capabilities of that emergency power for supplying the

chemical feed systems and limited process monitoring equipment. These shortfalls mean that while wastewater will continue to enter the WWTP, it will not be fully treated and enter the receiving stream. This will be fully assessed as part of Aqua's ongoing capital improvement processes and addressed through capital projects identified.

## D. ASSET MANAGEMENT

**Q. Does Beaver Falls have an asset management plan or computerized maintenance management system ("CMMS") in place and what is Aqua's plan for post-Closing asset management?**

A. The team at Beaver Falls maintains a basic calendar and spreadsheet to track preventative maintenance needs. Some written records are maintained to track assets over time. Aqua will implement several layered approaches to asset management through financial modules. Aqua will also implement a CMMS system to schedule and automate preventative maintenance schedules for the employees. This system will also capture reactive and corrective maintenance tasks for all aspects of the System. Aqua will work with the Beaver Falls team to fully document existing SOPs and to employ Aqua SOPs where none exist through these work order systems to record tacit knowledge and improve succession planning and operational consistency.

**Q. Are there specific examples of assets and processes that are not operating correctly due to lack of maintenance or expertise? If so, does Aqua have a plan to remedy the situation?**

A. Yes. Aqua personnel witnessed a complete absence of aeration in the WWTP. There is also evidence of incomplete or insufficient maintenance of the trickling filters. The distribution spray arms rotate continuously. The employees noted that it is common practice for them to create their own parts to maintain and patch operations of these large assets for this critical and continuously operating equipment. To avoid this patchwork approach, Aqua would engage manufacturers and experts to ensure that the correct parts are installed, and specialists are utilized to ensure this large rotating equipment is correctly balanced.

**[BEGIN CONFIDENTIAL]**

**Q. Did you observe the condition of the concrete at the WWTP?**

A. Yes.

**Q. What concerns are presented by the condition of the structures?**

A. The WWTP structures are concrete and steel. There was evidence of deterioration of the concrete throughout the WWTP in the form of cracks, spalling and other defects. See Appendix A, Section 7. Due to the freeze thaw conditions experienced at this WWTP, the concrete will begin to accelerate its deterioration if not addressed. There appears to be no plan to invest to address this situation based on conversations with Beaver Falls and the lack of any evidence of recent work being done.

**Q. How does Aqua plan to address these concerns?**

A. As part of Aqua's standard maintenance program and capital improvement plan, maintenance of structures is considered and implemented. Aqua's engineers will evaluate the WWTP and undertake a program to stabilize the concrete deterioration as they deem appropriate.

**Q. How will Aqua's plan benefit customers?**

A. This proactive approach would reduce the need for any large-scale replacements of very expensive structures, which could also cause interruption of normal treatment process while the structure is removed from service. This supports the long-term reliability of the facilities and proper control of expenditures to sustain the WWTP and level of service to the customers and the larger community.

**[END CONFIDENTIAL]**

**Q. Does Beaver Falls utilize any compliance assurance software?**

A. No. To address this, Aqua will implement its current compliance assurance software. This software system generates compliance-focused work orders for regulated wastewater system processes and functions. Employees will be assigned a combination of daily, weekly, monthly, quarterly, annual, and less frequent work orders to ensure that critical compliance requirements are completed on time and in a manner that is well documented. The system will generate monthly, quarterly, and annual regulatory reports for consistency

of calculations and to Aqua's standards. These systems will support the staff of Beaver Falls in the rapid adaptation to the operational excellence for which Aqua is known.

## IV. CONCLUSION

**Q. Does this conclude your Supplemental Direct Testimony?**

A. Yes, it does. However, I reserve the right to supplement my Supplemental Direct Testimony as additional issues and facts arise during the course of this proceeding.

# SUPPLEMENTAL EXHIBIT X

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 4 SUPP**

**SUPPLEMENTAL DIRECT TESTIMONY OF**

**CHARLES R. JONES, JR.**

**CITY MANAGER**

**CITY OF BEAVER FALLS**

**With Regard To:**
**Operations and**
**Public Benefits of the Proposed Transaction**

**March 2024**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1

II. CURRENT OPERATIONS AND CONDITION OF THE SYSTEM ..... 2

III. BENEFITS OF THE PROPOSED TRANSACTION ..... 3

IV. CONCLUSION ..... 6

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Charles R. Jones, Jr. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the appointed City Manager for the City of Beaver Falls (the "City"). My duties as defined by the City's Home Rule Charter are to manage day-to-day operations and oversee administrative functions of all City departments. I report directly to the Mayor of the City and City Council.

**Q. Please provide a brief description of your education and work experience.**

A. I am a United States Air Force Veteran, with extensive training and experience with law enforcement management and operations. I am a graduate of the F.B.I. National Academy and currently serve on several local and regional boards, including my role as an executive board member of our local Chamber of Commerce. I have an Associate's Degree in Criminal Justice and Police Technology. I have an undergraduate degree and graduate degree in leadership and organizational management, and I am a recent recipient of an honorary doctorate degree in leadership from Geneva College.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("Commission") before?**

A. Yes. I previously submitted Direct Testimony in this proceeding.

**Q. Do you hold any professional licenses or certifications related to wastewater?**

A. No. I have no expertise in operating a wastewater system.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purposes of your supplemental direct testimony and summarize the key points it will address.**

A. The purpose of my testimony is to supplement my Direct Testimony by providing additional discussion regarding current operations of the City's System and discussion of additional public benefits of this transaction.

**Q. Are you sponsoring any Exhibits with your testimony?**

A. No.

## II. CURRENT OPERATIONS AND CONDITION OF THE SYSTEM

**Q. Have you reviewed the Supplemental Direct Testimony of Zach Martin regarding the current operations of the System?**

A. Yes. I was not aware of the serious operational deficiencies and unsafe conditions at the WWTP until I reviewed the Supplemental Direct Testimony of Zach Martin. I am concerned about the current operations of the System and the deterioration of the City's 80

year-old wastewater treatment plant ("WWTP") since Aqua's initial review of the System in 2021. The Plant Manager has been out on medical leave for nearly two years and is unable to work for the City. He is on permanent disability. We have also lost other skilled operators since 2021. We have tried to hire people to fill these open positions for many months but have been unsuccessful.

**Q. Does the City have a plan to address the issues raised in Mr. Martin's Supplemental Direct Testimony?**

A. No, it does not at this time. The City will do its best to alleviate any serious and dangerous conditions but does not have the expertise or the financial resources to support the adequate operations of the System long-term.

**Q. Does the City have a capital plan for the System?**

A. The City does not have a long-term capital plan for the System as a result of the City's financial condition. The City attempts to fix problems with the System as they arise but does not have the ability to do more than that.

## III. BENEFITS OF THE PROPOSED TRANSACTION

**Q. Please describe the benefits of the Proposed Transaction for the City in addition to those provided in your Direct Testimony.**

A. Given the deterioration of the System and the serious deficiencies in the operation of the System since the City has been unable to employ the necessary experts, the City feels the urgent need to sell the System to Aqua to ensure that the System will be operated safely

and its customers will be provided with the excellent service they deserve. In addition the City believes Aqua will provide critical environmental compliance, and protection of the System's receiving waterways which I am very concerned about given the raw sewage seepage into the Beaver River from the System as described in Zach Martin's Supplemental Direct Testimony.

The City has historically experienced significant financial difficulties. Because of the financial condition of the City, the City likely will not be able to keep up with the growing capital needs of the aging System. If the City sells the System to Aqua, the capital needs will be met and the proceeds from the sale of the System will help prevent the City from being named by the Commonwealth Department of Community and Economic Development a distressed community or Act 47 status, which indicates severe financial difficulties and could lead to the City being placed in receivership.

Another benefit of the sale is Aqua's extensive financial assistance to lower income customers struggling to pay their wastewater bills. I understand that rates will increase for the City's customers if Aqua owns and operates the System, however, Aqua took great care explaining their commitment to assist the low income residents which could be a significant portion of the City's residents. As I stated in my Direct Testimony, the median household income based on 2020 data was $35,951. In 2022 the median household income was $39,194.[1] For a household of 4 persons at $39,194 they would be at the 130.65% of the federal poverty income guidelines ("FPIG"), and thus could qualify for Aqua'a low income

[1] See https://data.census.gov/table/ACSST5Y2022.S1903?q=Beaver%20Falls%20city,%20Pennsylvania&t=Income%20and%20Poverty

program.[2] Similarly, households of 2 and 3 persons at the median household income would be at 198.75% and 157.66% of FPIG, respectively, and could qualify for Aqua's low income program.[3] There are approximately 292 4-person families, 433 3-person families, and 696 2-person families in Beaver Falls which represents the vast majority of the population of Beaver Falls.[4]

**Q. Do you believe the System is a troubled system?**

A. Yes. For the reasons set forth in Mr. Martin's Supplemental Direct Testimony and as I explained above regarding the City unable to fill positions at the WWTP, the lack of capital planning, and the deficiencies in the System operations, Beaver Falls does not have the financial, managerial or technical ability to operate the System.

**Q. Do you believe that the Proposed Transaction is in the public interest?**

A. Yes. For the reasons I set forth in my Direct Testimony and above, I believe that the Proposed Transaction provides substantial affirmative public benefits and is in the public interest. I urge the Commission to promptly approve the Proposed Transaction.

[2] See https://www.hardshiptools.org/IncomeCalculator.aspx
[3] Id.
[4] See https://data.census.gov/table/ACSST5Y2022.S1903?q=Beaver%20Falls%20city,%20Pennsylvania&t=Income%20and%20Poverty

## IV. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to file additional testimony at a later date as may be necessary or appropriate.

# APPENDIX A

# (CONFIDENTIAL Version)

CONTAINS CONFIDENTIAL INFORMATION

# City of Beaver Falls WWTP

## SECTION 1

**March 3, 2021 – Primary Clarifier**



**September 19, 2023 – Primary Clarifier**



# SECTION 2

**March 3, 2021 – West Trickling Filter**



**September 19, 2023 – West Trickling Filter**



# SECTION 3

**March 3, 2021 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



# SECTION 4

**[BEGIN CONFIDENTIAL]**

**March 3 2021 – Chlorine Gas Room (Extremely Hazardous Chemical)**

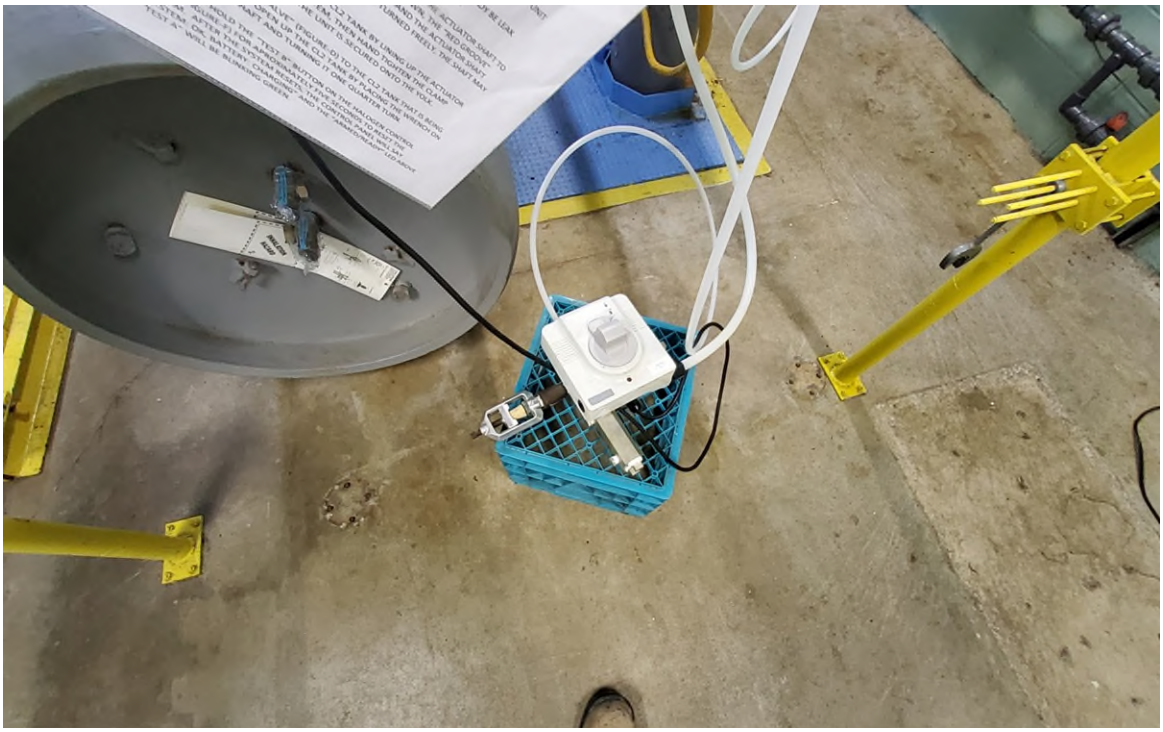


**Ton cylinder scale showing full 2,000 pound cylinder loaded.**





**Four additional 150 pound cylinders of chlorine gas on site. Total 2,600 pounds of gas on site.**



**Ton cylinder valves sealed but left unprotected and unconnected.**




**Two chlorinators and flow tubing installed on West and South wall of chlorine room. Note exhaust fan that is not gasketed and severely corroded. Corrosion in a chlorine room is an indication of leaks as chlorine is a very aggressive oxidant.**



**Chlorinator. Note tag is dated 2017 for last service. The tubing is marked with a 2016 date on this unit. These should be serviced annually and tubing should be replaced annually at minimum. Note discolored braided hose on the hypochlorous acid lines that is not rated for that service and severely discolored. The electrical junction box of this chlorinator is left open and severely corroded.**




**This chlorinator is newer, however had no dated service tag on it. There was one tag hanging from the tubing in the left of the photo that merely warned of proper use. There were no dates indicated on any of this gas tubing. Note the vacuum gauge at the top of the equipment is almost at the minimum limit which indicates injector fouling and a lack of preventative maintenance. This newer unit is still severely corroded.**



**Exterior of chlorine gas room looking East. Chlorine crane shown.**

Chlorine gas comments:

- Federal EPA Violation
  - This facility does not have a Risk Management Program ("RMP") filed with the U.S. EPA. The facility is operating with more than 2,500 pounds of chlorine gas on site which is the threshold for RMP regulations.
- Maintenance
  - Equipment maintenance is significantly overdue on critical equipment that must operate continuously. Tubing and hoses are severely aged and pose an increased risk of leaks.
  - An RMP would require formal maintenance programs and record keeping for these functions.
  - Electrical connections are left exposed subjecting equipment to corrosion and defeating the seal of the room.
  - The robotic isolation valve is powered by a residential office style battery backup hanging from the hazardous gas piping.
  - There is no labeling on the piping to indicate contents for first responders in an emergency.
- HVAC
  - The exhaust fan is not gasketed to seal and prevent gas from escaping the chlorine room.

    - There are no audio or visual indicators in the interior or exterior of the chlorine gas room for employees or first responders to be aware a gas leak is occurring.
- Lifting equipment
    - The crane beam is not labeled with a rated capacity.
    - The trolley is not labeled with a rated capacity.
    - The lifting bar is not labeled with a rated capacity.
    - There is no evidence of annual inspection and service by a certified inspector.
- Additional Safety
    - The heavy ton cylinder protective cover is hung from the wall over sensitive plastic piping carrying extremely hazardous chemicals.
    - There is no emergency lighting in this area.
    - There is no exit sign.
    - The large doors do not have panic hardware on them and bolt shut to the floor.
    - Milk crate is used to house sensitive hazardous gas feed equipment on the floor.
    - There is no indication of the water shutoff valve that would be necessary to stop the vacuum generation from the eductors and stop the withdrawal of chlorine from the cylinders.
    - None of the plastic tubing nor valves are labeled as approved for chlorine service.
    - There are no traps on the floor drain piping to prevent a leak from exiting this room and entering another through the floor drains.
    - Slips trips and falls.
        - There are cords and equipment left strewn on the floor. Anyone working in this room should be wearing an air purifying respirator which will limit visibility and range of motion of the head. It is critical that this room be kept free from obstructions.

**[END CONFIDENTIAL]**

# SECTION 5

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Headworks**



**Inside below grade headworks. Note blue tarp covering opening over screening/grit hopper. Note gas fired torpedo heater on extension cord in classified electrical space. Significant explosion hazard.**



**Northern end of headworks looking South. Note exposed bar rack in floor to process tank.**



**Exposed bar rack at Northern end of headworks room without railings or protective surface.**



**Exposed bar rack behind screen at Southern end of headworks room.**



**Screen equipment with exposed hydraulic drive with missing guards and mismatched hoses. Note the creative rigging on the dumpster to lift it from this hazardous space overhead to the parking lot.**



**East wall of headworks room. Note draped extension cords and outlets that are not explosion proof. No labeling on pipes, conduits, or hoses.**



**South influent pump suction well that was offline during visit. Note scum and floating debris. Note wooden railing modifications around the base.**



**North influent pump suction well that was online during visit. Note turbulence and consider ability to enter tank through exposed bar racks and absent grating.**

Influent / Headworks comments:

- Explosion hazards
  - This entire space is below grade and only accessible by an inclined set of stairs. This space is subject to anything that enters the sewage system and is a classified space, requiring explosion proof electrical equipment.
  - There is a fuel powered open flame torpedo heater placed in this explosive space. This is like holding a lit match over a case of dynamite.
  - There are extension cords and temporary wiring draped throughout the space. There are light fixtures and outlets that are not explosion proof.
  - The only major ventilation in this area was covered by a blue tarp during our visit.
- Slip, trip, and fall hazards
  - There are railings that prevent a fall into some of the process tanks. But there are also several exposed bar racks in the common walkways that would permit someone to fall into the process flows and into the influent pump station pump suction piping below.
  - The grating is mismatched and poorly supported in work areas like around the screen equipment.
- Maintenance
  - Through mechanical screening equipment and past multiple iterations of passive bar racks, there was still floating debris and solids accumulation in the headworks tanks.
  - Hoses and cording left strewn and draped throughout the space. Some hoses left to dangle in pump suction wells.
- General
  - No exit signs
  - No fire extinguishers
  - No emergency exit lighting
  - No atmospheric monitoring in the room
  - No E-Stops for the mechanical screening equipment no influent pumps

**[END CONFIDENTIAL]**

# SECTION 6

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Thickener, Digester, and building exterior**



**Thickener tank, digester tank, and building from the North.**



**Top of thickener and digester tanks.**



**Looking onto top of floating lid. East tank.**




**Exterior of thickener / digester building. Gas detector with failing screen and negative reading.**

Thickener tank, digester tank, and building exterior comments:

- Stairway provides easy and unrestricted access to the concrete area and tops of the tanks.
    - There is no railing around the work area to prevent a fall into the tanks onto the floating lids.
    - These floating lids are confined spaces, with sloped surfaces, and can hold hazardous gases that are heavier than oxygen.
    - The area around the perimeter of the lid is not sealed to the walls and provides exposed to sludge to create hazardous atmospheric conditions.
    - There are multiple trip hazards on this working surface that we were escorted up on to.
- Exterior wall gas detector.
    - This gas monitor had a faded screen and no calibration tags.
    - The display was reading a negative value during our visit.
- Structures
    - There are multiple cracks in the concrete on and around the cylindrical tanks.

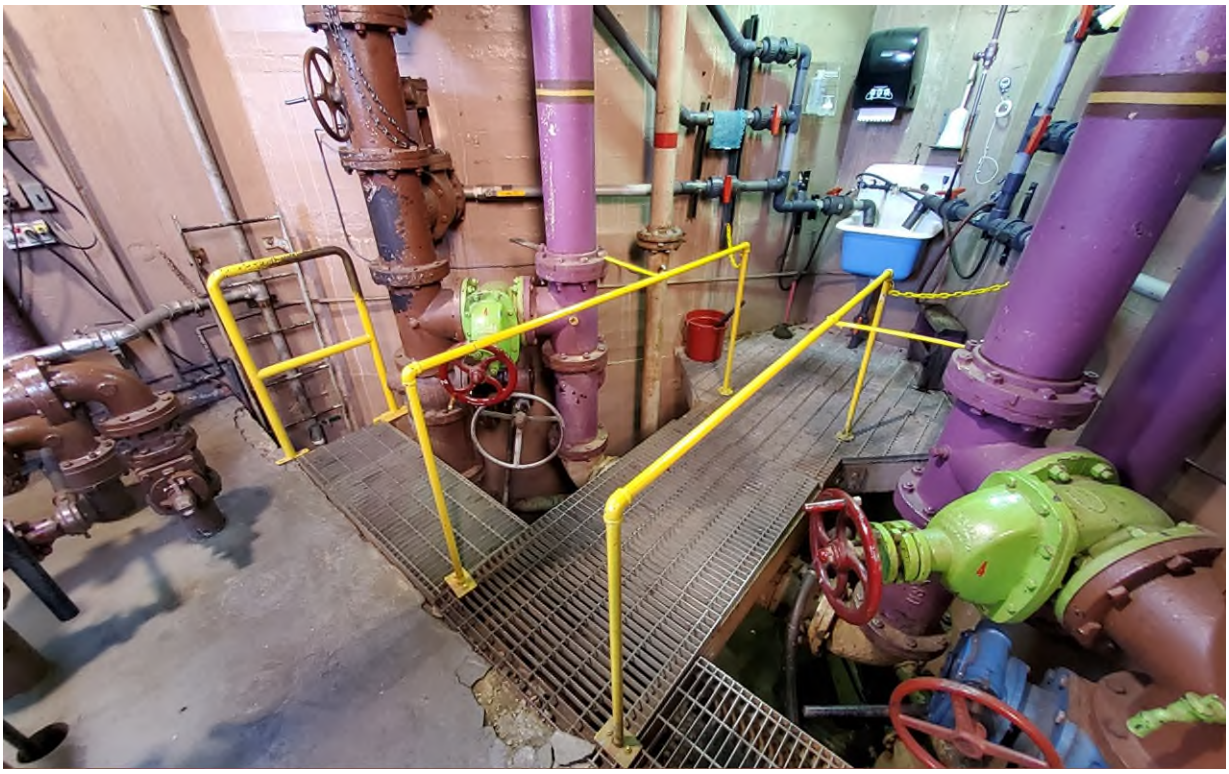
**March 3, 2021 – Thickener, digester, and building interior.**



**Inside of thickener / digester building from Northeast door.**



**Inside of thickener / digester building from main floor and Northeast corner of room.**



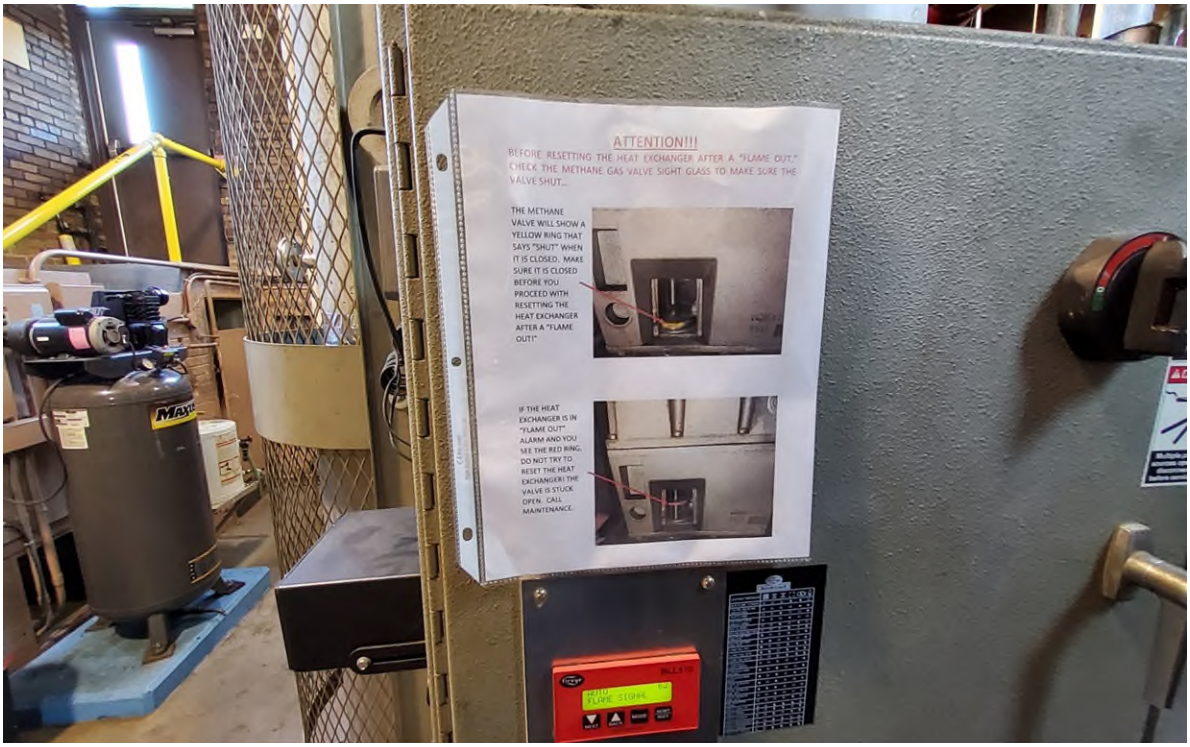
**South end of the thickener / digester building between the two tanks.**



**South end of the thickener / digester building between the two tanks.**




**Gas fired sludge heat exchanger. Note extensive modifications to electrical enclosure.**




**Gas fired heat exchanger warning sign. Note residential air compressor in background.**

Thickener / Digester building interior comments:

- Explosion hazards
    - This space is a classified space as the thickener and digester tanks produce methane and other combustible gases under the floating lids.
    - The gas detector on the exterior of the structure appears to be in a non-operational state preventing warning and/or alarm of employees.
    - The electrical enclosure on the gas fired heat exchanger shows multiple signs of bolt-on and add-on equipment modifications with no UL labeling to certify the integrity of the cabinet is maintained. This creates potential for spark for an explosion.
    - Note that the some of the motors are TEFC (totally enclosed fan cooled), however, none of the motors in this room were explosion proof. The air compressor for maintenance use is residential in nature and has several electrical capacitors exposed on top of the motor. This is another explosion hazard.
    - Note the handmade sign on the gas fired heat exchanger warning employees to not ignite the heat exchanger if the gas valve is not closed. There is no signage to indicate the gas valve.
    - There are no E-stops in this building.
- Trip and fall hazards.
    - Note the handmade railings on the elevated bridge between the tanks. It is bolted to the grated platform. There are no middle rail or toe board to prevent tools from being knocked into the workspace below.
    - There are multiple locations where railings do not exist between the tanks that would permit a fall to the area below.
- Structure
    - Note the crumbling concrete around the grated bridge between the tanks. This also creates slip, trip, and fall hazard.
- General
    - No fire extinguishers in this room
    - No exits signs
    - No exit lighting
    - No PPE signs

**[END CONFIDENTIAL]**

**March 3, 2021 – Grease Skimmer**




**Grease skimmer from North side on concrete floor.**




**Grease skimmer from platform.**

Grease skimmer comments:

- No railing to prevent employee from falling into the process vessel.
    - Step added to platform to reduce the height of the side wall making a fall into the vessel easier
- No E-Stop within reach of exposed moving equipment
    - Exposed chain drive
    - Exposed auger
    - Multiple pinch points unguarded

**March 3, 2021 – Belt Filter Press**



**Belt filter press from North side of room.**




**Belt filter press from North side close.**



**Belt filter press from West side of room.**




**Belt filter press room West wall.**

Belt filter press comments:

- Chemical Storage.
    - Note various chemical drum storage areas without labeling, spill containment, or measuring equipment.
    - Chemical drums not labeled with globally harmonized system (GHS) as required by OSHA.
    - Drum in service is tipped up on end by a stone and left balancing that could easily topple, spill, and cause injury.
    - It was unclear if the chemical drums were compatible with each other should a spill occur without separate containment.
- Platform / working surfaces.
    - Note the pooling/ponding water around the process equipment and electrical cabinets.
    - The platform around the press has a ladder on it that would make it easy to overtop the railing and fall to the concrete floor.
    - The platform is also installed elevating the worker higher than the yellow safety E-stop cable. This cable should be at waist level and easily accessible. If an employee was to get entangled in this moving equipment, the safety cable for the E-stop is at their ankles and out of reach.
    - Notice that the railing only exists on the outside perimeter of the work platform, permitting unobstructed fall potential into the moving equipment.
    - There are no guards on the pinch points of the equipment.
- Building
    - No exit signs
    - No emergency exit lighting
    - No fire extinguishers
    - Inadequate chemical storage signage
    - No signs for personal protective equipment requirements

# SECTION 7

**[BEGIN CONFIDENTIAL]**

**March 3, 2021 – Primary Clarifier Tank**



**Southeast corner of primary clarification tanks.**



**Northwest corner of primary clarification tanks.**



**East side of primary clarification tank.**

Clarification tank comments:

- Spalling concrete with signs of efflorescence which may indicate a leak and forecast structural failure.
- Unsupported process piping hanging from tanks.

**[END CONFIDENTIAL]**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Application of Aqua Pennsylvania Wastewater, Inc. (hereinafter referred to as "Aqua" or "Applicant") pursuant to Sections 1102 and 1329 of the Public Utility Code for:** | **:** | **Docket No. A-2022-3033138** |
| **(1) approval of the acquisition by Aqua of the wastewater system assets of the City of Beaver Falls ("Beaver Falls" or "City") situated within the City of Beaver Falls Eastvale Borough, and West Mayfield Borough, Beaver County, Pennsylvania;** | **:** | |
| **(2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the City of Beaver Falls, Beaver County, Pennsylvania; and** | **:** | |
| **(3) an order approving the acquisition that includes the ratemaking rate base of the City of Beaver Falls wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code.** | **:** | |
| **Request for Approval of Contracts, between Aqua and the City of Beaver Falls, Pursuant to Section 507 of the Public Utility Code** | **:** | |

## AMENDED APPLICATION

**To the Pennsylvania Public Utility Commission ("Commission"):**

## I. BACKGROUND

1. The name and address of Applicant are:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

2. The name, address and contact information for Applicant's counsel are:

Michael W. Hassell, Esq. (ID # 34851)
Garrett P. Lent, Esq. (ID # 321566)
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3. Pursuant to Sections 1102 and 1329 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 1102 and 1329, Applicant hereby requests that the Commission: (1) approve Aqua's acquisition of the wastewater system assets ("**Acquired Assets**") of the City of Beaver Falls ("Beaver Falls" or "the City"); (2) approve the right of Aqua to begin providing wastewater service in the requested territory, as shown as the area outlined in red on the map attached hereto as **Exhibit A** (the "**Requested Territory**");[1] and (3) include, in its Order approving the acquisition, the ratemaking rate base of the Assets as determined under Section 1329(c)(2) of the Public Utility Code, 66 Pa.C.S. § 1329(c)(2). As discussed in Section XII *infra*, Aqua also requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507 of the Public Utility Code, 66 Pa.C.S. § 507, for certain municipal contracts that Aqua has included in the Application, including new service agreements that Aqua will enter into with Big Beaver Borough, West Mayfield Borough, White Township, North Sewickley Township, Eastvale Borough, Patterson Township, and Patterson Heights Borough ("Contributing Municipalities") prior to Closing and which will replace any prior agreements.

4. The map of the Requested Territory includes a north arrow depicting map orientation, a graphic scale, the municipal boundaries of Beaver Falls and identification and depiction of all private and public roads relative to the Requested Territory. A bearing and angle description of the Requested

[1] A CONFIDENTIAL facilities map is included with the Asset Inventory as addressed *infra*.

Territory is included on Exhibit A. The Requested Territory is approximately 2.3 square miles (1,468.8 acres).

5. Aqua and Beaver Falls have reached an agreement regarding the acquisition of the Acquired Assets, as evidenced by the *Asset Purchase Agreement*, dated as of October 20, 2021, and attached hereto as **Exhibit B** (the "**Agreement**"). Applicant respectfully requests that the Commission issue an *Order* and *Certificates of Public Convenience* approving and addressing the items requested in this Application.

6. An **Application Filing Checklist** identifying topics addressed and the section, paragraph and page number where they can be found is included with this Application as Appendix 1.

## II. AFFECTED ENTITIES

7. Aqua is a regulated public utility company, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua is engaged in the wastewater service business and furnishes wastewater service to approximately 60,000 customer accounts, as reflected in documents already on file with the Commission. Aqua's existing service territories cover various Counties throughout Pennsylvania with wastewater operations in nearby Venango County and water operations under Aqua Pennsylvania, Inc. ("Aqua PA") in nearby Lawrence County.

8. Beaver Falls is a duly organized and validly existing city under a Home Rule Charter. The City owns the sanitary wastewater collection and treatment system which provides sanitary wastewater service to approximately 3,190 customers in the City, and provides transmission and treatment service for the seven (7) Contributing Municipalities.

9. Applicant incorporates into this Application other information on file with the Commission that establishes the fact that Aqua is qualified to provide adequate public wastewater service. Aqua will supplement this Application with all additional information the Commission may

require. Balance Sheet and Income Statement reports from Aqua's financial system for calendar year 2021 are attached hereto as **Exhibit C**.

## III. PLANT-IN-SERVICE

10. Aqua will acquire Beaver Falls' wastewater collection and treatment system assets as defined in the Agreement, i.e., the Acquired Assets. All of the Acquired Assets are located in the City except for the Eastvale Pump Station which is located in Eastvale Borough, the force main that connects the Eastvale Pump Station to the City collection system, and a meter located in West Mayfield Borough.

11. An Engineer's Assessment of Wastewater System Assets, prepared by Gannett Fleming, Inc. ("Asset Inventory"), is attached hereto as **Exhibit D**. The facilities map included with the Asset Inventory as Appendix B thereto is considered CONFIDENTIAL.

12. The Asset Inventory explains that the Beaver Falls' collection and treatment system has one wastewater treatment plant, approximately 36 miles of gravity sewer collection mains, in sizes ranging from 8 inches to 24 inches in diameter, and the system has approximately 1,400 lineal feet ("LF") of 8 inch force mains. The Asset Inventory also details the one City owned pump station.

13. A list of non-depreciable property is presented in Appendix A of the Asset Inventory. The Beaver Falls System has no plant held for future use and none is included in the Asset Inventory.

14. All component facilities are installed. The approximate time of installation of component facilities is addressed in Appendix A of the Asset Inventory and in Mr. Bubel's testimony (Application **Exhibit V**, Aqua Statement No. 2).

15. Wastewater treatment is provided by the City at its Wastewater Treatment Plant ("WWTP") located in Beaver Falls, Beaver County. The Chapter 94 Report to the Department of Environmental Protection ("DEP") of Beaver Falls for the Beaver Falls WWTP, which includes

Chapter 94 Report questionnaires for the Contributing Municipalities, is attached hereto as **Exhibit E**. The Beaver Falls WWTP has a permitted capacity of 4.8 million gallons per day ("MGD") with elevation ("EL") between EL 722 and 738.

16. Beaver Falls accepts wastewater flow into its collection system from the Contributing Municipalities, which is treated at the Beaver Falls WWTP. Flow is conveyed from the Contributing Municipalities through gravity sewers, force mains, and pump stations owned by the Contributing Municipalities. Once flow enters the City from Big Beaver Borough, West Mayfield, White Township, Patterson Township and Patterson Heights Borough, it is conveyed by gravity to the WWTP. Flow coming from Eastvale Borough and North Sewickley Township is conveyed to the Eastvale Pump Station and pumped into the City. The Eastvale Pump Station has design capacity of 610 gallons per minute ("gpm"). The arrangement for conveyance and treatment of flow from the Contributing Municipalities is discussed below in paragraph 25 and Sections XII and XIII.

17. Elevation of the Beaver Falls collection system and the service area varies:

EL 885 to EL 1150 along the western boundary.

EL 720 to EL 985 along the southern boundary.

EL 755 to EL 850 along the northern boundary.

EL 720 to EL 820 along the eastern boundary.

18. Water service in the Requested Territory is provided by the Beaver Falls Municipal Authority ("BFMA").

19. The original cost, by year and major plant category, of Beaver Falls' used and useful plant in service is $12,898,487 with a related calculated depreciation reserve of $7,866,277.

20. Tentative journal entries to record the transaction are presented in Section IV.

## IV. ASSET PURCHASE AGREEMENT

21. The Asset Purchase Agreement is dated October 20, 2021. The purchase price is Forty-One Million Two Hundred and Fifty Thousand Dollars ($41,250,000.00).

22. The purchase price is based on arm's length negotiations. Aqua and the City are not affiliated with each other.

23. Aqua will use short term debt initially for the purchase of the Acquired Assets with the expectation that the short-term debt will be converted to long-term debt and equity capital at a later date.

24. The wastewater system Acquired Assets to be transferred are the "Acquired Assets" and have the meaning specified in Section 2.01 of the Agreement. The Acquired Assets include the assets, properties and rights of the City used in the system and all treatment facilities, pipes, pumping stations, generators, manholes and pipelines and billing and collections related assets necessary to run the system.

25. Acquired Assets at the time of the Application filing also include the four contracts identified on Schedule 4.15 of the Agreement to which City is a party (the "Assigned Contracts"). The Assigned Contracts are attached hereto as **Exhibit F1**, **Exhibit F2**, **Exhibit F3**, and **Exhibit F4**, respectively:[2]

F1 – Agreement, dated April 28, 1977, between the City of Beaver Falls and Township of Patterson.

F2 – Cooperation Agreement, dated May 1, 1983, between the Borough of Eastvale and the City of Beaver Falls.

F3 – Agreement, dated November 1998, between the Big Beaver Municipal Authority and the City of Beaver Falls.[3]

[2] As noted below, Exhibits F3 and F4 are missing certain pages and/or exhibits. The Company and Beaver Falls have sought to obtain the missing items from the parties to the contracts through Right to Know Law ("RTKL") requests. Should the documents/information requested via RTKL be located and become available, Aqua will supplement the Application and record accordingly.

[3] Missing Signature Pages for Big Beaver Municipal Authority and City of Beaver Falls, and Exhibit A.

F4 – Agreement, dated January 9, 2003, between North Sewickley Township Sewer Authority and the City of Beaver Falls.[4]

While these agreements are listed as part of the Acquired Assets, the Company is submitting with this Application new Wastewater Service Agreements which the Company has negotiated with each of the Contributing Municipalities which will terminate and replace all prior agreements for the conveyance and treatment of wastewater ("New Wastewater Service Agreements"). The New Wastewater Service Agreements are meant to standardize wastewater conveyance and treatment service to each of the Contributing Municipalities, including the Contributing Municipalities which do not have a conveyance and treatment agreement that could be located.[5] The Company requested any agreements regarding conveyance and treatment under the RTKL to Patterson Heights Borough, West Mayfield Borough, and White Township and those responses are attached as **Exhibit F6**, **Exhibit F7**, and **Exhibit F8**. The New Wastewater Service Agreements are included in this Application as **Exhibit F9**, **Exhibit F10**, **Exhibit F11**, **Exhibit F12**, **Exhibit F13**, **Exhibit F14**, and **Exhibit F15**. The City has disclosed an April 8, 2014 Capital Lease Agreement, which is attached as **Exhibit F5**. The City notes that it included the document for the sake of disclosure, but has not been able to identify the counterparty entity and makes no representation as to the validity of that agreement. Moreover, the New Wastewater Service Agreements cancel all prior agreements concerning wastewater service between the parties, and, therefore, the Capital Lease Agreement will terminate if it was a valid agreement. Additionally, included as **Exhibit F16** is an agreement between Aqua and the City for certain charitable contributions. The Company is also submitting a pro-forma meter reading agreement between Aqua and BFMA for the provision of water meter read data for billing

[4] Missing Exhibits A and B.

[5] The Company could not locate any conveyance and treatment agreements for Patterson Heights Borough, West Mayfield Borough, and White Township.

purposes post-closing. The meter read agreement is included in this Application as **Exhibit F17**. Finally, the Company is submitting a settlement agreement ("Settlement") by and between Aqua, the City, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township, included as **Exhibit F18**. Further details regarding the Settlement are provided in Section XIII, *infra*.

26. Acquired Assets also include all Authorizations and Permits of or held by Beaver Falls (to the extent transferrable to Aqua under applicable Law), including all Authorizations and Permits which are environmental permits, other operating permits and those items listed or described on Schedule 4.14 of the Agreement.

27. "Excluded Assets," which are those assets not being transferred to Aqua, has the meaning specified in Section 2.02 of the Agreement. Excluded Assets include Stormwater System Assets, contracts that are not Assigned Contracts, cash and cash equivalents and the assets, insurance policies, Beaver Falls' Plans, properties and rights set forth in Schedule 2.02(h) of the Agreement.

28. "Assumed Liabilities" has the meaning specified in Section 2.04(a) of the Agreement and include all liabilities and obligations arising out of or relating to Aqua's ownership or operation of the wastewater system and the Acquired Assets on or after Closing.

29. The tentative journal entries to record the transfer in Aqua's accounts are:

| | Debit | Credit |
|---|---|---|
| Utility Plant Purchased | $41,250,000 | |
| Cash/Short Term Debt | | $41,250,000 |

## V. CUSTOMERS

30. Beaver Falls provides wastewater service to approximately 3,197 customers, which includes 2,879 residential, 276 commercial, 7 industrial, 17 public, 7 Contributing Municipalities, and 1 bulk pumping and hauling customer.

31. Wastewater flow billed for Beaver Falls customers within the City was approximately 162,435,115 gallons for 2021.[6] Wastewater flow billed to the Contributing Municipalities was 177,925,000 gallons.[7]

32. City projects growth of 183 Equivalent Dwelling Units ("EDUs") over the next five years.

## VI. RATES

33. After Closing, Aqua will implement Beaver Falls' sanitary wastewater rates in effect at closing as reflected on **Revised Exhibit G**. The Contributing Municipalities will be charged in accordance with the New Wastewater Service Agreements after closing. The City presently bills on a quarterly and monthly basis. Aqua will continue to bill Beaver Falls customers on a quarterly basis and monthly basis. A schedule of rates tariff page implementing monthly and quarterly rates for City customers post-closing is attached hereto as **Revised Exhibit G**.

34. As presented in **Revised** Schedule 7.04 of the Agreement, Beaver Falls bills customers inside the City of Beaver Falls a quarterly base fee of $43.64 ($14.54 monthly) which includes an allowance of 3,000 gallons and a consumption charge of $8.71 per 1,000 gallons based on water usage. Pursuant to the Settlement, the rate to the Contributing Municipalities at Closing will be $3.66 per 1,000 gallons based on water usage. Dalton Service Company, LLC is billed $4.68 per 1,000 gallons based on water usage. A copy of the City's currently effective Rate Ordinance is attached hereto as **Exhibit H**.

35. Upon Commission approval of this Application and completion of the proposed transaction, Aqua will begin to provide wastewater service in its name to the customers in the

[6] Billed flow is based on water usage.
[7] Billed flow is based on water usage.

Requested Territory. It will implement its *Rules and Regulations* to govern the provision of wastewater service in the Requested Territory, as those *Rules and Regulations* are in effect from time to time for Aqua.

36. Copies of the notices that will be sent to customers of Aqua and to customers of Beaver Falls describing the filing and the anticipated effect on rates are attached hereto as **Revised Exhibit I1**, **Revised Exhibit I2**, and **Revised Exhibit I3**.

## VII. COST OF SERVICE

37. Copies of Beaver Falls' Annual Financial Report for 2020 and 2021 are attached hereto as **Exhibit J1** and **Exhibit J2**. For the year ended December 31, 2021, the City had approximately $6,899,152 of long-term debt, and the details of long-term debt obligations are described in Note 9 in Exhibit J2. This debt is the long-term debt of the City, and there are no outstanding loans on the utility plant.

38. Copies of Beaver Falls' Adopted Annual Budgets for 2022 and 2023 are attached hereto as **Exhibit J3** and **Exhibit J4**.

39. A copy of Beaver Falls' most recent annual report filed with the Department of Community and Economic Development is attached hereto as **Exhibit K**.

40. Aqua projects annual revenue of $2,534,808 from the City's customers based on City's current rate schedule, calculated as follows:

| *Address Type* | *Service* | *Billed Dollars* | *Quarterly Minimum Fee Up to 3 Kgal* | *Rate per Kgal* | *Customers* | *EDUs* | *Total Usage* |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Domestic | Wastewater | $1,153,108 | $43.64 | $8.71 | 2,879 | 3,078 | 109,238,000 |
| | | | | | | | |
| **Domestic/Residential Total** | | **$1,153,108** | | | **2,879** | **3,078** | **109,238,000** |
| | | | | | | | |
| Commercial | Wastewater | $402,719 | $43.64 | $8.71 | 276 | 376 | 44,017,000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Commercial Total** | | **$402,719** | | | **276** | **376** | **44,017,000** |
| | | | | | | | |
| Industrial | Wastewater | $24,077 | $43.64 | $8.71 | 7 | 7 | 2,708,000 |
| | | | | | | | |
| **Industrial Total** | | **$24,077** | | | **7** | **7** | **2,708,000** |
| | | | | | | | |
| Public | Wastewater | $42,215 | $43.64 | $8.71 | 17 | 17 | 4,710,000 |
| | | | | | | | |
| **Public Total** | | **$42,215** | | | **17** | **17** | **4,710,000** |
| | | | | | | | |
| Bulk | Wastewater | $832,689 | | $4.68 | 7 | 3,767 | 177,925,000 |
| | | | | | | | |
| **Bulk Total** | | **$832,689** | | | **7** | **3,767** | **177,925,000** |
| | | | | | | | |
| Bulk Other | Wastewater | $80,000 | | $4.68 | 1 | 1 | 1,762,115 |
| | | | | | | | |
| **Bulk Total** | | **$80,000** | | | **1** | **1** | **1,762,115** |
| **Total Service Revenue** | | **$2,534,808** | | | **3,187** | **7,246** | **340,360,115** |

41. Aqua estimates annual operating and maintenance expenses of $1,462,000 based on Beaver Falls' operating expenses presented in the 2021 financial statements, adjusted by the Company.

## VIII. PROOF OF COMPLIANCE

42. Aqua will operate and manage the Beaver Falls wastewater system as a standalone collection system, but within Aqua's footprint, from its Western Division Office in Sharon, Pennsylvania with operations and management support from Aqua's Southeastern Division Office in Bryn Mawr, Pennsylvania. The system is approximately 32 miles from the Company's Western Division Office. Mr. Joseph Durish will be the assigned Certified Wastewater Operator for the system. Mr. Durish's currently effective Wastewater Operator's License is attached hereto as **Exhibit L**.

43. The Water Quality Management ("WQM") Permit for the Beaver Falls WWTP issued in 1996 is attached as **Exhibit M1**. Other WQM permits related to the WWTP and the System are included

in **Exhibit M1**, in reverse chronological order. The WQM permit for the Eastvale Pump Station is attached as **Exhibit M2**. The National Pollution Discharge Elimination System ("NPDES") Permit for the Beaver Falls WWTP is attached hereto as **Exhibit N1**. Copies of Discharge Monitoring Reports ("DMR") for the Beaver Falls WWTP from 2017 through November 2022, are attached hereto as **Exhibit N2**.

44. Notices of Violation ("NOVs") issued to Beaver Falls are attached hereto as **Exhibit O1**. Beaver Falls' response to the NOVs is also included in Exhibit O1. Beaver Falls entered into a Consent Assessment of Civil Penalty ("CACP") with DEP on September 26, 2019 in relation to violations of effluent limitations between December 2016 and June 2019. The CACP is attached hereto as **Exhibit O2**. Beaver Falls and the Contributing Municipalities have entered into Corrective Action Plans submitted to DEP and attached hereto as **Exhibit O3** (Beaver Falls), **Exhibit O4** (Big Beaver Municipal Authority), **Exhibit O5** (North Sewickley), **Exhibit O6** (Patterson), and **Exhibit O7** (White), respectively. Eastvale Borough, Patterson Heights Borough, and West Mayfield Borough have not submitted CAPs to DEP. Beaver Falls employed Gannet Fleming, Inc. ("Gannett") to perform a limited hazardous materials assessment at the WWTP in 2021, and Gannett reported through a technical memo that there were suspected asbestos containing materials at the WWTP. Gannett then performed a Phase I Environmental Site Assessment of the WWTP in July 2021. Beaver Falls informed the bidders that it would be engaging professionals to safely remove the material as of July 19, 2021. Attached hereto as **Exhibit O11** is the Gannett Technical Memorandum, the Phase I Environmental Site Assessment, and Beaver Falls' memo to bidders. As stated in Schedule 4.12 to the APA (*see* Application **Exhibit B**) the City removed asbestos in 2021.

45. Aqua is a Class A utility. It is in good standing with DEP and in general compliance with DEP with regard to the provision of wastewater service.

46. The service area comprising the Requested Territory is consistent with Beaver Falls' sewage planning and in compliance with DEP approved Act 537 Plans. A copy of Beaver Falls' Act 537 Plan documents is attached hereto as **Exhibit P1**.

47. The web address for the Beaver Falls Comprehensive Plan is: https://beaverfallspa.org/wp-content/uploads/2022/03/Beaver-Falls-Comprehensive-Plan-2013.pdf. The web address for the Beaver County Comprehensive Plan is: https://www.beavercountypa.gov/Depts/Planning/Documents/BC_ComprehensivePlan_May2010.pdf. Aqua is not requesting service territory beyond the existing plant footprint.

48. Aqua has wastewater operations in Venango County and Aqua PA has water operations in Lawrence County. The acquisition will easily fold into Aqua's existing wastewater operations. A listing of Aqua's nearby territory and facilities is as follows:

| Aqua Facilities | Location | Distance from City |
|---|---|---|
| Emlenton System | Emlenton, PA | 42 miles |
| Western Division Office | Sharon, PA | 32 miles |
| Mahoning Township System | Hillsville, PA | 19 miles |

49. Aqua is not anticipating any physical, operational or managerial changes at its Southeastern Office as a result of the acquisition. Aqua also does not anticipate any physical, operation, or managerial changes at its Western Division Office. Aqua will be offering employment to seven (7) operational staff from Beaver Falls to address the day-to-day operations of Beaver Falls.

50. Planned capital improvements are addressed in Mr. Bubel's testimony (Application **Exhibit V**, Aqua Statement No.2).

## IX. AFFECTED PERSONS

51. No corporation or entity, except Beaver Falls, is now furnishing or has corporate or franchise rights to furnish wastewater service in the Requested Territory, and no competitive condition

will be created by approval of this Application. Water and wastewater service providers abutting or within one mile of the Requested Territory are as follows:

i. Within neighboring Big Beaver Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Bradys Run Sanitary Authority and private septic systems.

ii. Within neighboring West Mayfield Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by West Mayfield Municipal Authority and private septic systems.

iii. Within neighboring Chippewa Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Bradys Run Sanitary Authority and private septic systems.

iv. Within neighboring White Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by White Township Municipal Authority and private septic systems.

v. Within neighboring Patterson Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Patterson Township Municipal Authority and private septic systems.

vi. Within neighboring Patterson Heights Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by Patterson Township Municipal Authority and private septic systems.

vii. Within neighboring Fallston Borough, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

viii. Within neighboring New Brighton Borough, water service is provided by Beaver Falls Municipal Authority. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

ix. Within neighboring Pulaski Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

x. Within neighboring Daugherty Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater service is provided by New Brighton Borough Sanitary Authority and private septic systems.

xi. Within neighboring Eastvale Borough, water service is provided by Beaver Falls Municipal Authority. Wastewater service is provided by Eastvale Borough.

xii. Within neighboring North Sewickley Township, water service is provided by Beaver Falls Municipal Authority and private wells. Wastewater Service is provided by North Sewickley Township Sewer Authority and private septic systems.

## X. REASONS SUPPORTING THIS APPLICATION

52. Approval of this Application is necessary or proper for the service, accommodation, convenience or safety of the public. As summarized below and discussed further in the testimonies of Mr. Packer, Mr. Bubel, and Mr. Martin which as identified in Section XI below, are attached hereto as **Exhibit U** and **Supplemental Exhibit U**, **Exhibit V**, and **Exhibit W** and **Supplemental Exhibit W**:

a. Aqua has the technical, regulatory, financial and legal fitness to operate the Acquired Assets of Beaver Falls, and to maintain the operations and make improvements to meet continuing and future customer needs.[8] The proposed transaction will not have an adverse effect on the service provided to existing customers of Aqua;

b. Beaver Falls has agreed to sell its assets. The public interest and need will be served by allowing Aqua, in lieu of Beaver Falls, to provide wastewater service in the Requested Territory and to address the issues of regulatory requirements and capital expenditures. The Beaver Falls system will benefit from the support of wastewater professionals throughout Aqua's organization;

c. The acquisition is consistent with the Commission's long-standing policy supporting the consolidation/regionalization of water/wastewater systems. Through consolidation/regionalization, the utility industry has a better chance to realize the benefits of better management practices, economies of scale, and the resulting greater environmental/economic benefits. The Commission has previously stated that

[8] As a certificated provider of utility service, Aqua's fitness is presumed. *See Re Pennsylvania-American Water Company*, 85 PA PUC 548 (1995).

"acquisitions of smaller systems by larger more viable systems will likely improve the overall long-term viability of the water and wastewater industry."[9] The benefits of consolidation/regionalization, ultimately, inure to customers both existing and acquired;

d. Aqua provides utility service to approximately 60,000 wastewater customers and has years of experience operating wastewater treatment and collection systems in a safe, reliable and efficient manner. Aqua has the managerial, technical, and financial resources to improve the operations of the City;

e. In *McCloskey v. Pa. P.U.C.*, 195 A.3d 1055 (Pa. Cmwlth. 2018), *petition for allowance of appeal denied* No. 703 MAL 2018 (April 23, 2019), the Commonwealth Court held that Commission findings: (i) that Aqua, as the owner of numerous water and wastewater systems has sufficient operational expertise and ability to raise capital to support system operations; and (ii) that the Commission has a policy of consolidation/regionalization of wastewater system assets that allows for increased maintenance, upgrade and expansion of public sewer and water facilities, are substantial evidence, consistent with *Popowsky v. Pa. P.U.C.*, 937 A.2d 1040 (Pa. 2007), to support a conclusion that there is a public benefit to a transaction;

f. The acquisition of the Beaver Falls Sewer system will increase Aqua's customer base by approximately 5%. With a larger customer base, future infrastructure investments, Statewide, will be shared at a lower incremental cost per customer for all Aqua customers; and

g. The acquisition will not have any immediate impact on the rates of either existing customers of Aqua or City customers, except as through the Settlement and New

[9] Pennsylvania Public Utility Commission, Final Policy Statement on Acquisitions of Water and Wastewater Systems, Docket No. M-00051926, Final Order at 18 (Aug. 17, 2006).

Wastewater Service Agreements, if approved, with the Contributing Municipalities described in Section XIII, *infra*. As discussed in the testimony of Mr. Packer and presented in the Notice to customers, the increase in rate base may ultimately require an increase in revenue. The hypothetical impact on rates is outweighed by the recognized benefits of Aqua's ownership including its expertise and ability to raise capital; the furtherance of consolidation/regionalization of wastewater services; repairs and process improvements to ensure safe operation of the WWTP; adequate staffing at the WWTP; and the spreading of costs over a larger customer base. Perhaps more significantly, the acquisition furthers the objective of the General Assembly with the enactment of Section 1329. While *McCloskey* concludes that rate impact should be addressed, it recognizes that it is not dispositive in the Commission's determination of substantial affirmative benefits.

## XI. ADDITIONAL INFORMATION REQUIRED BY SECTION 1329 OF THE PUBLIC UTILITY CODE AND THE PUBLIC UTILITY COMMISSION'S 1329 CHECKLIST

53. Aqua and Beaver Falls have agreed to use the process presented in Section 1329 of the Public Utility Code, 66 Pa.C.S. § 1329, to determine the fair market value of the Acquired Assets and the ratemaking rate base. Aqua's verified statement that it selected ScottMadden, Inc. ("ScottMadden") as its Utility Valuation Expert is attached hereto as **Exhibit BB1**. Beaver Falls' verified statement that it selected Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") as its Utility Valuation Expert is attached hereto as **Exhibit BB2**.

54. As required by Section 1329(d)(1)(i), copies of the Fair Market Value Appraisal Reports of ScottMadden, Utility Valuation Expert, and Gannett Fleming, Utility Valuation Expert, are attached hereto as **Exhibit Q** and **Exhibit R**, respectively. Confidential and Proprietary Work Paper

Files, in Excel Format, of ScottMadden and Gannett Fleming are provided with the Application, as explained in the cover letter thereto.

55. Applicant states that the purchase price of the Acquired Assets of the selling utility as agreed to by Aqua and Beaver Falls is $41,250,000.

56. The ratemaking rate base determined pursuant to Section 1329(c)(2) of the Public Utility Code is $41,250,000, being the lesser of the purchase price of $41,250,000 negotiated by Aqua and Beaver Falls and the average of the fair market value appraisals which is $42,245,674 – determined by $40,199,348 presented in the appraisal of ScottMadden and $44,292,000 presented in the appraisal of Gannett Fleming.

57. Aqua will incur transaction and closing costs of approximately $714,980, which it will include in its rate base.

58. A schedule of rates tariff page implementing rates equal to the rates of Beaver Falls at the time of closing is attached hereto as **Revised Exhibit G**, as previously stated.

59. Applicant verifies that ScottMadden was selected by Aqua, the acquiring public utility, and that Gannett Fleming was selected by Beaver Falls, the selling municipality.

60. The Utility Valuation Experts were paid $71,297.50 for the completed Fair Market Value Appraisal Reports. Documentation of the fees paid to ScottMadden and Gannett Fleming, including the valuation service agreements and all associated invoices, are attached hereto as **Exhibit S1** and **Exhibit S2**, respectively. Fees paid to the Utility Valuation Experts did not exceed 5% of the fair market value of the selling utility.

61. Statements of ScottMadden and of Gannett Fleming verifying that they have no affiliation with Aqua or Beaver Falls as specified in Section 1329; that their Appraisals determined fair market value in compliance with the most recent edition of the Uniform Standards of Professional

Appraisal Practice as of the date of their report, employing the cost, market and income approaches; and that they applied applicable jurisdictional exceptions to their submitted Appraisal are attached hereto as **Exhibit T1** and **Exhibit T2**, respectively.

62. The testimony of William C. Packer, in support of this Application is attached hereto as **Exhibit U** and **Supplemental Exhibit U**.[10] Mr. Packer's testimony explains that Aqua is not presenting a rate stabilization plan. Aqua is proposing to implement Beaver Falls' existing rates after Closing and to maintain those rates until the next Aqua rate proceeding following Closing of the transaction.

63. The testimony of Mark J. Bubel, Sr., in support of this Application is attached hereto as **Exhibit V**.

64. The testimony of Zach Martin, in support of this Application is attached hereto as **Exhibit W** and Supplemental **Exhibit W**. Mr. Martin's revised testimony includes additions to describe the current state of System operations, including operational and safety issues after further review.

65. The testimony of Charles R. Jones, Jr., City Manager, in support of the Application is attached hereto as **Exhibit X** and **Supplemental Exhibit X**. Mr. Jones' revised testimony includes additional information on the public benefits of the transaction.

66. The testimony of Dylan W. D'Ascendis in support of the ScottMadden Appraisal is attached hereto as **Exhibit Y**.

67. The testimony of Harold Walker, III, in support of the Gannett Fleming Appraisal is attached hereto as **Exhibit Z**.

[10] Electronic workpapers of Appendix A to Aqua Statement No. 1 are being submitted to the Commission under CONFIDENTIAL cover.

68. Answers to the Section 1329 Application Standard Data Requests are attached hereto as **Exhibit AA.**

## XII. SECTION 507 APPROVAL OF CONTRACTS

69. Section 507 of the Code, 66 Pa.C.S. § 507, provides that, except for contracts between a public utility and a municipal corporation to furnish service at tariff rates, no contract or agreement between a public utility and a municipal corporation shall be valid unless filed with the Commission at least 30 days prior to its effective date.

70. Aqua requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507, of the New Wastewater Service Agreements which are included in this Application. The New Wastewater Service Agreements are included as **Exhibit F9** through **Exhibit F15** to the Application. Aqua requests approval of the charitable contribution agreement between Aqua and the City included as **Exhibit F16** to the Application. Aqua also requests that the Commission, to the extent necessary, issue certificates for filing, pursuant to Section 507, upon execution and filing of the pro-forma meter read agreement with the BFMA included as **Exhibit F17** to the Application. Further, as explained next, Aqua requests approval of the Settlement among Aqua, the City, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township included as **Exhibit F18.**

## XIII. SETTLEMENT WITH CERTAIN CONTRIBUTING MUNICIPALITIES

71. As indicated previously, the City provides conveyance wastewater treatment services for seven Contributing Municipalities.

72. On or about September 22, 2022, the Contributing Municipalities of Patterson Township, Patterson Heights Borough, White Township and West Mayfield Borough (collectively, the "Plaintiff Municipalities") filed suit against Aqua and the City. The suit alleged, *inter alia*, that the Plaintiff Municipalities are part owners of the City's treatment facilities.

73. Aqua and the City answered the suit, and denied that the Plaintiff Municipalities were part owners of the City's treatment facilities.

74. Aqua, the City and the Plaintiff Municipalities undertook negotiations, that resulted in the Settlement that is included herein as **Exhibit F18**. The Settlement provides, *inter alia*, that in exchange for certain payments by Aqua and the City to the Plaintiff Municipalities, the Plaintiff Municipalities agree to withdraw their suit, agree to withdraw their protests to this Application, and agree to enter into a wastewater service agreement, which was negotiated, entered into, and included in this Revised Application.

75. Aqua will not seek recovery from customers, either through inclusion in rate base or as an expense in future rate proceedings, of the payments made by Aqua or the City to the Plaintiff Municipalities through the Settlement.

## XIV. OTHER APPROVALS, CERTIFICATES, REGISTRATIONS AND RELIEF, IF ANY

76. Aqua asks that the Commission issue such other approvals, certificates, registrations and relief, if any, that may be required with respect to Aqua's acquisition of the Beaver Falls wastewater system assets.

## XV. CONCLUSION

**WHEREFORE**, Aqua requests that the Public Utility Commission approve this Application, filed pursuant to Sections 1102, 1329, 507, and 508 of the Public Utility Code, and:

a. Issue *Certificates of Public Convenience* under §1102 of the Pennsylvania Public Utility Code:

(1) Authorizing Aqua to acquire, by purchase, the wastewater system assets of the City of Beaver Falls; and

(2) Authorizing Aqua to begin to offer, render, furnish and supply wastewater service to the public in the Requested Territory covered by this Application.

b. Authorize Aqua to file tariff revisions, effective upon one day's notice, to:

(1) Include within its territory all the Requested Territory covered by this Application;

(2) Adopt and apply the City of Beaver Falls' rates as set forth in this Application as Aqua's Base Rates within the Requested Territory; and

(3) Apply Aqua's *Rules and Regulations* within the Requested Territory.

c. Enter an *Order* approving this Application and Aqua's acquisition of the Acquired Assets and, as part of that *Order* include the ratemaking rate base of the City of Beaver Falls as $41,250,000 pursuant to Section 1329(c)(2) of the Public Utility Code;

d. Approve Contracts, including the New Wastewater Service Agreements entered into by Aqua and the Contributing Municipalities, the charitable contribution agreement between Aqua and the City, the pro forma meter read agreement between Aqua

and the BFMA, and the Settlement Agreement entered into by Aqua, the City and the Plaintiff Municipalities pursuant to Section 507 of the Public Utility Code; and

e. Issue such other approvals, certificates, registrations and relief, if any, under the Public Utility Code that may be required with respect to Aqua's acquisition of the City of Beaver Falls wastewater system assets.

Respectfully submitted,

**AQUA PENNSYLVANIA WASTEWATER, INC.**

By Michael W. Hassell

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*Counsel for Aqua Pennsylvania Wastewater, Inc.*

Date: March 28, 2024

# EXHIBIT F9

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 19th day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the BOROUGH OF BIG BEAVER, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Agreement by and between the Big Beaver Municipal Authority (the "Authority") and the City dated November 1998, as the same has been assigned to the Municipality by operation of law on the dissolution of the Authority (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services; and

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Municipality's ordinance applicable to the Municipality System as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Meter." A flow meter that Aqua installs at a Connection Point.

2.1.2. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.3. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.4. "Contributing Users." The Borough of Eastvale, City, Municipality, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.5. "Designated Person." A single person that the Municipality designates in writing to Aqua as being the point of contact at the Municipality regarding the Municipality System.

2.1.6. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.7. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.8. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.8.1. "Metered Flow." Any Flow through the Metered Point.

2.1.8.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided

to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.9. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.10. "Industrial Waste Survey." As defined in Section 12.

2.1.11. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.12. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.13. "Metered Point." The Wallace Run pump station; provided, however, if Aqua elects to install an Aqua Meter, "Metered Point" shall mean the Connection Point at which the Aqua Meter is located. If Aqua elects to install an Aqua Meter, Exhibit B shall be amended to evidence the Connection Point at which the Aqua Meter is installed.

2.1.14. "Municipality Meter." The flow meter located at the Wallace Run pump station and any replacement of such flow meter that the Municipality installs.

2.1.15. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.16. "Outside Users." The Contributing Users excluding the City.

2.1.17. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.18. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.19. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.20. "PUC." The Pennsylvania Public Utility Commission.

2.1.21. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's Ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. The presence of the Municipality Meter shall be deemed Aqua installing a flow meter in the Municipality System for purposes of this Section 7.1. During the period in which an Aqua Meter has not been installed, the Municipality shall communicate to Aqua flow calculations from the Municipality Meter for each quarter within thirty (30) days of the end of each quarter. If Aqua elects to install an Aqua Meter, after the installation of the Aqua Meter, Aqua shall communicate to the Municipality Flow calculations from the Aqua Meter for such quarter within thirty (30) days of the end of each quarter. All daily Flow calculations (whether by Aqua or the Municipality) from be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. The Municipality shall (a) maintain accurate Flow records for Metered Flow based on the Flow meter readings from the Municipality Meter; and (b) own, operate, maintain and replace, if necessary, the Municipality Meter and shall calibrate the Municipality Meter in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings. If Aqua installs an Aqua Meter, Aqua shall (x) maintain accurate Flow records for Metered Flow based on the Flow meter readings from the Aqua Meter; and (y) own, operate, maintain and replace, if necessary, the Aqua Meter and shall calibrate the Aqua Meter in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts (a) for an Aqua Meter (if Aqua elects to install an Aqua Meter) shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost, and (b) the Municipality Meter shall be tested, calibrated, maintained, and

repaired at least annually by the Municipality at the Municipality's cost. The party responsible for the testing and calibration of a meter (the "Testing Party") shall provide the other party (the "Non-testing Party") with the results of such testing and calibration upon request and no later than fourteen (14) business days from such request. If the Non-testing Party requests additional testing, calibration, maintenance and repair, such expenses associated therewith shall be at the cost of the Non-testing Party.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the party that does agree to the accuracy of a meter may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua or the Municipality, as applicable, shall notify the other for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired

System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. If Aqua elects to install an Aqua Meter, Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of the Aqua Meter, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device. The Municipality shall pay for all costs and expenses that the Municipality incurs related to the installation or maintenance of the Municipality Meter, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining such metering device.

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at any Connection Point or at the Wallace Run pump station or at such other location in the Municipality System on which Aqua and the Municipality may agree for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall provide the Municipality 15 days notice before the installation of any permanent sampling equipment at the Wallace Run pump station or within the Municipality's System. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality. Aqua and the Municipality will use best efforts to cooperate on obtaining samples from the Wallace Run pump station in the case of emergency or as may otherwise be reasonably requested by Aqua.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. Aqua shall provide notice via e-mail to the Designated Person prior to accessing the Municipality System in relations to the installation, accessing, operation or maintenance of any Aqua Meter that Aqua elects to install or any Sampling Equipment that Aqua elects to install

pursuant to Section 10, which access shall not be unreasonably withheld, hindered or delayed and the Municipality shall timely grant. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate, and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua

shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to Sale of Acquired System. Effective as of the Execution Date, the Municipality (a) hereby consents to Aqua's purchase and acquisition of the Acquired System and related assets, (b) hereby waives any and all objections it has or may have in regard to the City's sale and Aqua's acquisition of the Acquired System and related assets, and (c) shall take any and all actions reasonably requested by Aqua and/or the City to effectuate the City's sale and Aqua's acquisition

of the Acquired System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19.

20. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

21. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

22. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

23. Miscellaneous.

23.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

23.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

23.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

23.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit

during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

23.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

23.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

23.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

23.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Borough of Big Beaver
114 Forest Drive
Darlington, PA 16115
Attn: Mayor

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010

Attn: General Counsel

23.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater**,** including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

23.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

23.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

23.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

23.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

23.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Marc A. Lucca

Title: President

MUNICIPALITY:

BOROUGH OF BIG BEAVER

By: _____

Name: Michelle Joy

Title: President of Council

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | BOROUGH OF BIG BEAVER |
| By: _____ | By: _____ |
| Name: Marc A. Lucca | Name: Michelle Joy |
| Title: President | Title: President of Council |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

# EXHIBIT A
# CONNECTION POINTS

Attached

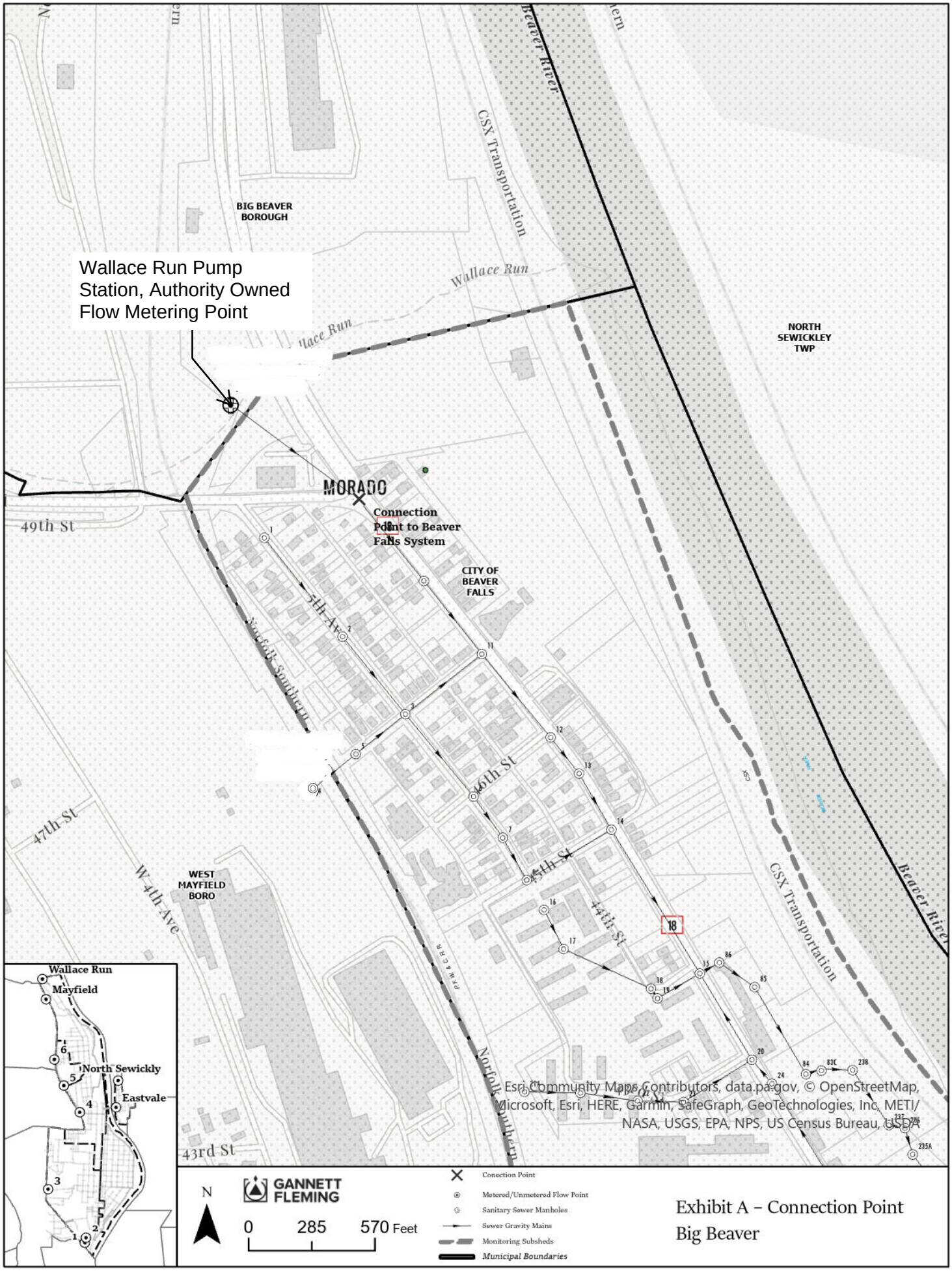

Wallace Run Pump Station, Authority Owned Flow Metering Point
BIG BEAVER BOROUGH
Wallace Run
CSX Transportation
Beaver River
NORTH SEWICKLEY TWP
MORADO
Connection Point to Beaver Falls System
CITY OF BEAVER FALLS
49th St
47th St
46th St
45th St
44th St
43rd St
5th Ave
W 4th Ave
WEST MAYFIELD BORO
Norfolk Southern
Esri Community Maps Contributors, data.pa.gov, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, EPA, NPS, US Census Bureau, USDA
Wallace Run
Mayfield
North Sewickly
Eastvale
N
GANNETT FLEMING
0
285
570 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit A – Connection Point
Big Beaver

EXHIBIT B
CONNECTION POINTS HAVING AQUA METER

None

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

None

# EXHIBIT F10

EXECUTION VERSION

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 4th day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the BOROUGH OF EASTVALE, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Cooperation Agreement by and between the Municipality and the City dated May 1, 1983 (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services; and

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Municipality's ordinance applicable to the Municipality System as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, City, Municipality, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside

Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's Ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are

in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14)) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation,

or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate,

and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this

Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to Sale of Acquired System. Effective as of the Execution Date, the Municipality (a) hereby consents to Aqua's purchase and acquisition of the Acquired System and related assets, (b) hereby waives any and all objections it has or may have in regard to the City's sale and Aqua's acquisition of the Acquired System and related assets, and (c) shall take any and all actions reasonably requested by Aqua and/or the City to effectuate the City's sale and Aqua's acquisition of the Acquired System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19.

20. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

21. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

22. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

23. Miscellaneous.

23.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

23.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

23.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

23.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

23.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

23.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

23.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

23.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Borough of Eastvale
Eastvale Municipal Building
512 2nd Avenue Eastvale
Beaver Falls, PA 15010
Attn: Mayor

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

23.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater, including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

23.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

23.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

23.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

23.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and

disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

23.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Mark A. Lucca

Title: President

MUNICIPALITY:

BOROUGH OF EASTVALE

By: _____

Name: _____

Title: _____

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Dr. Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | BOROUGH OF EASTVALE |
| By: _____ | By: Sam Cupec |
| Name: Mark A. Lucca | Name: Sam Cupec |
| Title: President | Title: President |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Dr. Kenya Johns

Title: Mayor

# EXHIBIT A
# CONNECTION POINTS

Attached

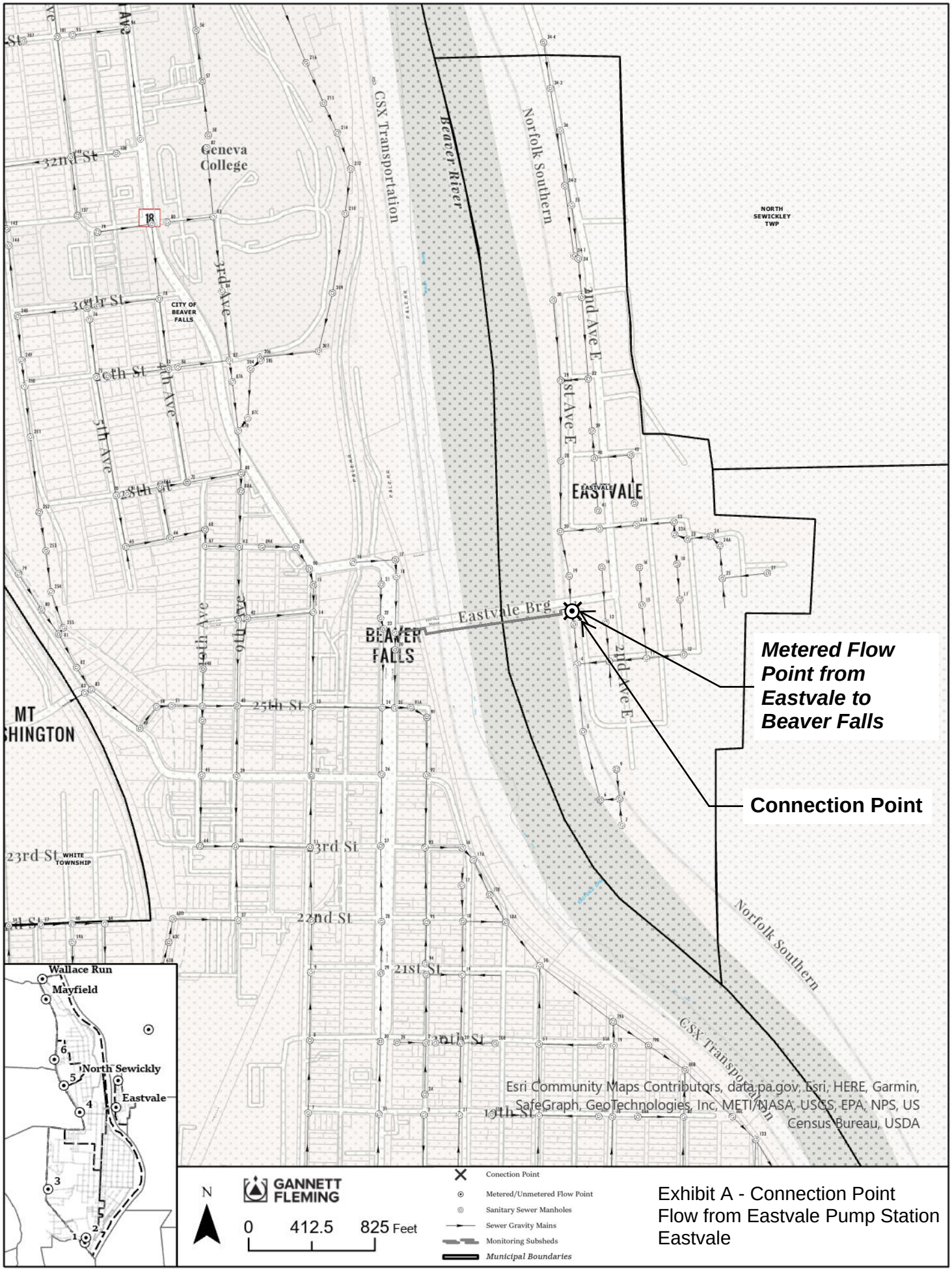
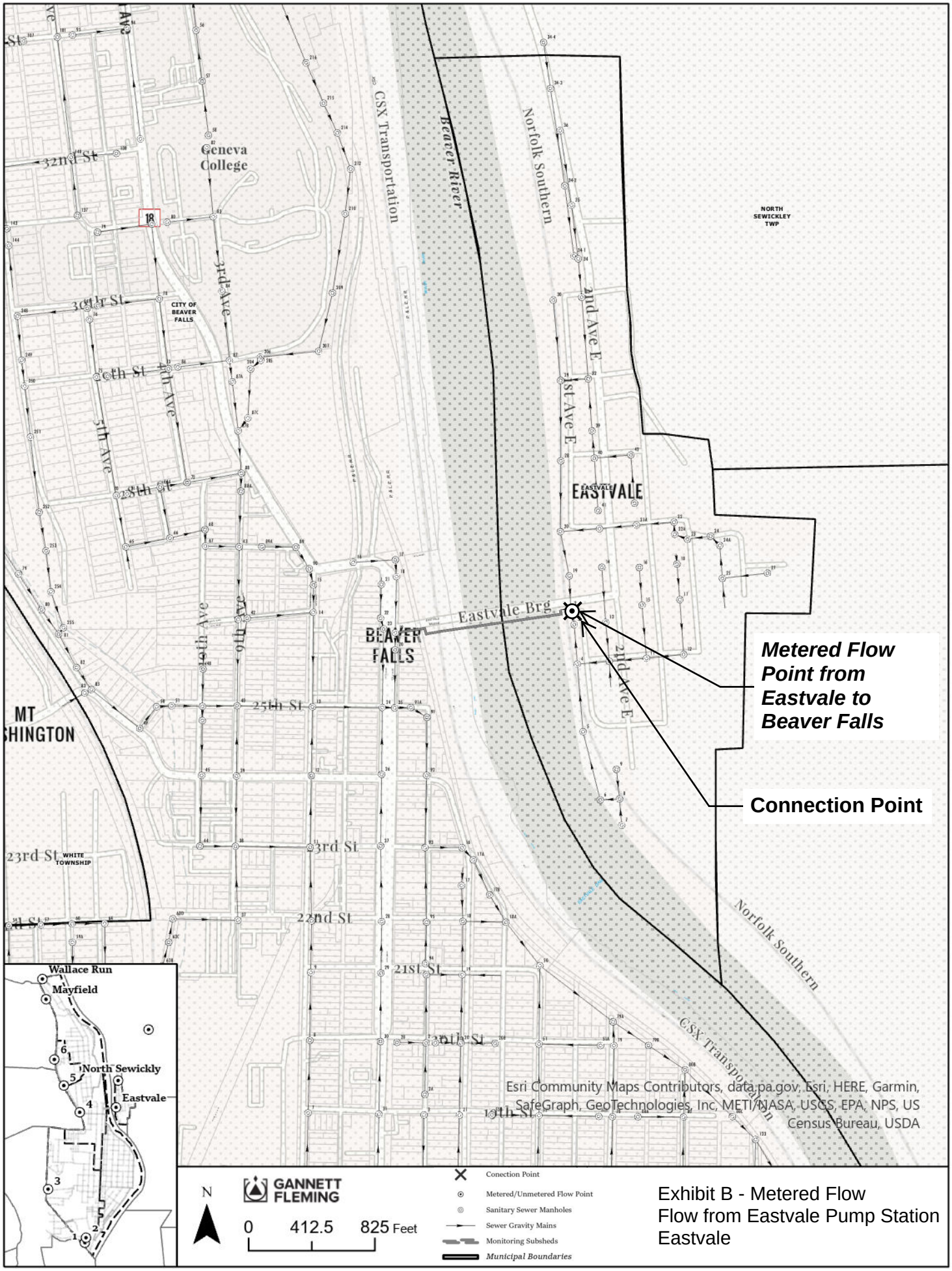

Geneva College
CSX Transportation
Beaver River
Norfolk Southern
NORTH SEWICKLEY TWP
CITY OF BEAVER FALLS
EASTVALE
BEAVER FALLS
Eastvale Brg
MT WASHINGTON
WHITE TOWNSHIP
32nd St
30th St
28th St
25th St
23rd St
22nd St
21st St
19th St
3rd St
1st Ave E
2nd Ave E
3rd Ave
4th Ave
5th Ave
6th St
Metered Flow Point from Eastvale to Beaver Falls
Connection Point
Wallace Run
Mayfield
North Sewickly
Eastvale
Esri Community Maps Contributors, data.pa.gov, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA
N
GANNETT FLEMING
0 412.5 825 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit A - Connection Point
Flow from Eastvale Pump Station
Eastvale

EXHIBIT B
CONNECTION POINTS HAVING FLOW METERS

Attached


Geneva College
CSX Transportation
Beaver River
Norfolk Southern
NORTH SEWICKLEY TWP
CITY OF BEAVER FALLS
EASTVALE
BEAVER FALLS
Eastvale Brg
32nd St
30th St
6th St
5th Ave
4th Ave
3rd Ave
2nd Ave E
1st Ave E
25th St
23rd St
22nd St
21st St
19th St
3rd St
WHITE TOWNSHIP
MT WASHINGTON
Metered Flow Point from Eastvale to Beaver Falls
Connection Point
Wallace Run
Mayfield
North Sewickly
Eastvale
Esri Community Maps Contributors, data.pa.gov, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA
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GANNETT FLEMING
0 412.5 825 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit B - Metered Flow
Flow from Eastvale Pump Station
Eastvale

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

None

# EXHIBIT F11

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 21st day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and THE NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY, a municipal authority (the "Authority"). Aqua and the Authority are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Authority owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from North Sewickley Township (the "Authority System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Authority System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the wastewater emanating from the Authority System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Authority desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the wastewater emanating from the Authority System by the Acquired System including, without limitation, that certain Agreement by and between the Authority and the City dated January 9, 2003 (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the wastewater emanating from the Authority System by the Acquired System and the charge for such services; and

WHEREAS, operation of the Authority sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP").

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Authority Meter." The flow meter located at the Bennetts Run pump station and any replacement of such flow meter that the Authority installs.

2.1.2. "Aqua Meter." A flow meter that Aqua installs at a Connection Point.

2.1.3. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.4. "Connection Points." The locations at which the Authority System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.5. "Contributing Users." The Authority, Borough of Big Beaver, Borough of Eastvale, City, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.6. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.7. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Authority, the components of the Authority System.

2.1.8. "Flow." The quantity or volume of wastewater that emanates from the Authority System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.8.1. "Metered Flow." Any Flow through the Metered Point.

2.1.8.2. "Un-Metered Flow." Any Flow through interconnections of the Authority System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Authority System will be deducted from the bill to the Authority System. Un-Metered Flow originating from the Authority System flowing to the Acquired Collection System will be added to the bill of the Authority System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow

interconnections occur, or existing connections are removed, to or from the Authority System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.9. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.10. "Industrial Waste Survey." As defined in Section 12.

2.1.11. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.12. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.13. "Metered Point." The Bennetts Run pump station; provided, however, if Aqua elects to install an Aqua Meter, "Metered Point" shall mean the Connection Point at which the Aqua Meter is located. If Aqua elects to install an Aqua Meter, Exhibit B shall be amended to evidence the Connection Point at which the Aqua Meter is installed.

2.1.14. "Notice Date." The date that Aqua provides written notice to the Authority that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.15. "Outside Users." The Contributing Users excluding the City.

2.1.16. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.17. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.18. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.19. "PUC." The Pennsylvania Public Utility Commission.

2.1.20. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Authority System. The wastewater that emanates from the Authority System shall be delivered to the Acquired Treatment Plant from the Authority System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Authority covenants and agrees that all wastewater emanating from the Authority System to the Acquired System shall be in accordance and compliance with all requirements of the Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Authority System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Authority System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Authority System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Authority System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Authority System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. The presence of the Authority Meter shall be deemed Aqua installing a flow meter in the Authority System for purposes of this Section 7.1. During the period in which an Aqua Meter has not been installed, the Authority shall communicate to Aqua flow calculations from the Authority Meter for each quarter within thirty (30) days of the end of each quarter. If Aqua elects to install an Aqua Meter, after the installation of the Aqua Meter, Aqua shall communicate to the Authority Flow calculations from the Aqua Meter for such quarter within thirty (30) days of the end of each quarter. All daily Flow calculations (whether by Aqua or the Authority) from be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. The Authority shall (a) maintain accurate Flow records for Metered Flow based on the Flow meter readings from the Authority Meter; and (b) own, operate, maintain and replace, if necessary, the Authority Meter and shall calibrate the Authority Meter in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings. If Aqua installs an Aqua Meter, Aqua shall (x) maintain accurate Flow records for Metered Flow based on the Flow meter readings from the Aqua Meter; and (y) own, operate, maintain and replace, if necessary, the Aqua Meter and shall calibrate the Aqua Meter in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts (a) for an Aqua Meter (if Aqua elects to install an Aqua Meter) shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost, and (b) the Authority Meter shall be tested, calibrated, maintained, and repaired at least annually by the Authority at the Authority's cost. The party responsible for the testing and calibration of a meter (the "Testing Party") shall provide the other party (the "Non-testing Party") with the results of such testing and calibration upon request and no later than fourteen (14) business days from such request. If the Non-testing Party requests additional testing, calibration, maintenance and repair, such expenses associated therewith shall be at the cost of the Non-testing Party.

7.3.2. If the Authority and Aqua cannot agree as to the inaccuracy of any meter, the party that does agree to the accuracy of a meter may request that the meter be tested by an independent testing facility mutually agreed to by the Authority and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Authority and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if

such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua or the Authority, as applicable, shall notify the other for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Authority shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Authority System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Authority System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Authority shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Authority does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Authority shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Authority System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Authority or DEP, and whereby external fines or penalties may result, the Authority shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Authority, Aqua and the Authority shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. If Aqua elects to install an Aqua Meter, Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of the Aqua Meter, which shall include, without limitation, the cost of the metering device and any other equipment related

or ancillary to such metering device and labor incurred in installing and maintaining any metering device. The Authority shall pay for all costs and expenses that the Authority incurs related to the installation or maintenance of the Authority Meter, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining such metering device.

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at any Connection Point or at the Bennetts Run pump station or at such other location in the Authority System on which Aqua and the Authority may agree for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Authority for concurrent independent analysis by the Authority.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Authority hereby grants Aqua an easement over any of its property and a license to access the Authority System in order to install, access, operate or maintain (a) any Aqua Meter that Aqua elects to install, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Authority shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Authority may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Authority's sole expense and the Authority shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Authority shall maintain a current list of users of the Authority System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Authority System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Authority shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater emanating from the Authority System, the Authority shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate, and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Authority quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Authority shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Authority shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Authority within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Authority in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Authority exceed the Peak Flow Limitation Amount, the Authority shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Authority shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Authority paying the subject penalty payment to Aqua, the Authority shall be permitted to use this money to address I&I within the Authority System. If the Authority elects to make improvements to the Authority System to address I&I, the Authority shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Authority intends to make improvements to the Authority System, which notice shall include what improvements the Authority intends to make to the Authority System, (b) complete such improvements to the Authority System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Authority elects to make improvements to the Authority System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Authority shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary

of the date on which Aqua commences billing the Authority solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Authority to make I&I repairs to the Authority System. Notwithstanding anything set forth in this section to the contrary, the Authority shall be permitted to transmit Flow of up to 450 gallons per minute from the Authority System to the Acquired System without penalty or surcharge by Aqua.

16. Authority System. During the Term, the Authority shall, at its sole cost and expense, maintain the Authority System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Authority System and any repair, maintenance, expansion or modification of all or any part of the Authority System shall be at the sole cost and expense of the Authority.

17. Indemnification

17.1. Indemnification by the Authority. The Authority shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Authority in connection with the collection or conveyance of any wastewater emanating from the Authority System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Authority with respect to the Authority System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Authority System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Authority of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Authority is not immune under applicable Law, Aqua shall indemnify and defend the Authority, and the Authority's elected officials, directors, officers, employees, representatives and agents (collectively the "Authority Indemnified Parties") against, and shall hold the Authority Indemnified Parties harmless from and against, and shall pay and reimburse the Authority Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Authority Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Authority System except to the extent that any such injury, death or damage is caused by the Authority (including, without limitation, resulting from any breach of this Agreement by the Authority) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Authority for which the Authority could potentially seek indemnification from Aqua pursuant to the provision of this Section 17.2, the Authority shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Authority shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Authority), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to Sale of Acquired System. Effective as of the Execution Date, the Authority (a) hereby consents to Aqua's purchase and acquisition of the Acquired System and related assets, (b) hereby waives any and all objections it has or may have in regard to the City's sale and Aqua's acquisition of the Acquired System and related assets, and (c) shall take any and all actions reasonably requested by Aqua and/or the City to effectuate the City's sale and Aqua's acquisition of the Acquired System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19.

20. Consent to City Updating of City's Act 537 Plan. The Authority acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Authority shall review the update to the City's Act 537 Plan and provide comments to the City's updated Act 537 Plan (the "Updated Plan") and, if appropriate, shall pass a resolution approving the Updated Plan and urging the Township of North Sewickley to adopt the Updated Plan. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

21. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Authority; and, within six (6) months of the date of

such notice, the City or Aqua and the Authority shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

22. Planning Modules. For any changes within the Authority (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Authority will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Authority's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

23. Miscellaneous.

23.1. Inspection and Audit. Aqua and the Authority agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Authority shall make said records and accounts immediately available to federal and state authorities.

23.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

23.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

23.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

23.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

23.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring

construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

23.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

23.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Authority: The North Sewickley Township Sewer Authority
893 Mercer Road
Beaver Falls, PA 15010
Attn: Lisa Crespo, Operations Manager

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

23.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Authority with respect to the conveyance and/or treatment of wastewater, including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

23.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

23.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

23.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

23.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Authority under this Agreement.

23.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

**IN WITNESS WHEREOF**, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | THE NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY |
| By: _____ | By: _____ |
| Name: Marc A. Lucca | Name: _____ |
| Title: President | Title: _____ |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | THE NORTH SEWICKLEY TOWNSHIP SEWER AUTHORITY |
| By: _____ | By: _____ |
| Name: Marc A. Lucca | Name: Scott Morton |
| Title: President | Title: Chairman |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Sections 19 and 23.9. No other terms or obligations within this Agreement apply to the City.

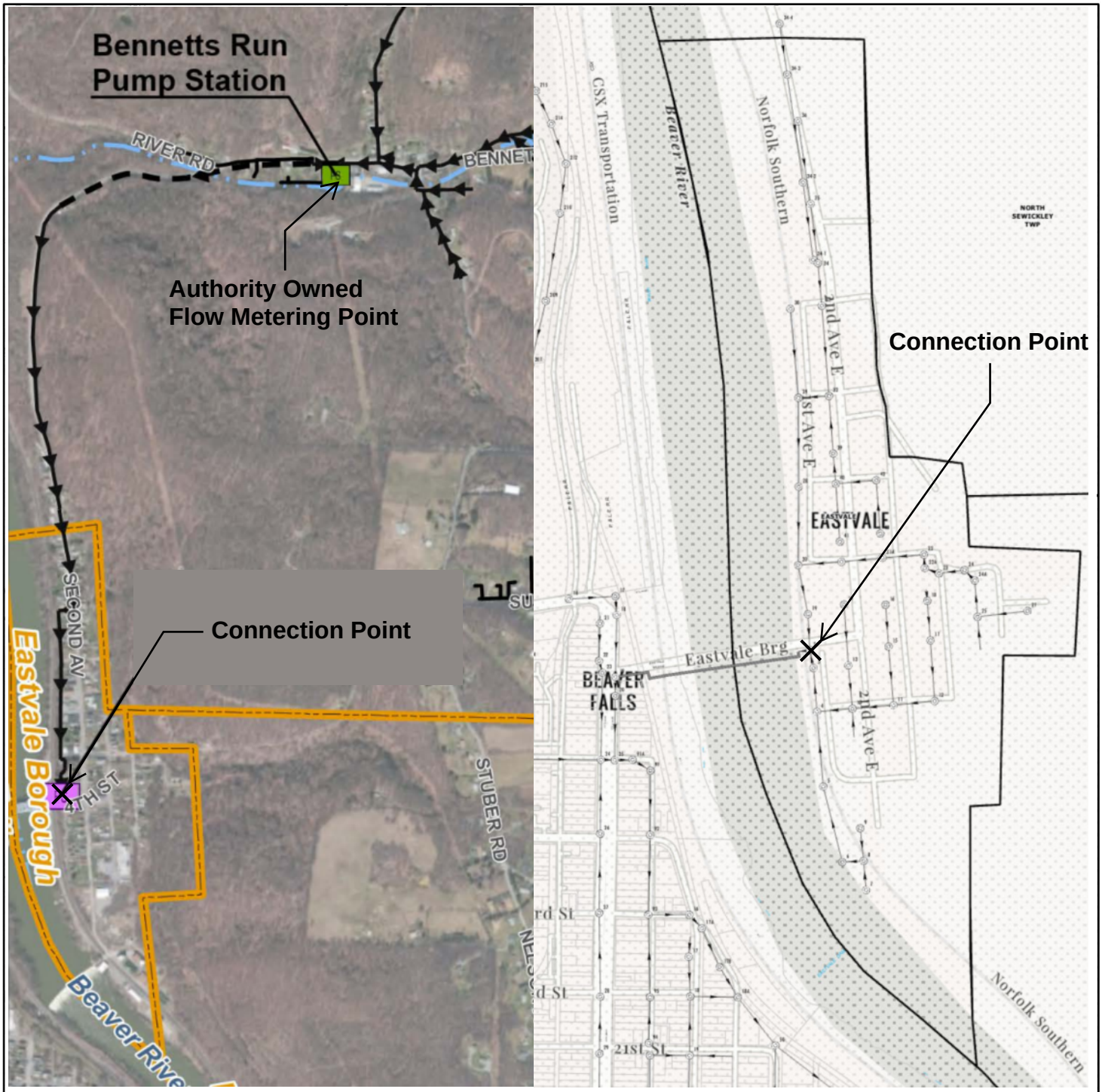
CITY OF BEAVER FALLS

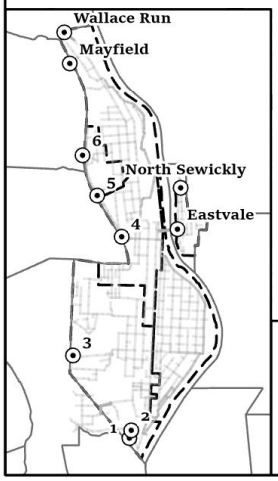
By: _____

Name: Kenya Johns

Title: Mayor

# EXHIBIT A
# CONNECTION POINTS




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A- Connection Point
Flow from Bennetts Run PS,
Connection at Eastvale PS
North Sewickley

EXHIBIT B
CONNECTION POINTS HAVING AN AQUA METER

None

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

None

# EXHIBIT F12

EXECUTION VERSION

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 20th day of DECEMBER, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the BOROUGH OF PATTERSON HEIGHTS, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Agreement dated April 28, 1977 between the City and the Municipality (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Chapter 50 of the Code of the Municipality as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, Borough of Eastvale, City, North Sewickley Township Sewer Authority, Township of Patterson, Municipality, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and

deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any

Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate, and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the

"Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

20. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

21. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

22. Miscellaneous.

22.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

22.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

22.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

22.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

22.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

22.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

22.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

22.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Borough of Patterson Heights
600 7th Avenue
Beaver Falls, PA 15010
Attn: President

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.

762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

22.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater**,** including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

22.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

22.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

22.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

22.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

22.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Marc A. Lucca

Title: President

MUNICIPALITY:

BOROUGH OF PATTERSON HEIGHTS

By: _____

Name: William Starn

Title: President

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | BOROUGH OF PATTERSON HEIGHTS |
| By: _____ | By: _____ |
| Name: Marc A. Lucca | Name: William Starn |
| Title: President | Title: President |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

EXHIBIT A
CONNECTION POINTS

Attached

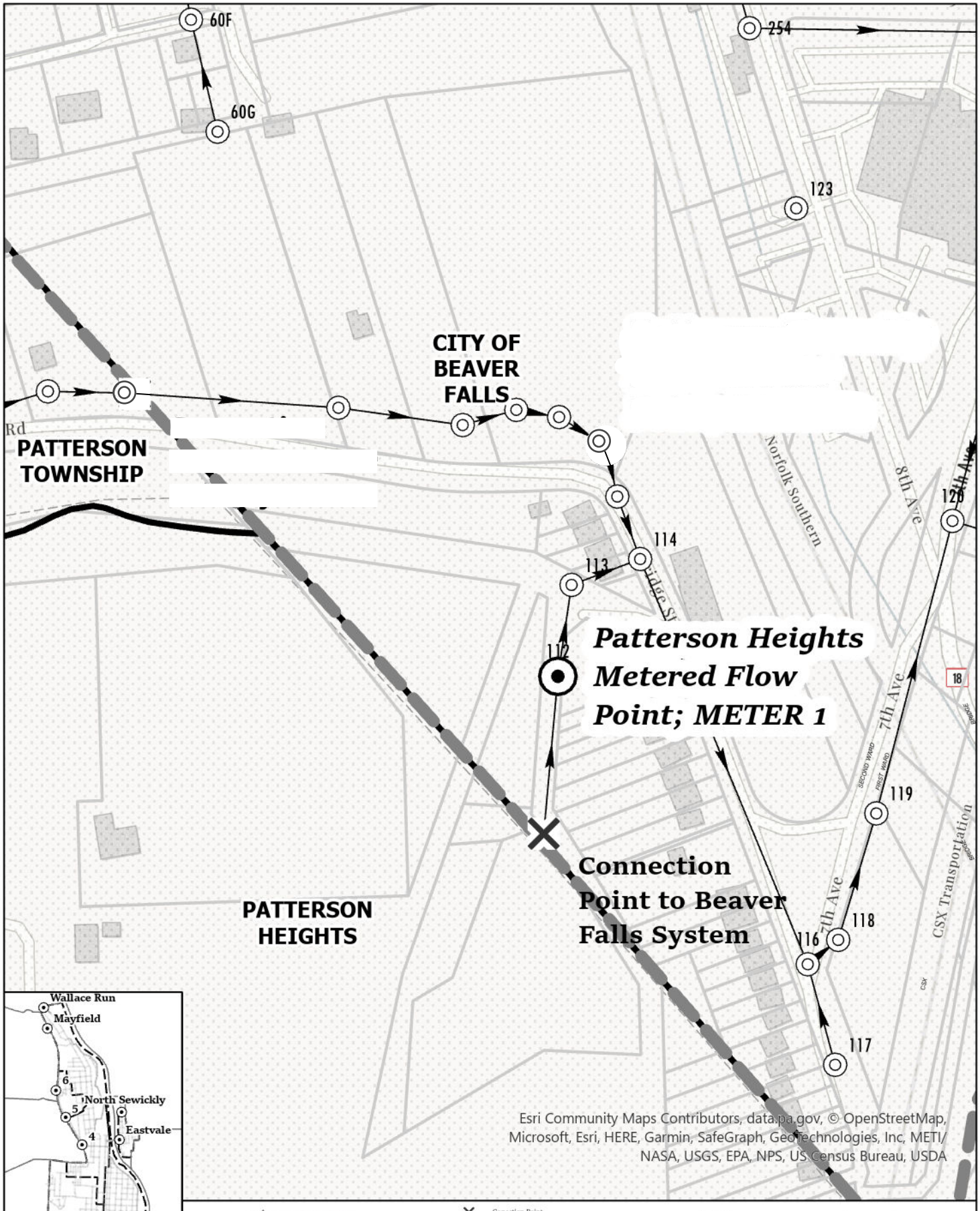
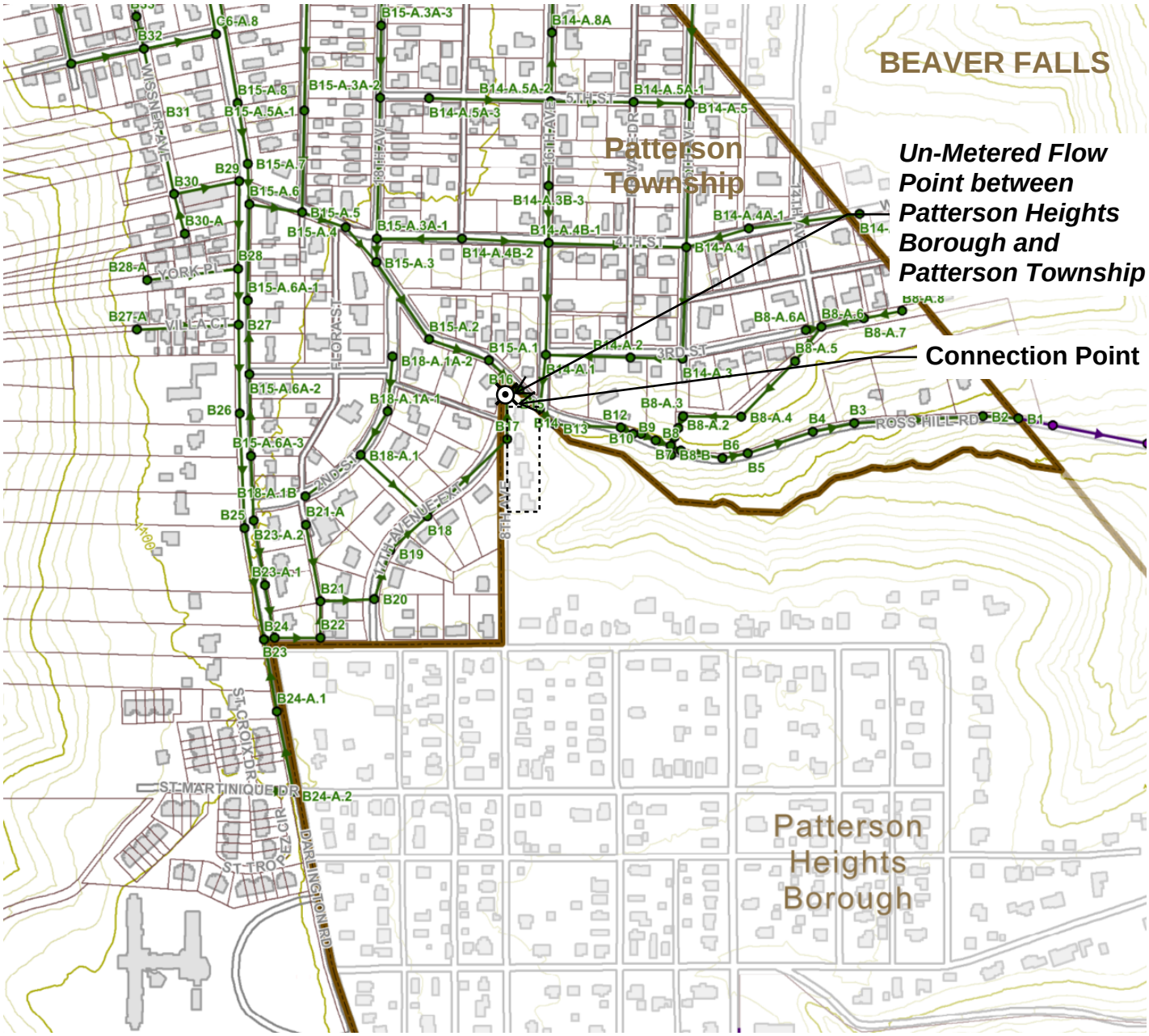
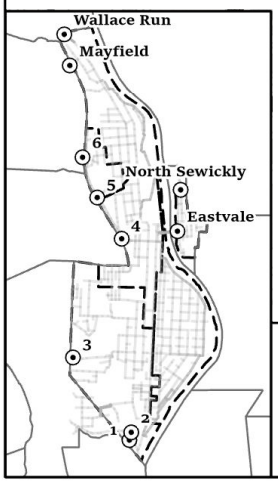



Exhibit A – Connection Point, Located at Meter #1
Patterson Heights Borough



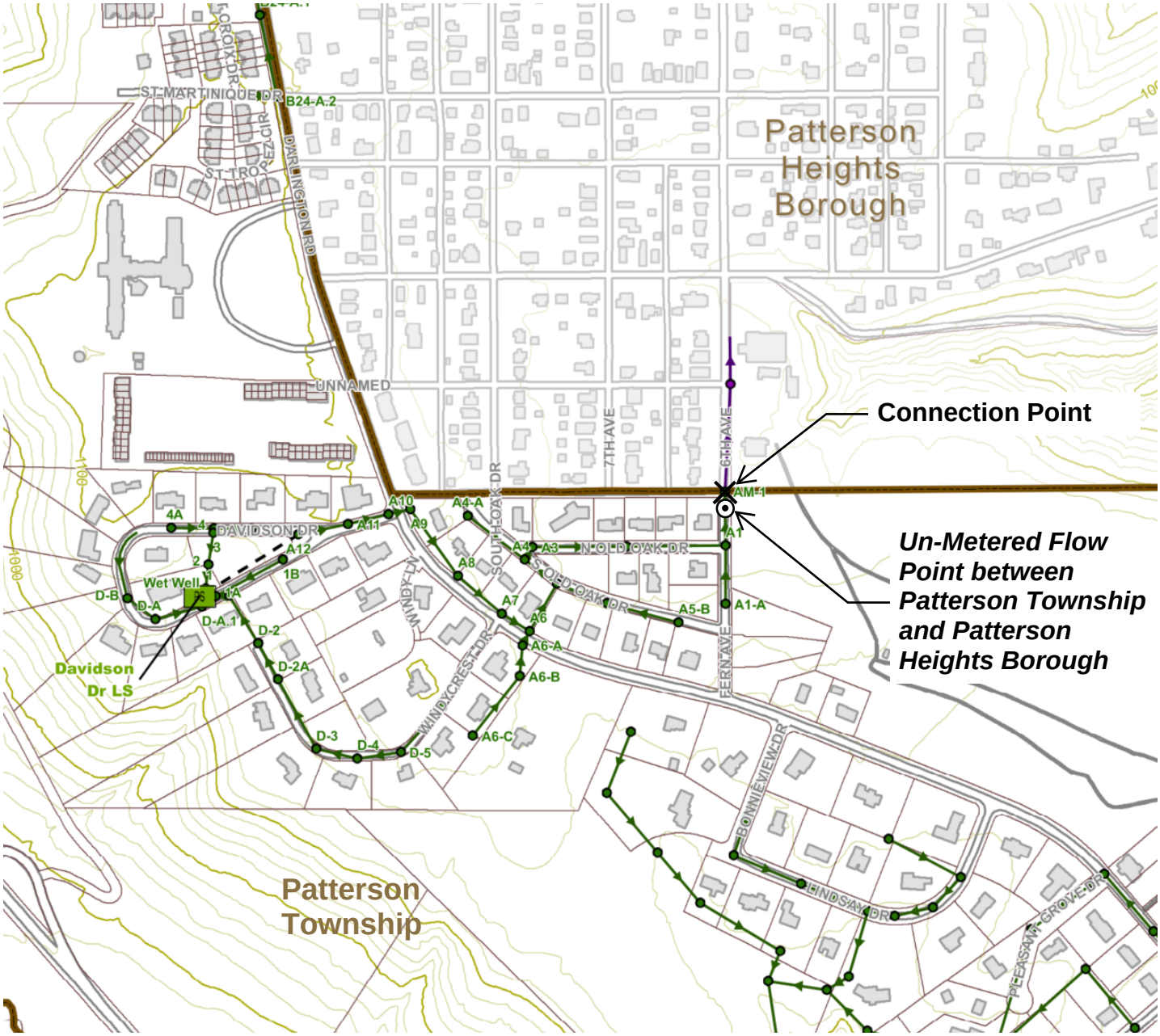

N

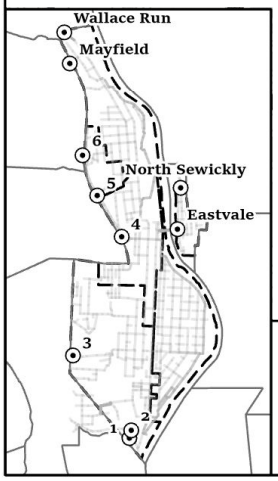
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_1 - Connection Point Located 8th Avenue and Ross Hill Road
Patterson Heights Borough



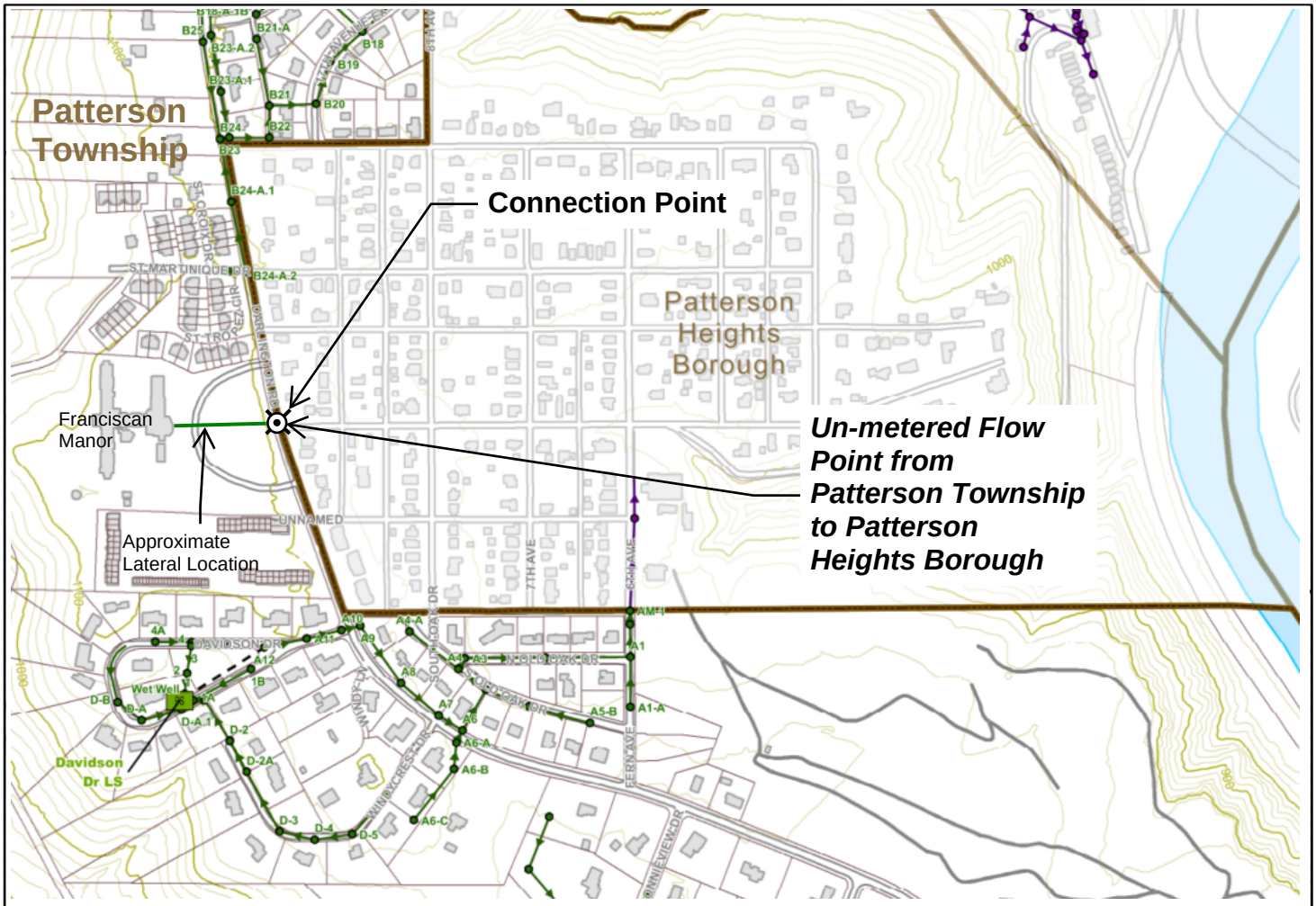

N

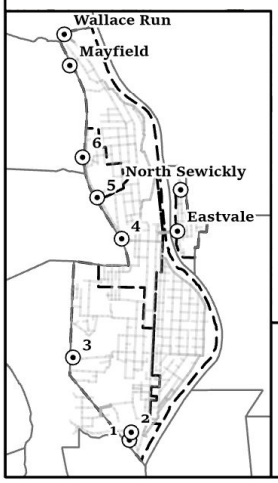
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_2 - Connection Point Located at 6th Ave/Fern Ave & Old Oak Drive North
Patterson Heights Borough



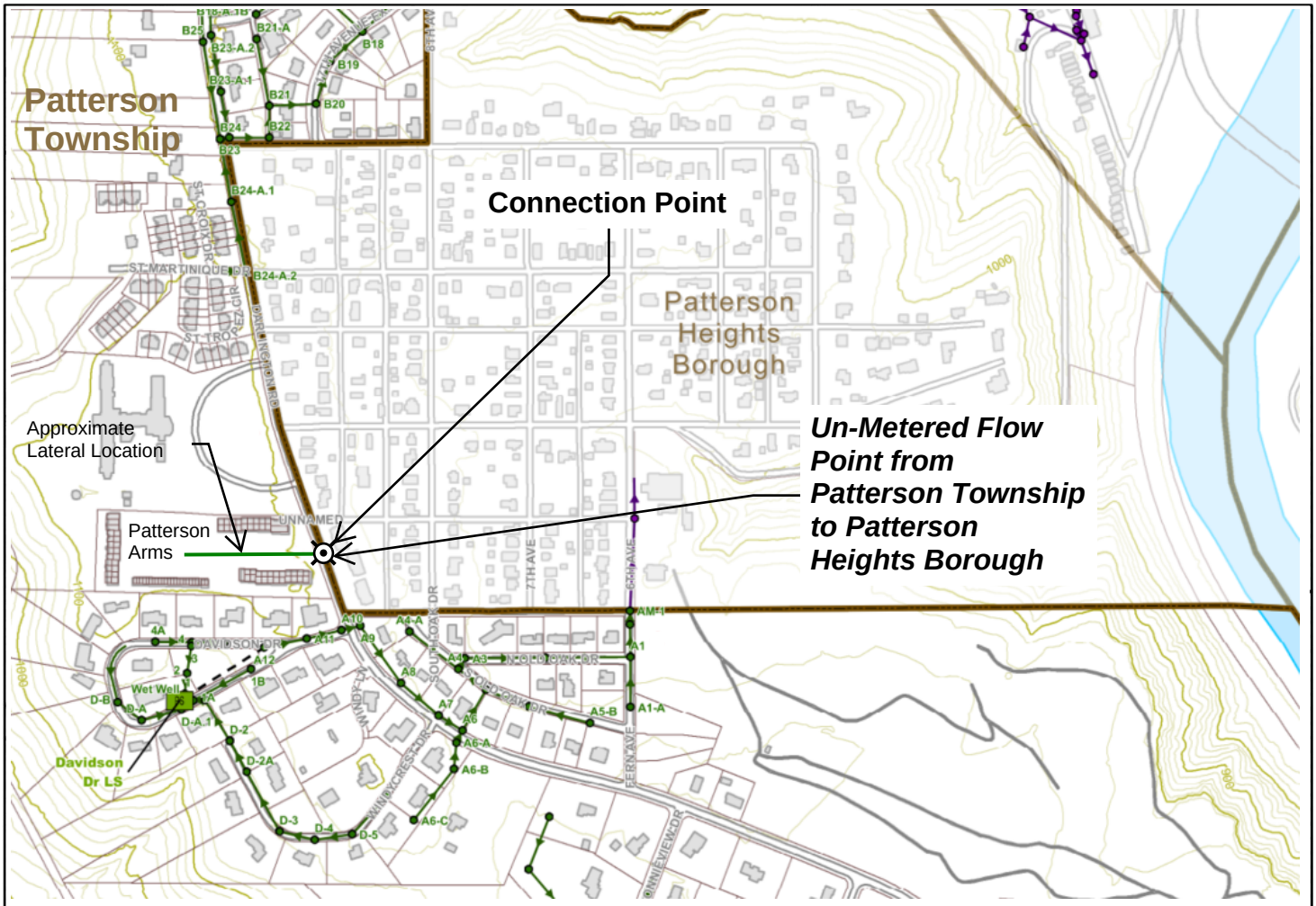

N

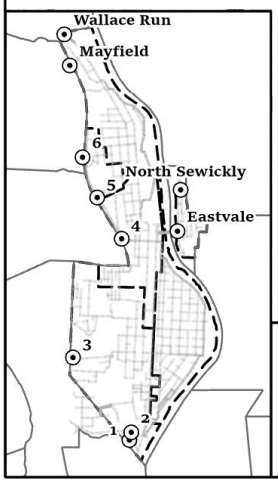
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_3 - Connection Point Located at Franciscan Manor Patterson Heights Borough



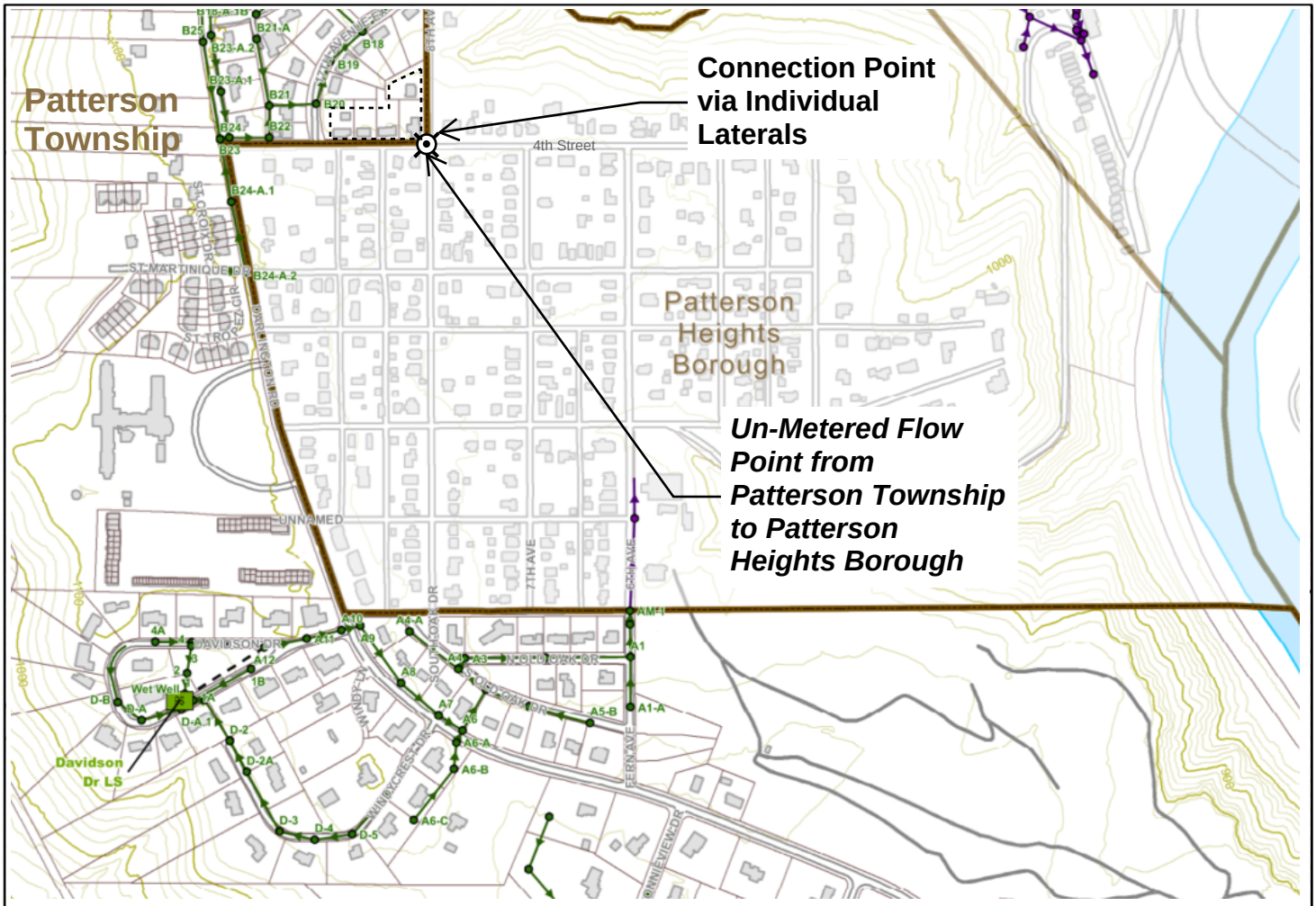

N

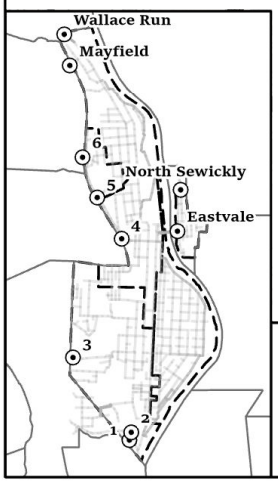
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_4 - Connection Point Located at Patterson Arms
Patterson Heights Borough




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_5 - Connection Point via Individual Laterals, Located at Fourth Street and 8th Ave Patterson Heights Borough

EXHIBIT B
CONNECTION POINTS HAVING FLOW METERS

Attached

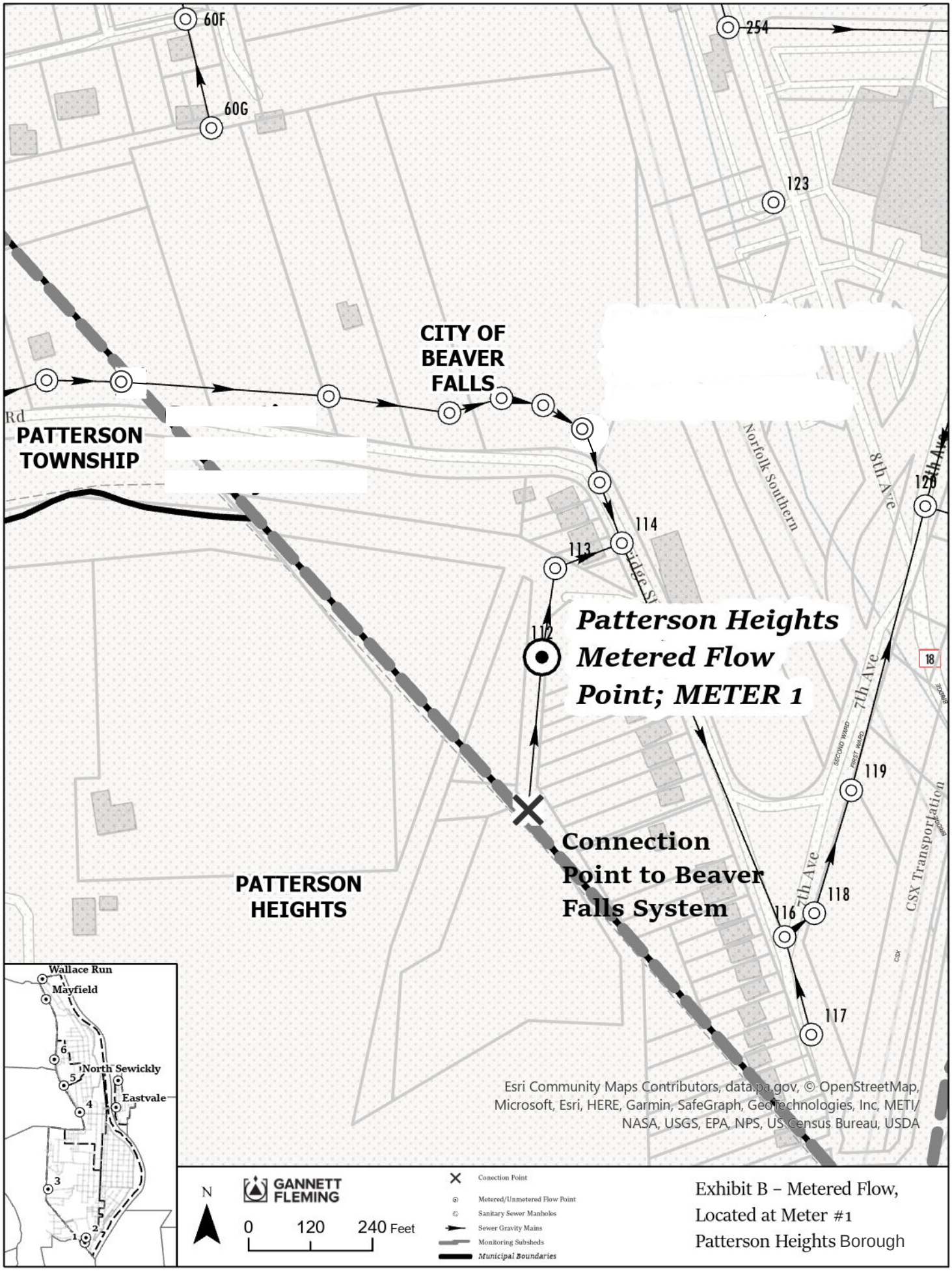
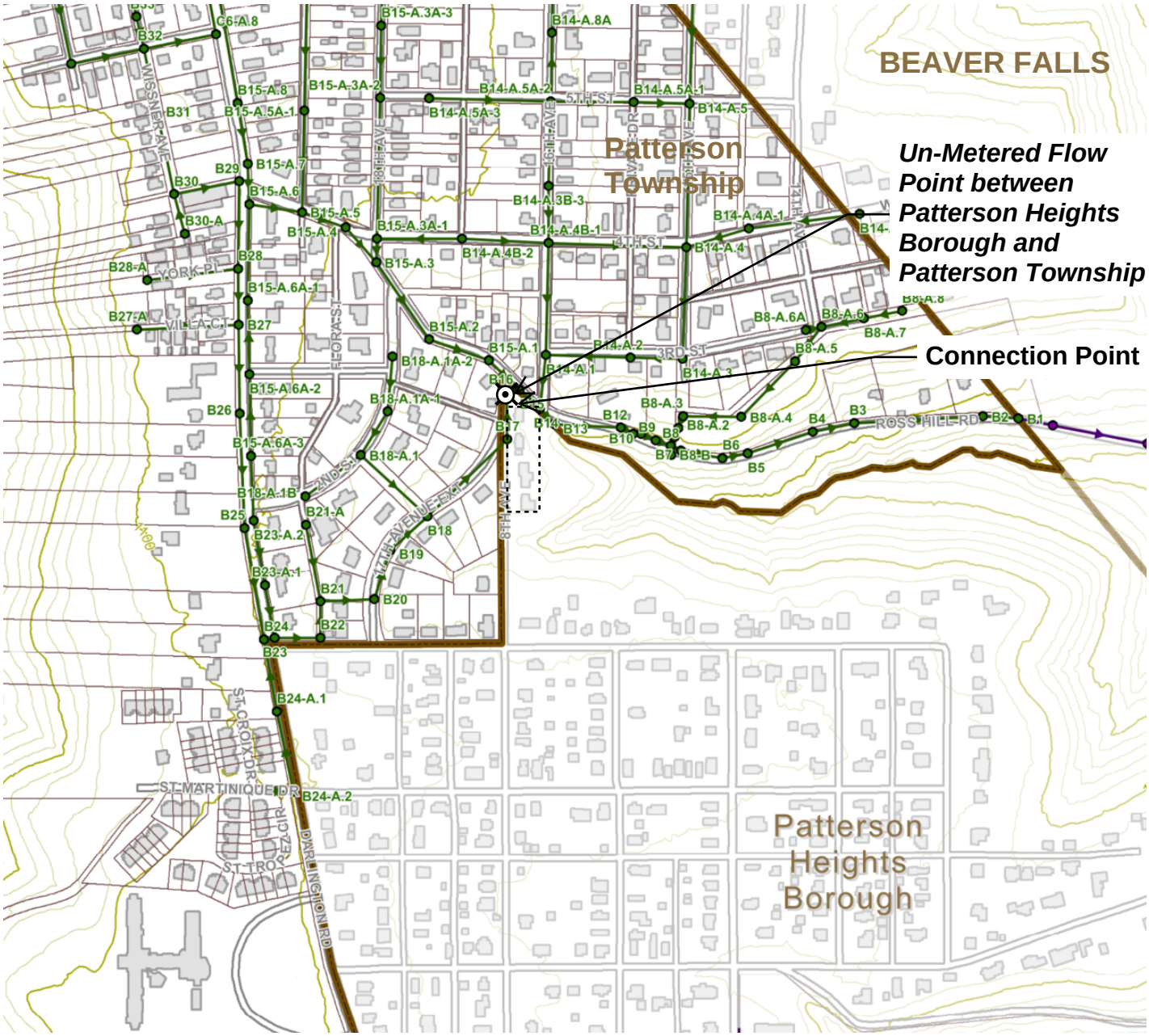
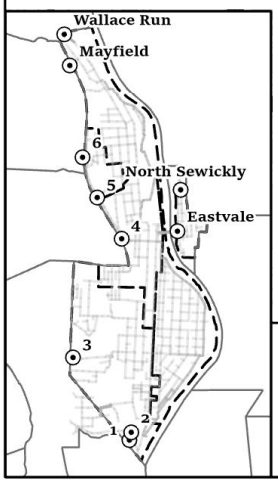



Exhibit B – Metered Flow, Located at Meter #1
Patterson Heights Borough

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

Attached



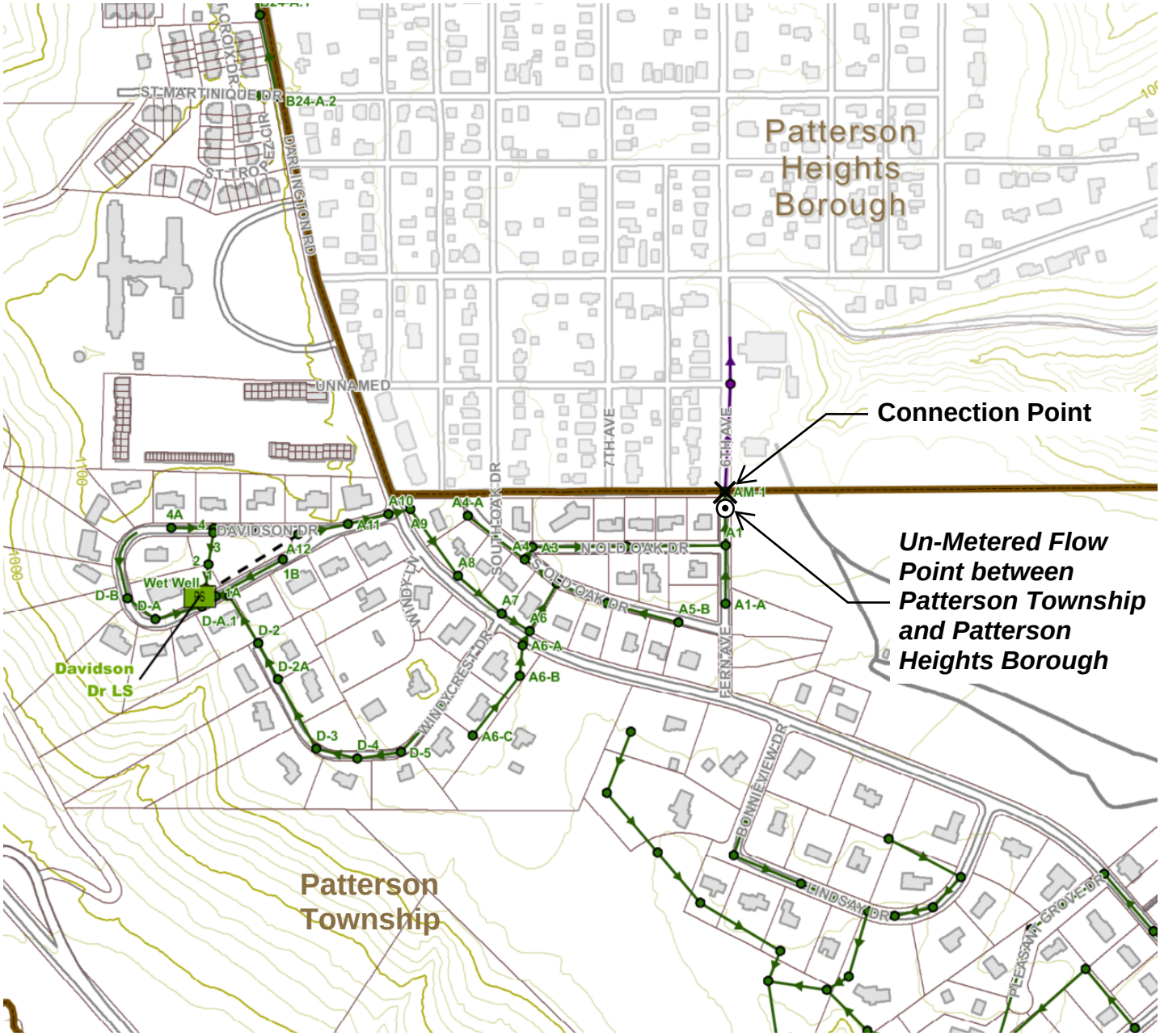

N

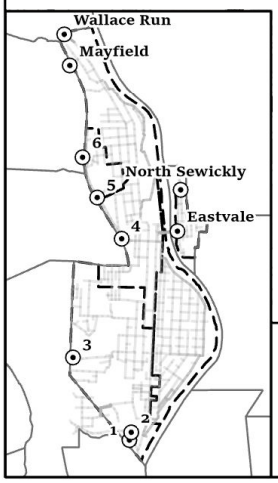
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_1 - Un-metered Flow Located 8th Avenue and Ross Hill Road
Patterson Heights Borough



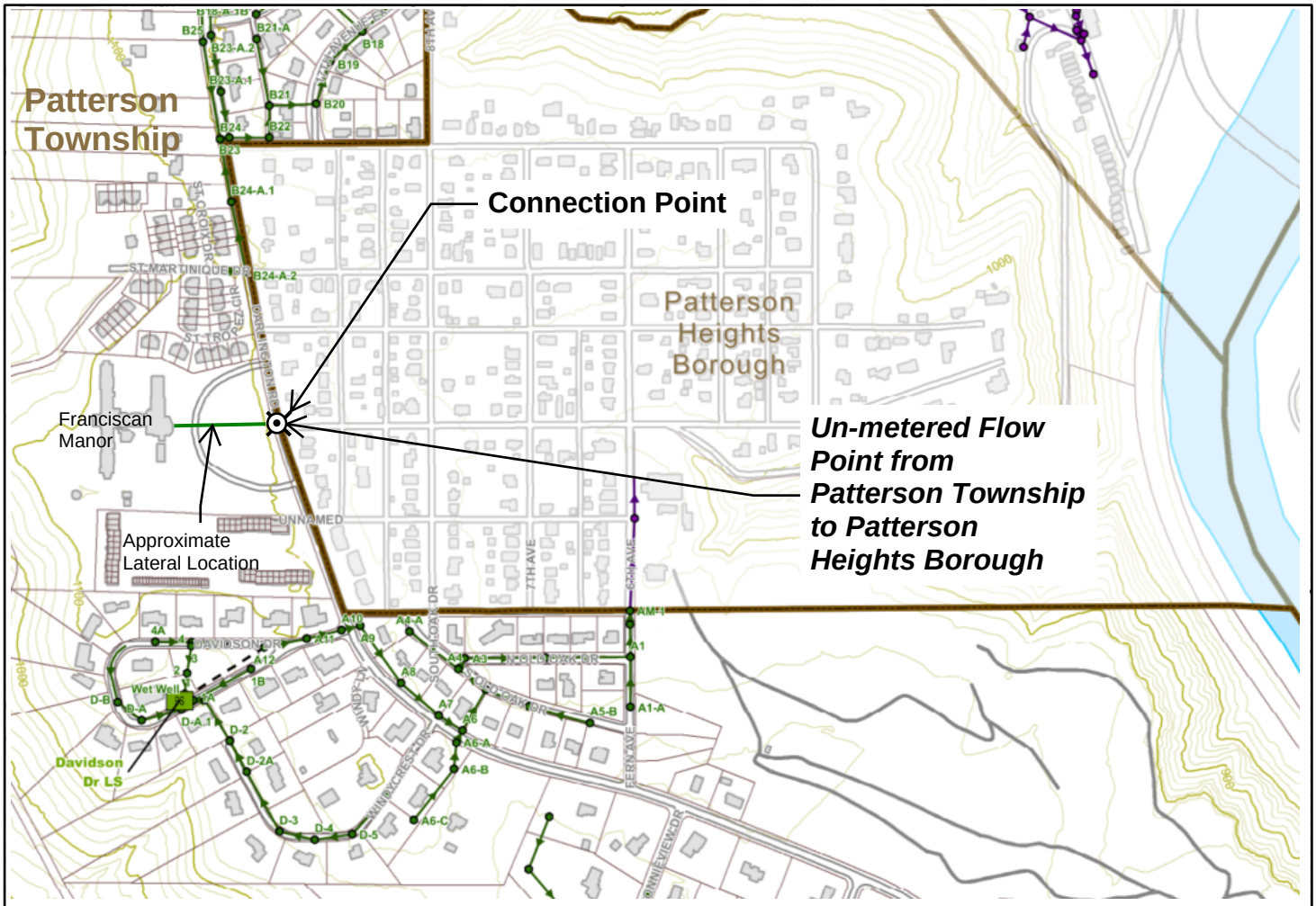

N

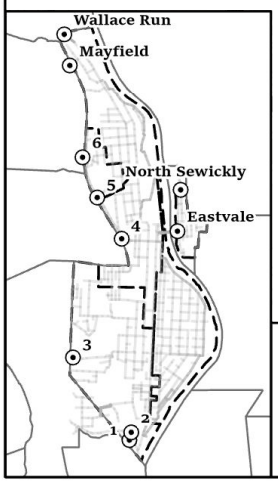
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_2 - Un-Metered Flow Located at 6th Ave/Fern Ave & Old Oak Drive North
Patterson Heights Borough



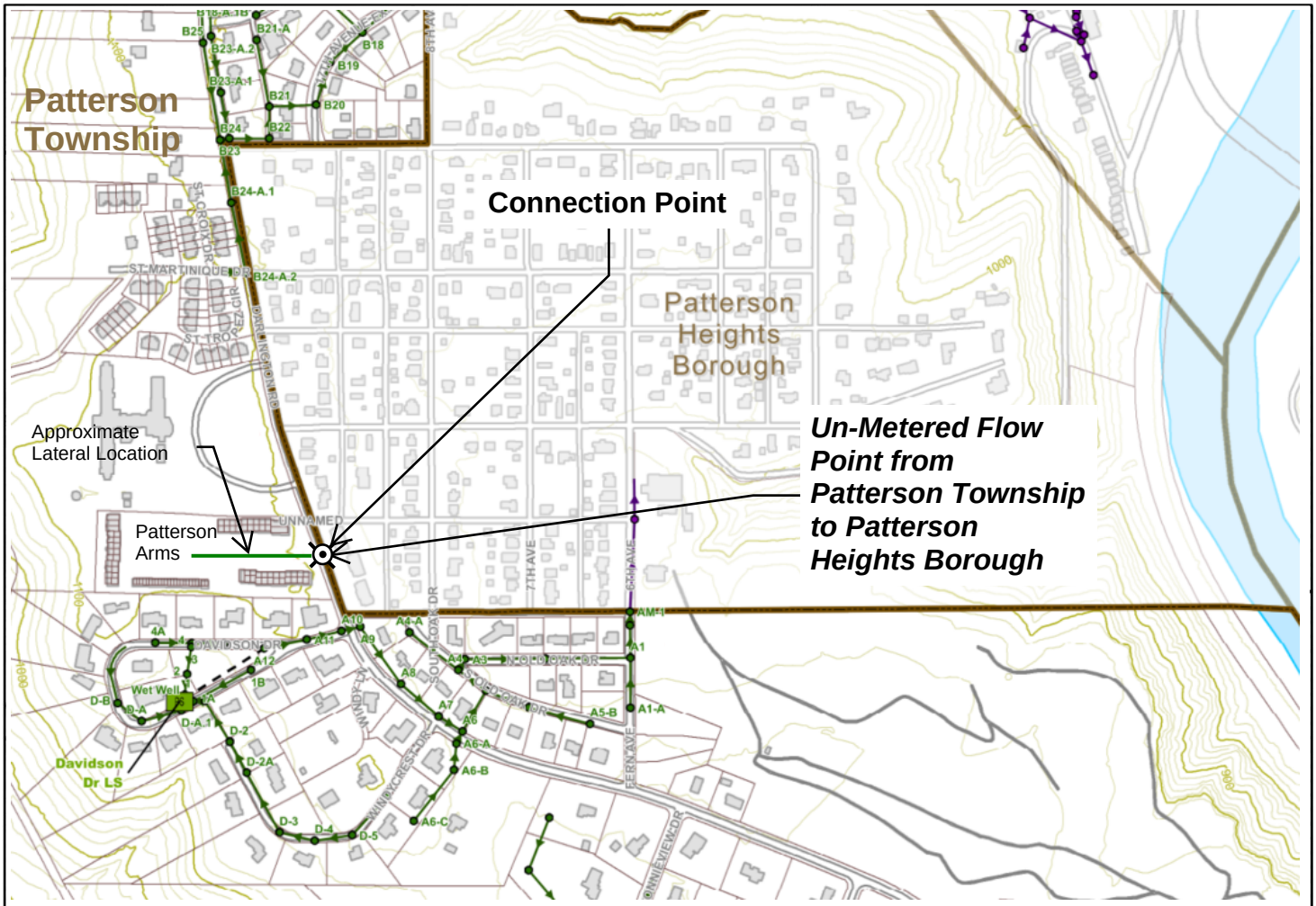

N

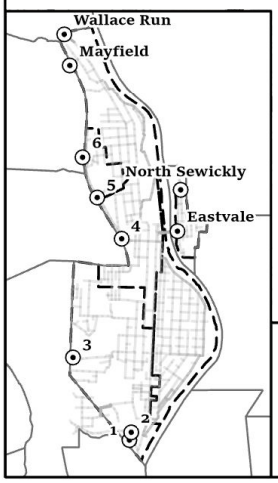
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_3 - Un-metered Flow Located at Franciscan Manor Patterson Heights Borough



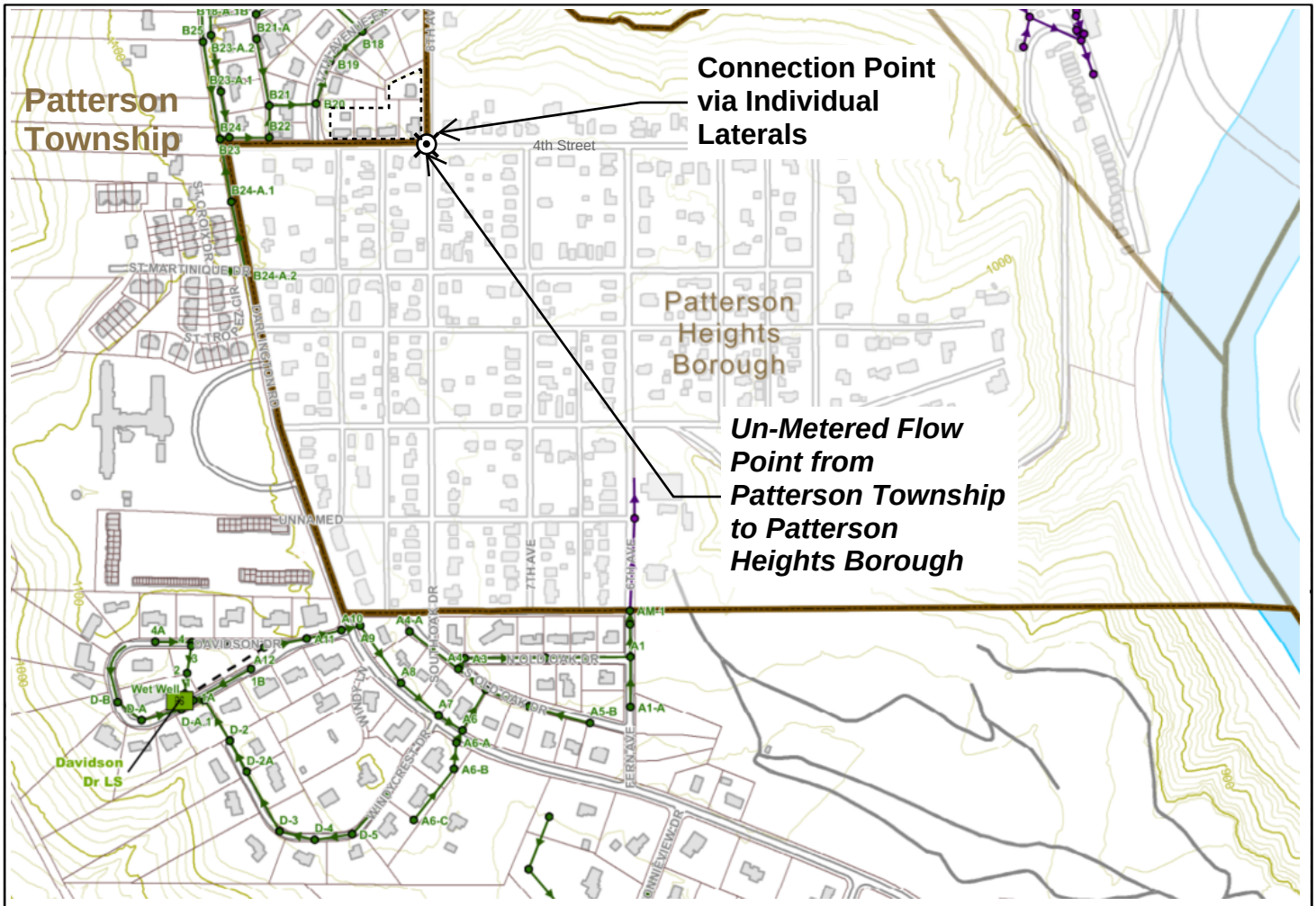

N

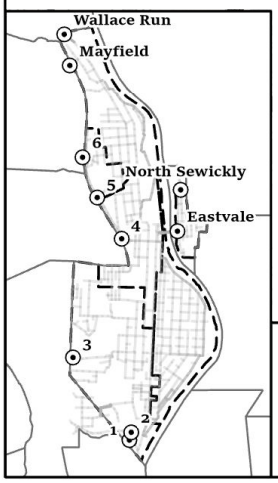
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_4 - Un-metered Flow Located at Patterson Arms
Patterson Heights Borough




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_5 - Un-metered Flow via Individual Laterals,
Located at Fourth Street and 8th Ave
Patterson Heights Borough

# EXHIBIT F13

EXECUTION VERSION

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 6 day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the TOWNSHIP OF WHITE, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Agreement dated April 28, 1977 between the City and the Municipality (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Municipality's ordinance applicable to the Municipality System as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, Borough of Eastvale, City, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside

Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's Ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are

in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation,

or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate,

and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this

Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

20. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

21. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

22. Miscellaneous.

22.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

22.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

22.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

22.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

22.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

22.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

22.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

22.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Township of White
2511 13th Avenue
Beaver Falls, PA 15010
Attn: President

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue

Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

22.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater**,** including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

22.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

22.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

22.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

22.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

22.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Marc A. Lucca

Title: President

MUNICIPALITY:

TOWNSHIP OF WHITE

By: _____

Name: Ray Evans, Jr.

Title: President

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | TOWNSHIP OF WHITE |
| By: _____ | By: Ray A Evans Jr |
| Name: Marc A. Lucca | Name: Ray Evans, Jr. |
| Title: President | Title: President |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

EXHIBIT A
CONNECTION POINTS

Attached

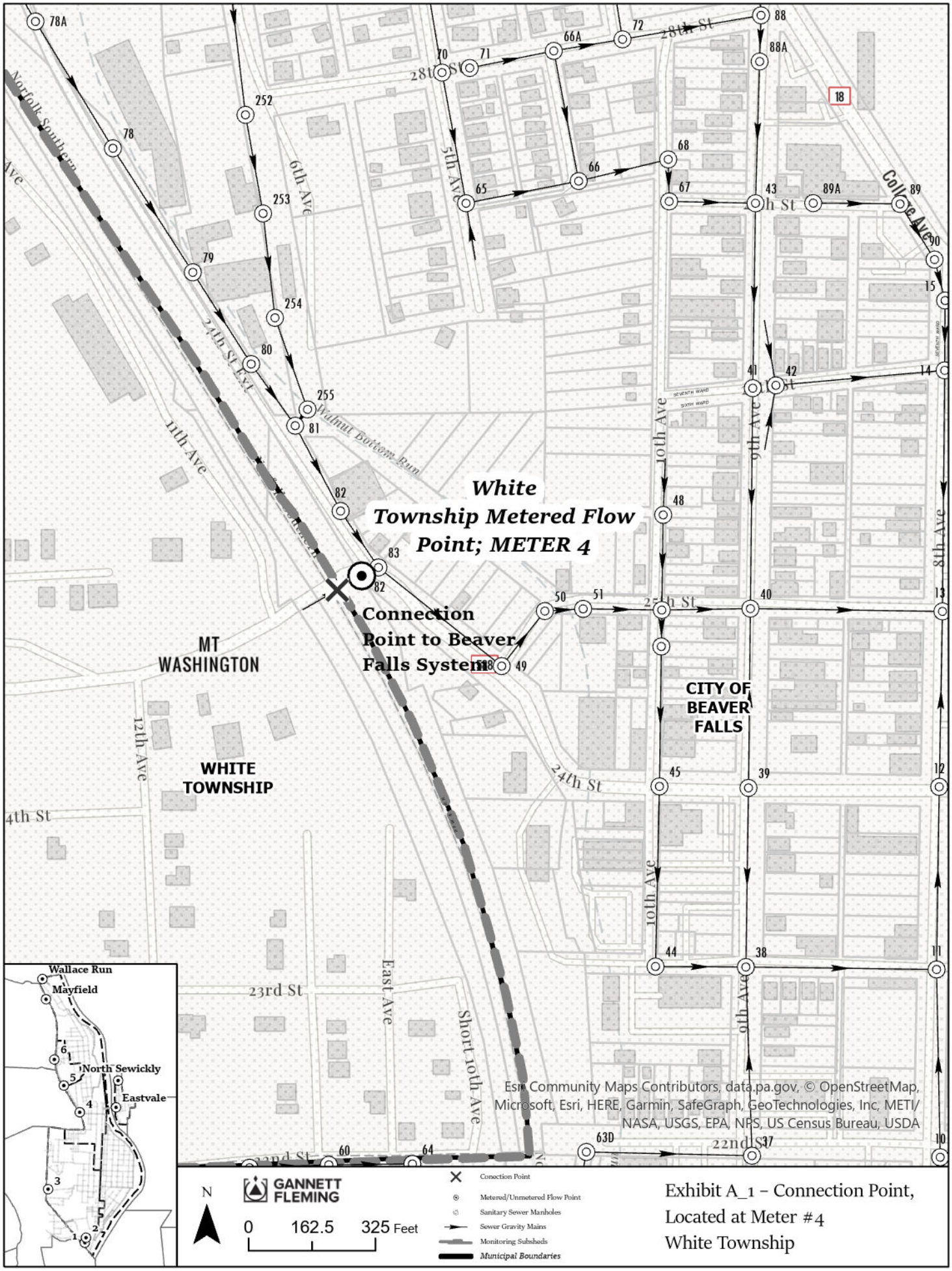



Exhibit A_1 – Connection Point, Located at Meter #4
White Township

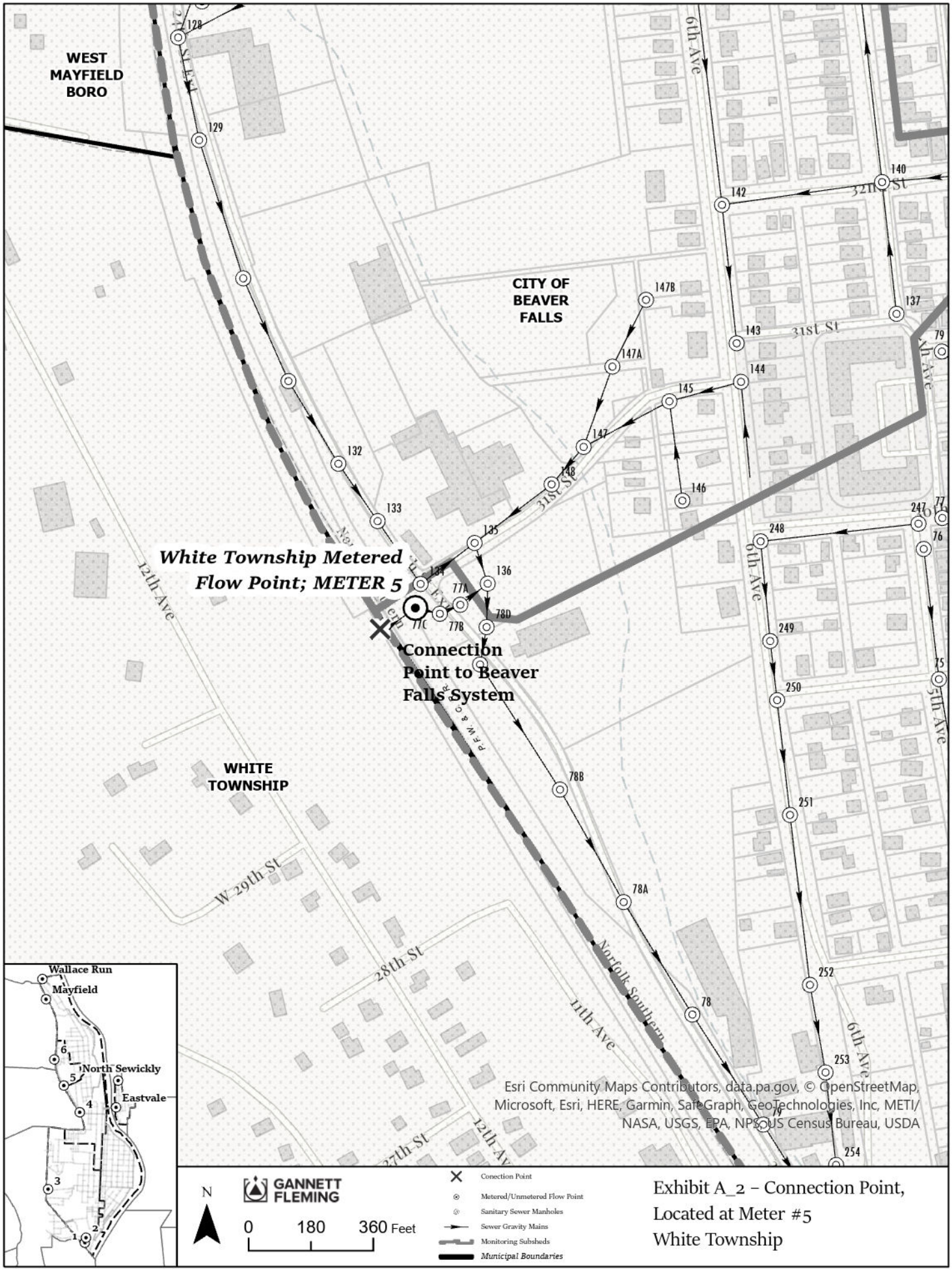
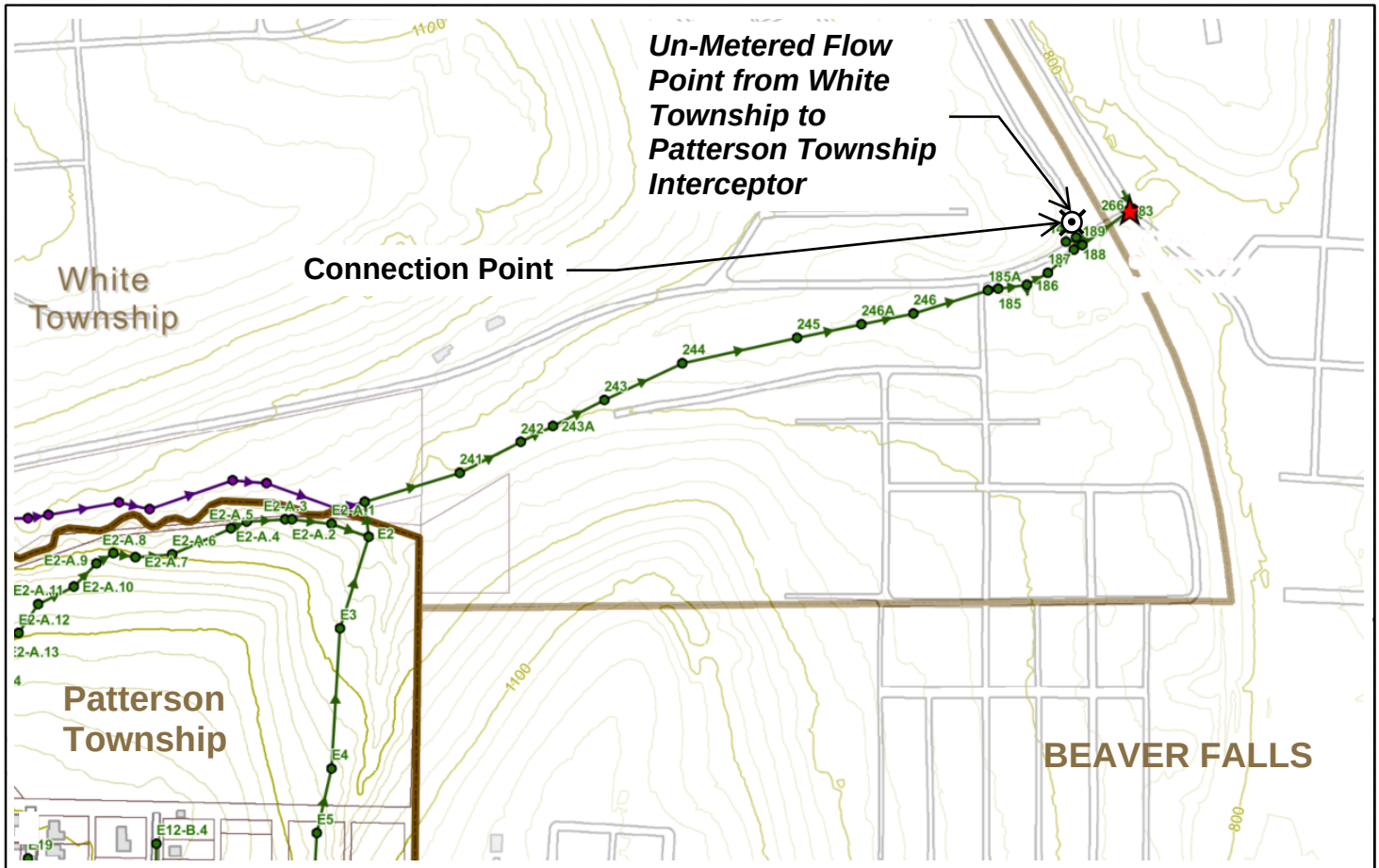
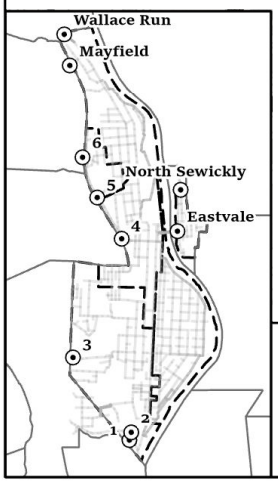



Exhibit A_2 – Connection Point, Located at Meter #5
White Township



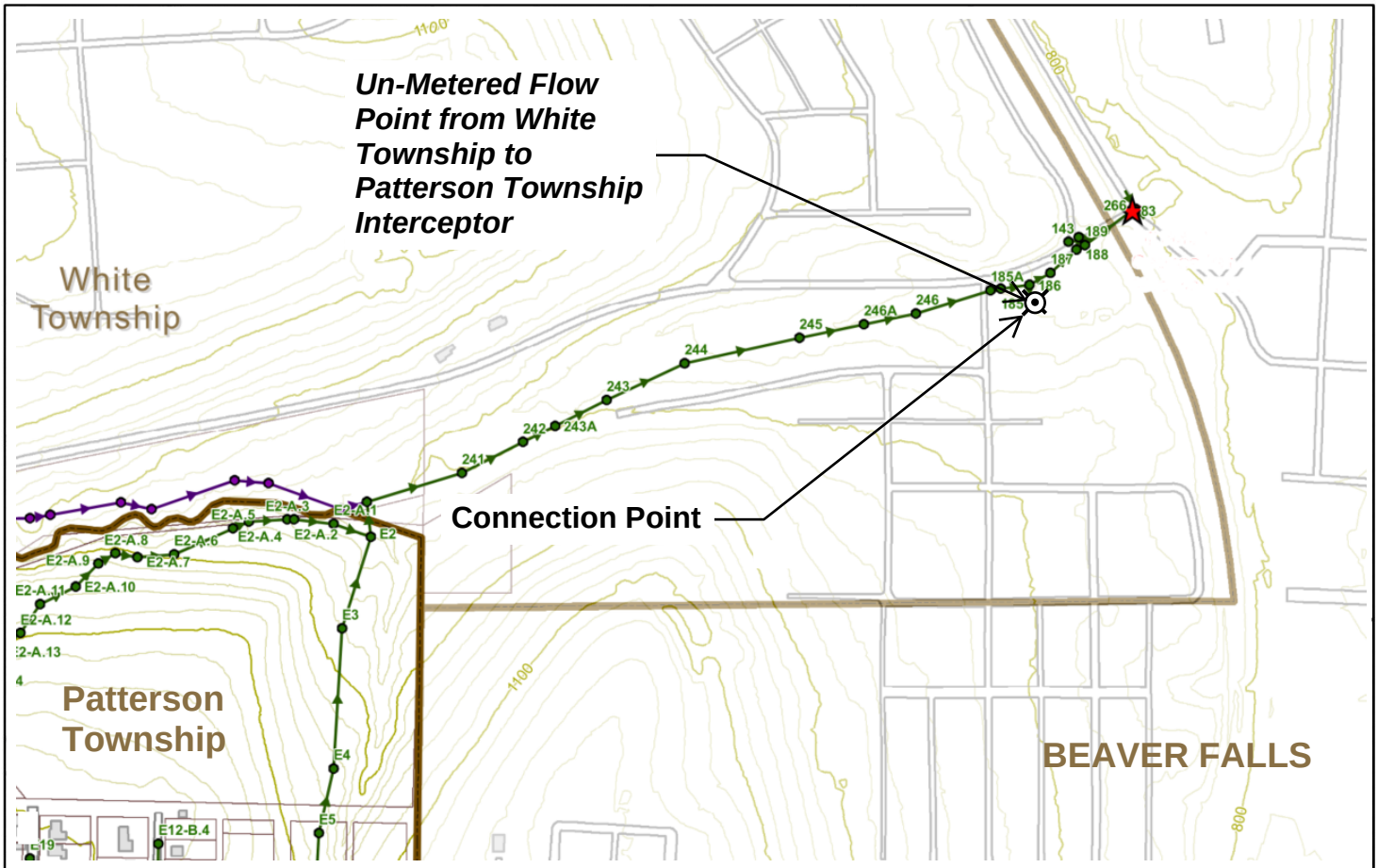

N

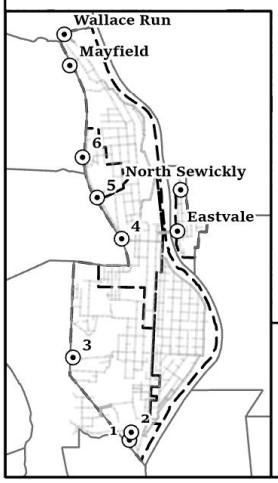
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_3 - Connection Point Located at Steffin Hill Road, MH E189
White Township



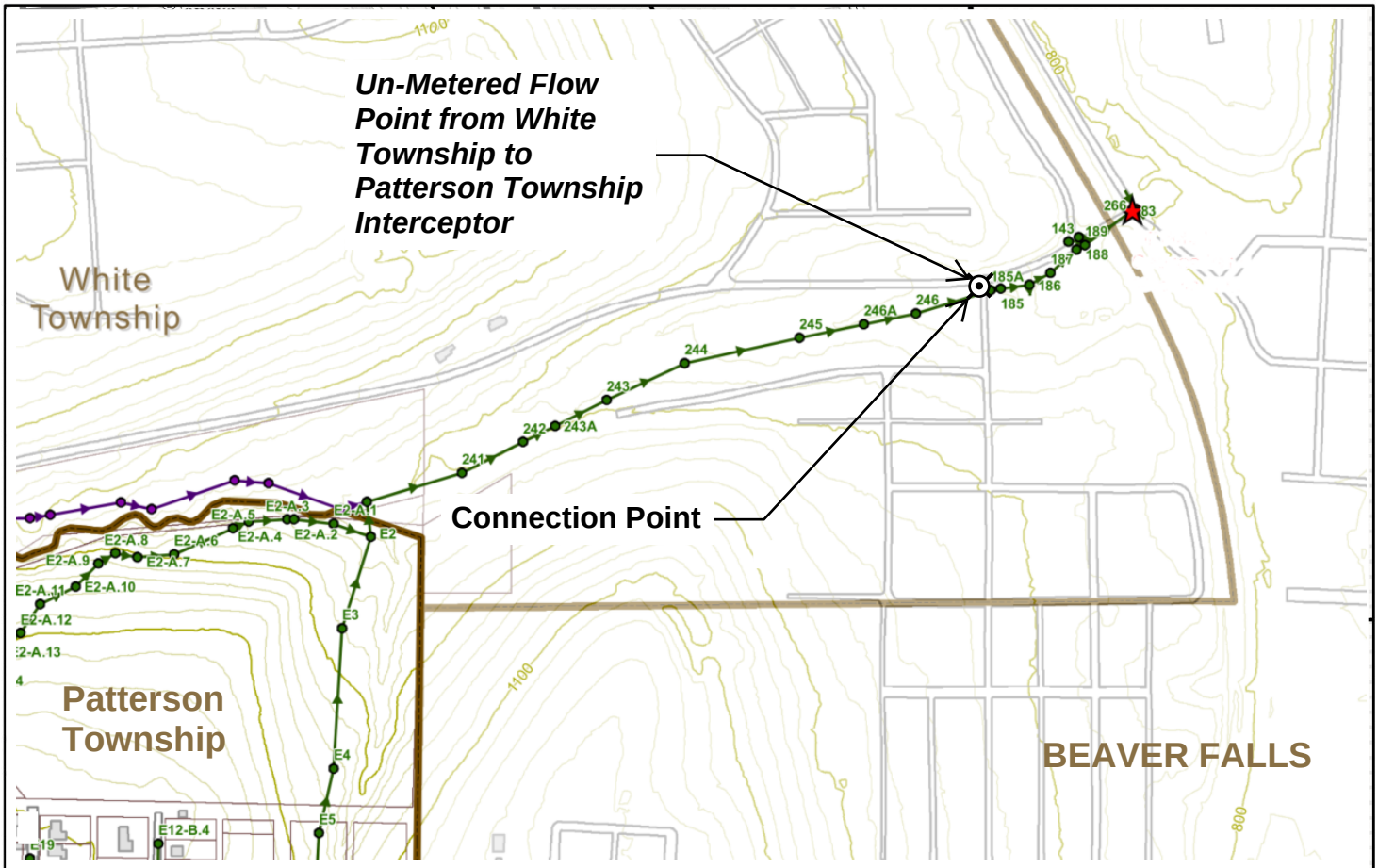

N

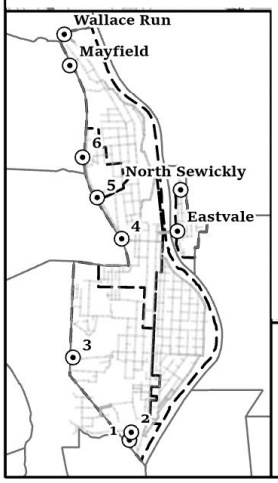
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_4 - Connection Point Located at Steffin Hill Road, MH E186
White Township



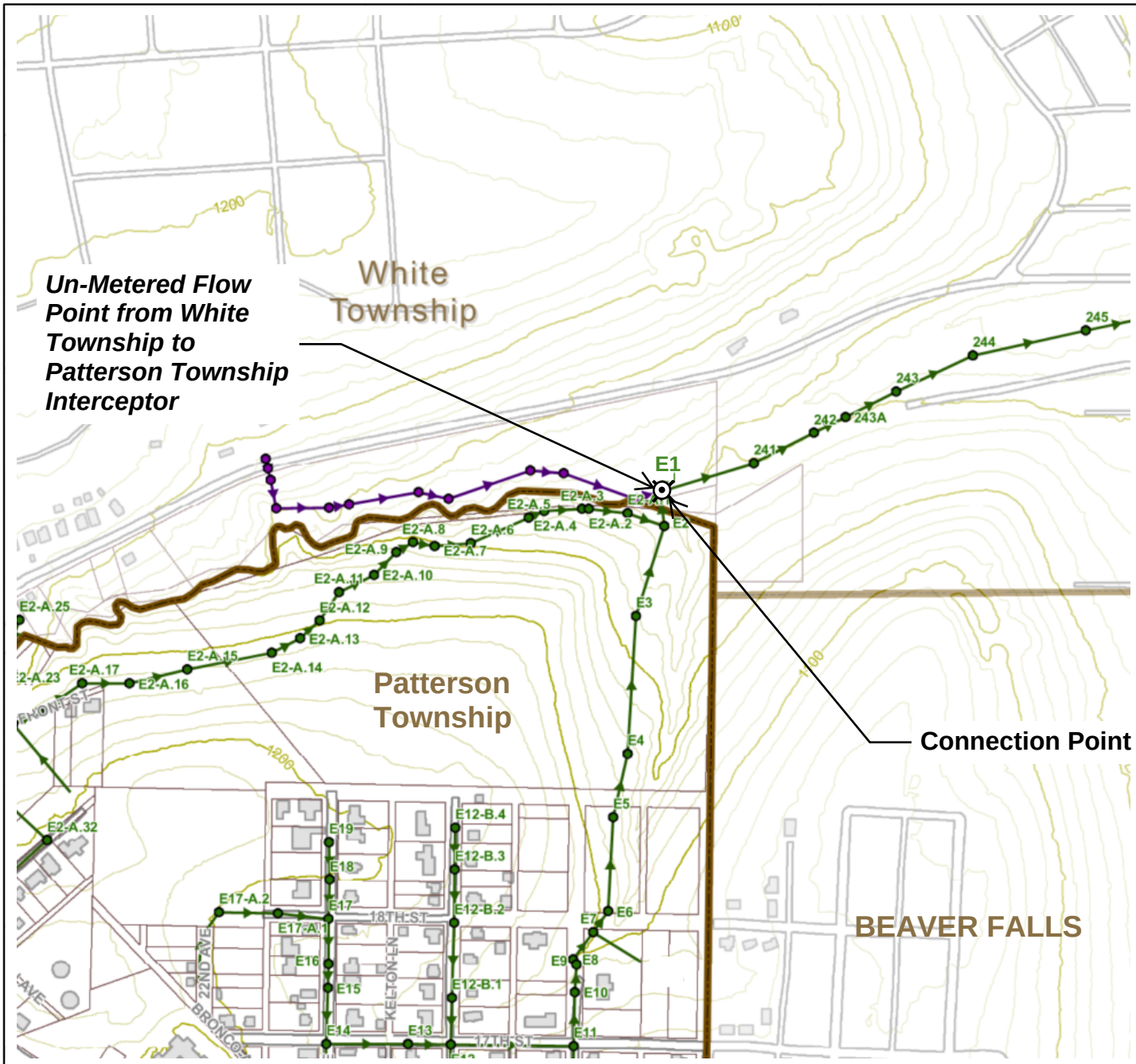

N

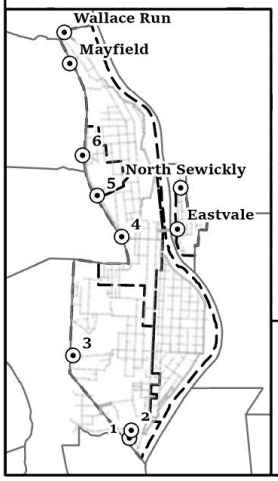
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_5 - Connection Point Located at Steffin Hill Road, MH E185A
White Township



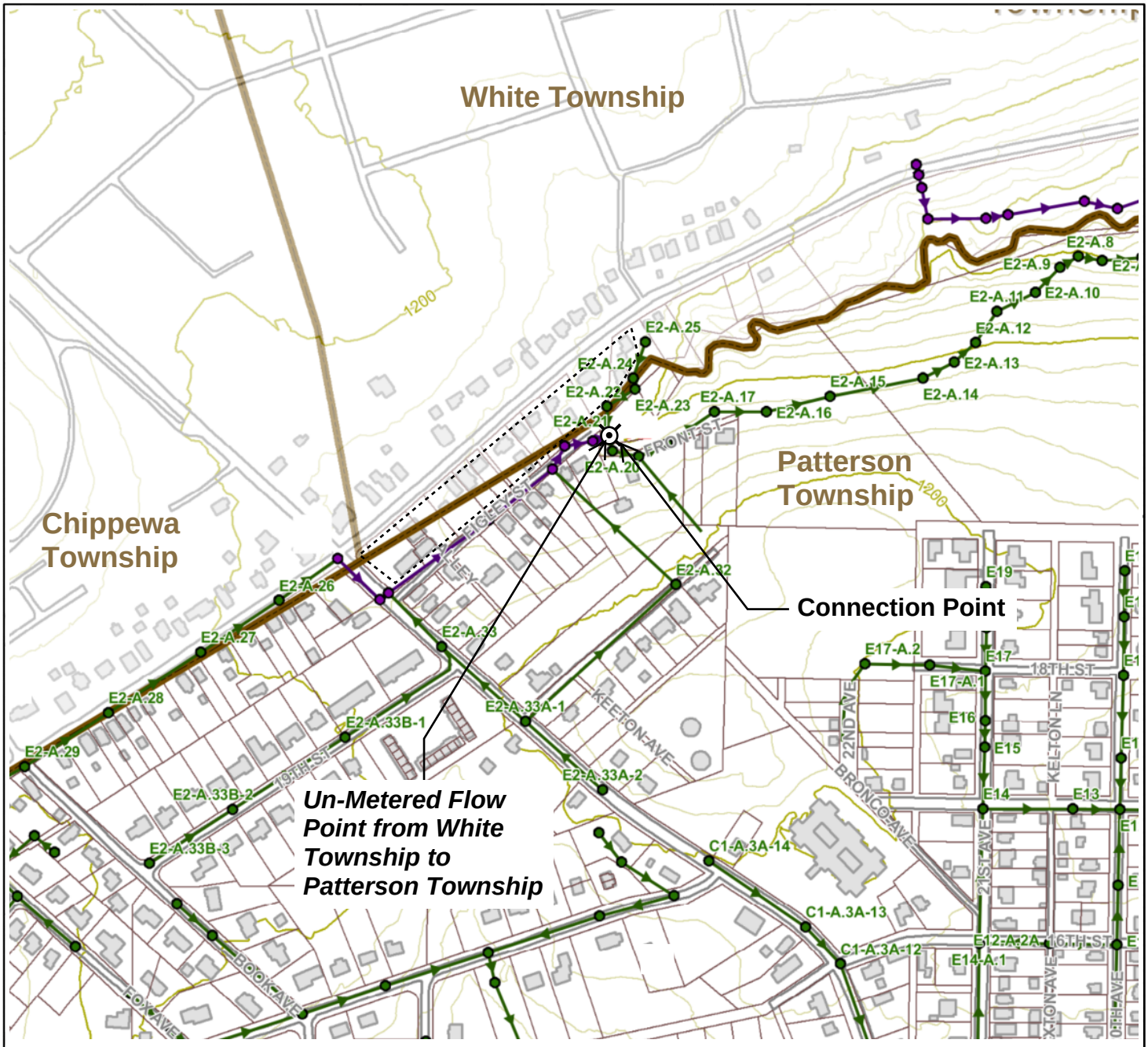

N

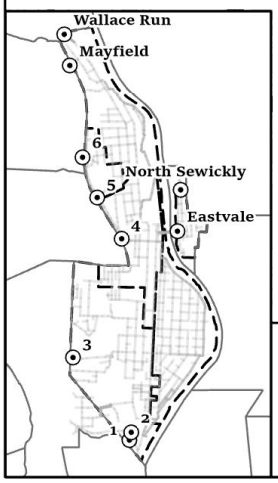
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_6 - Connection Point Located at NE Corner of Patterson Township, MH E1 White Township



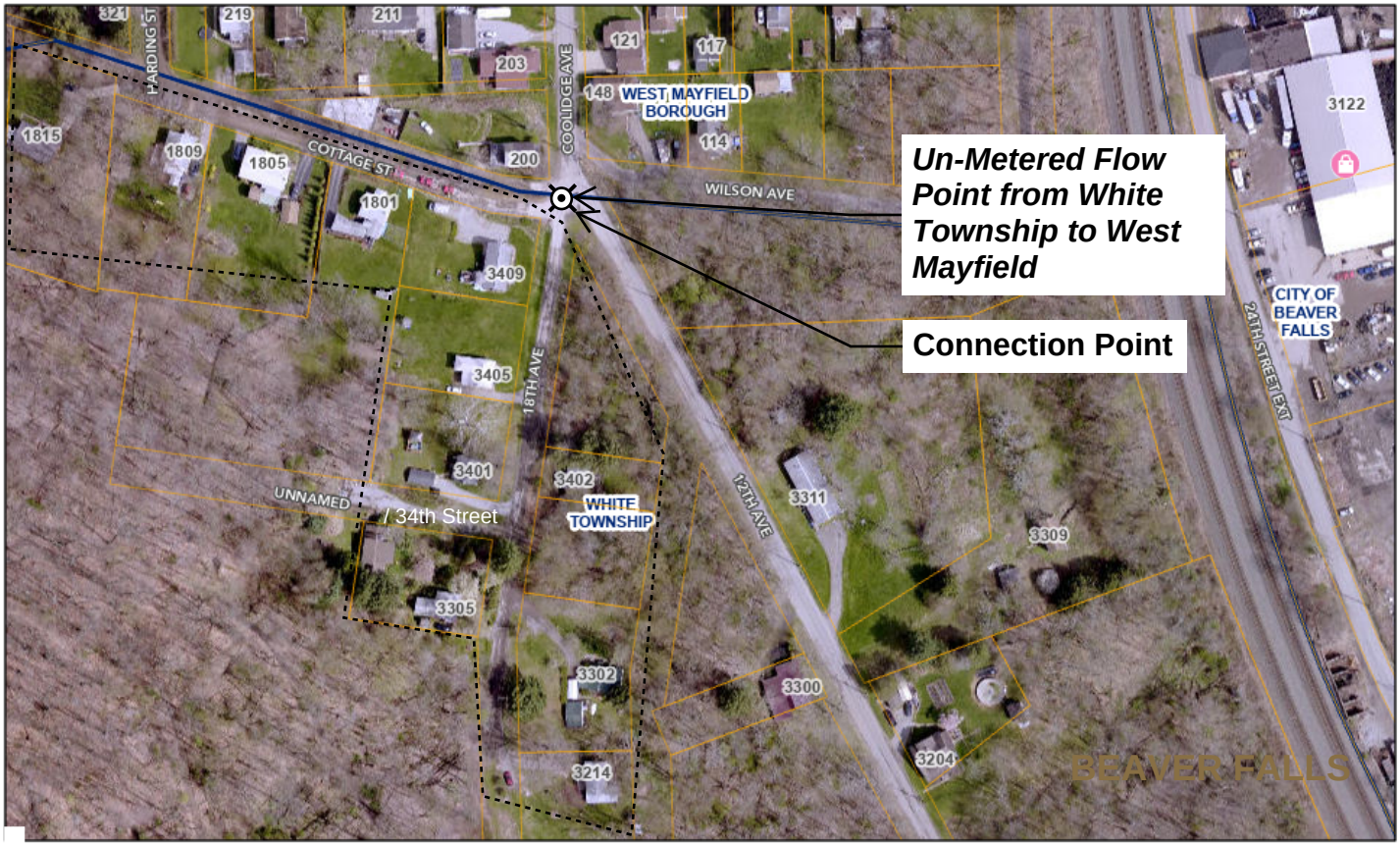

N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_7 - Connection Point Located at Figley St and Front St, MH E2-A.21
White Township




November 30, 2023

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.09 km

Retail Parcels Municipalities

Addresses Centerline Labels




N

GANNETT FLEMING

Conection Point

Metered/Unmetered Flow Point

Sanitary Sewer Manholes

Sewer Gravity Mains

Monitoring Subsheds

*Municipal Boundaries*

Exhibit A_8 - Connection Point
Homes on 34th Street and 18th Avenue
White Township

EXHIBIT B
CONNECTION POINTS HAVING FLOW METERS

Attached

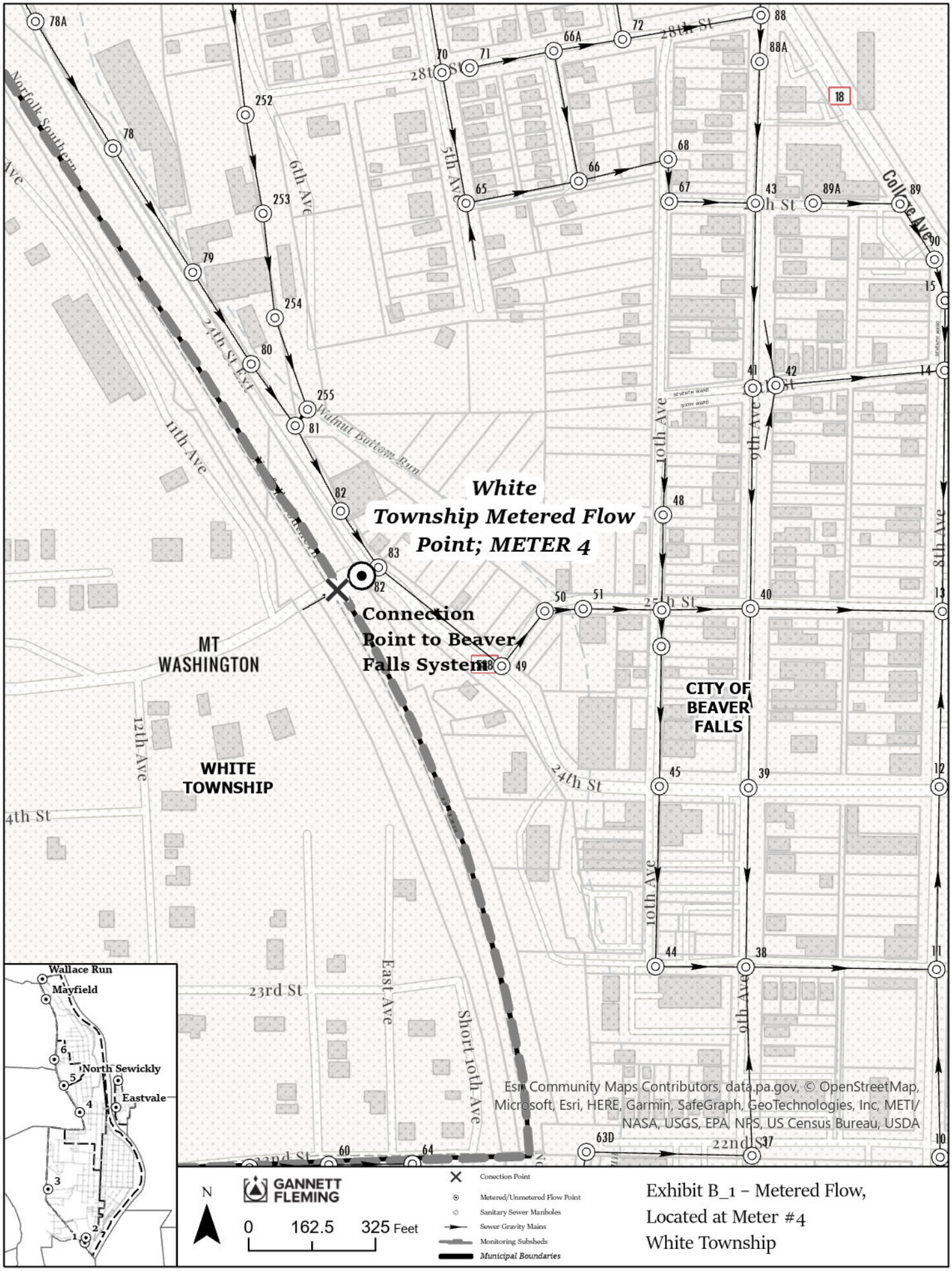
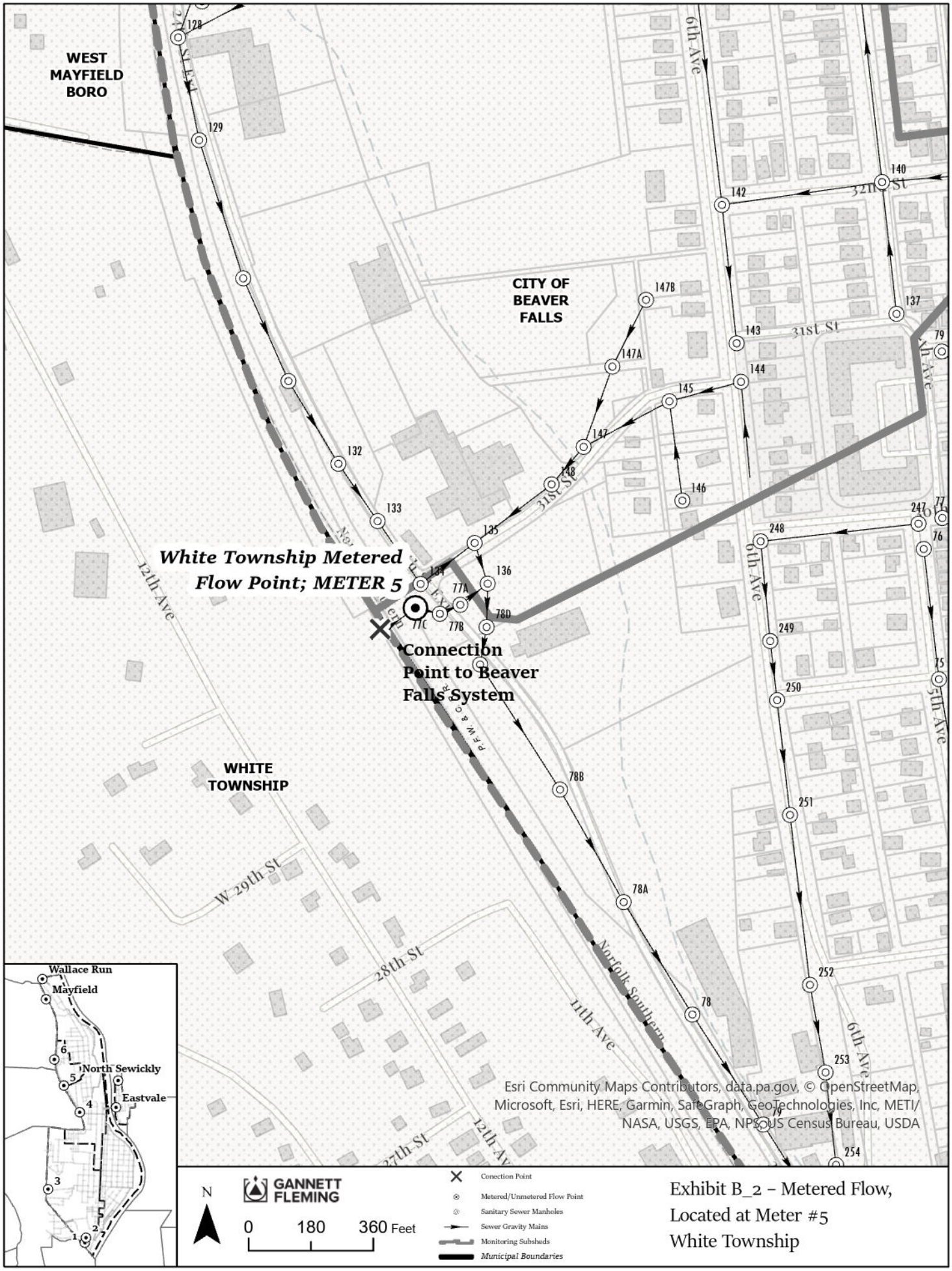



Exhibit B_1 – Metered Flow, Located at Meter #4
White Township


WEST MAYFIELD BORO
CITY OF BEAVER FALLS
WHITE TOWNSHIP
White Township Metered Flow Point; METER 5
Connection Point to Beaver Falls System
6th Ave
31st St
12th Ave
W 29th St
28th St
11th Ave
27th St
Norfolk Southern
P.F.W. & C.R.R.
128
129
132
133
135
136
137
138
77A
77B
77C
78D
78B
78A
78
140
142
143
144
145
146
147
147A
147B
247
248
249
250
251
252
253
254
79
77
76
75
Wallace Run
Mayfield
North Sewickly
Eastvale
1
2
3
4
5
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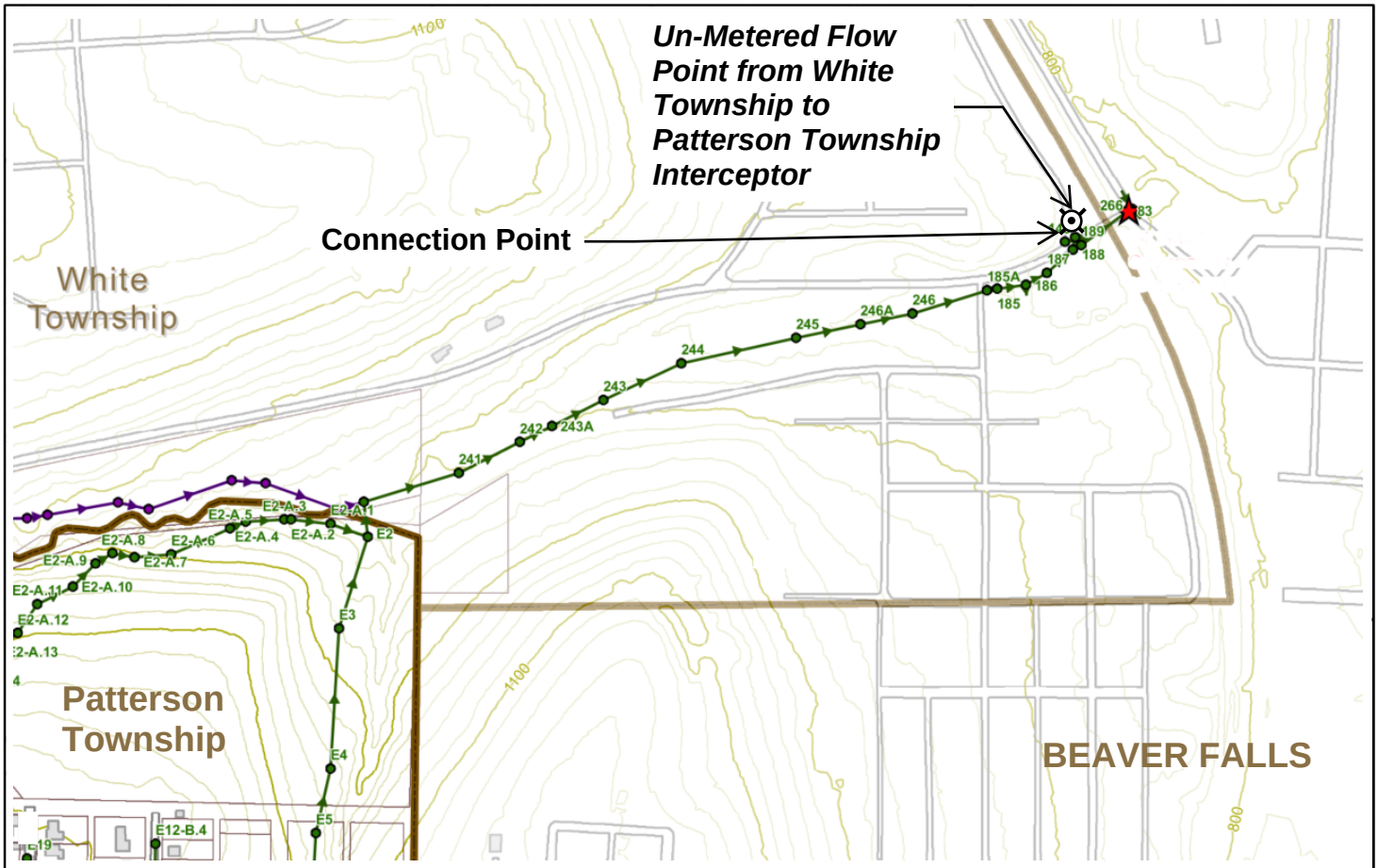
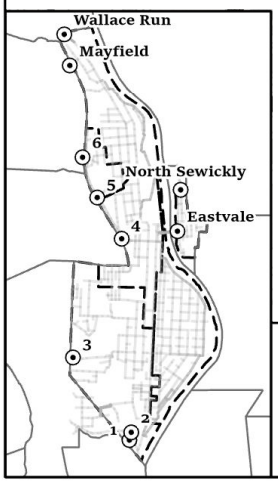
Esri Community Maps Contributors, data.pa.gov, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA
N
GANNETT FLEMING
0
180
360 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit B_2 – Metered Flow, Located at Meter #5
White Township

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

Attached

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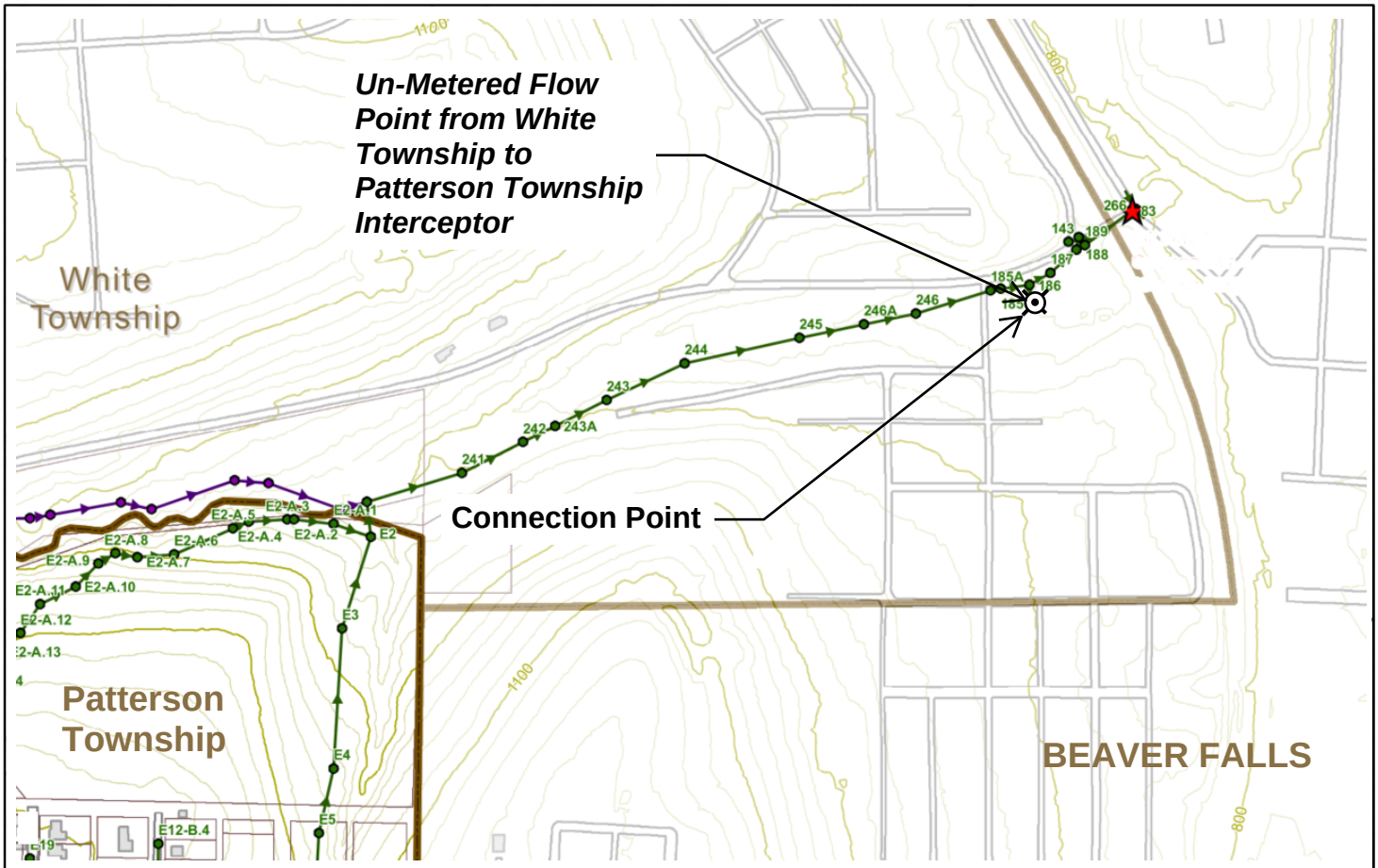
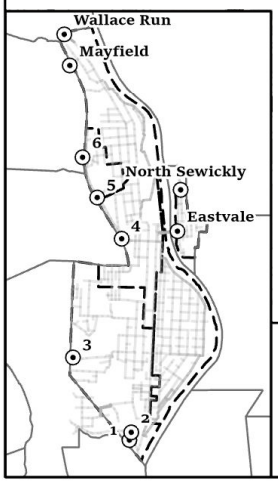
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_3 - Un-metered Flow Located at Steffin Hill Road, MH E189
White Township

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GANNETT FLEMING

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- Monitoring Subsheds
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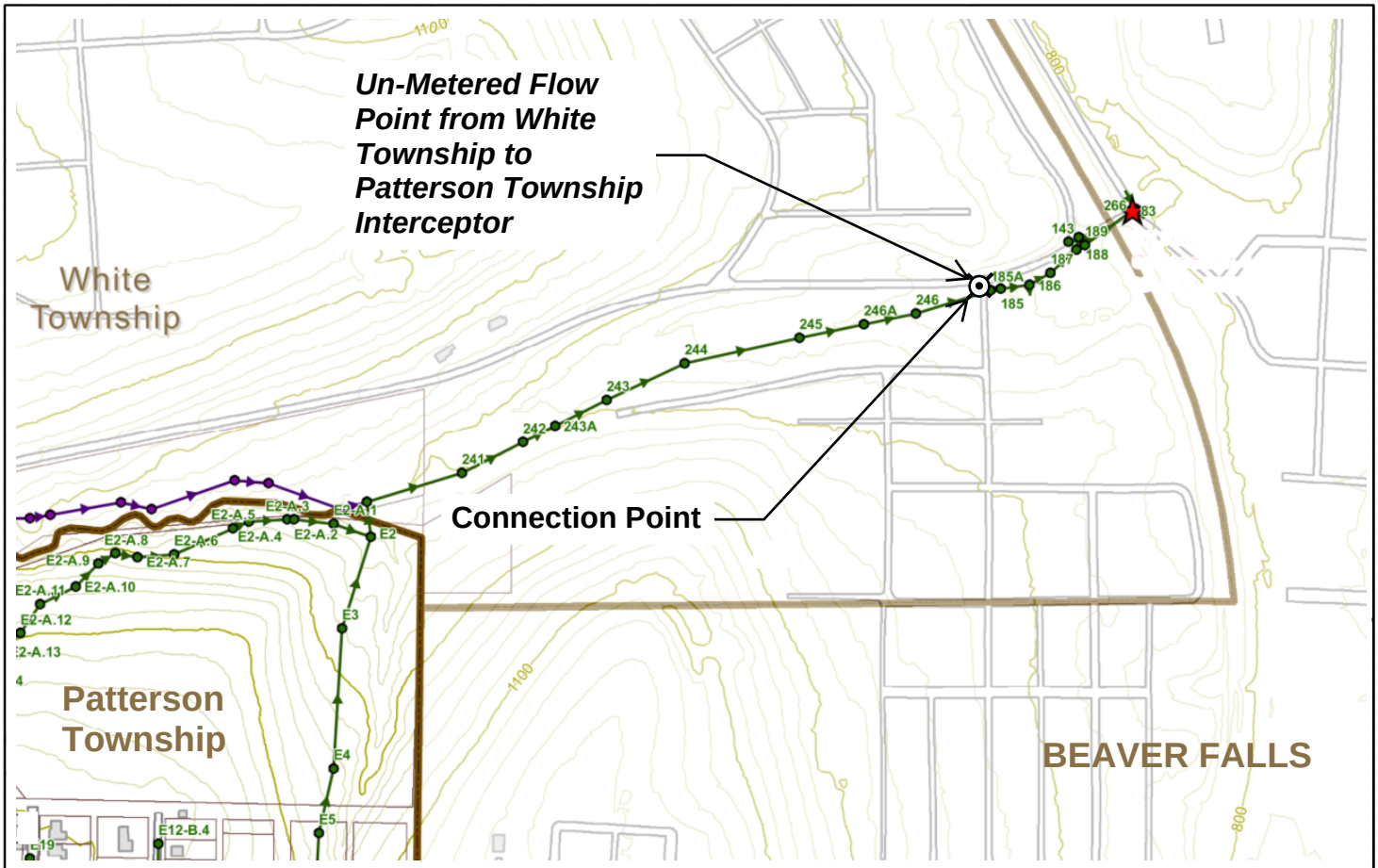
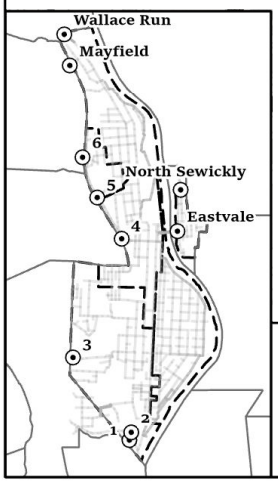
Exhibit C_4 - Un-metered Flow Located at Steffin Hill Road, MH E186
White Township

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GANNETT FLEMING

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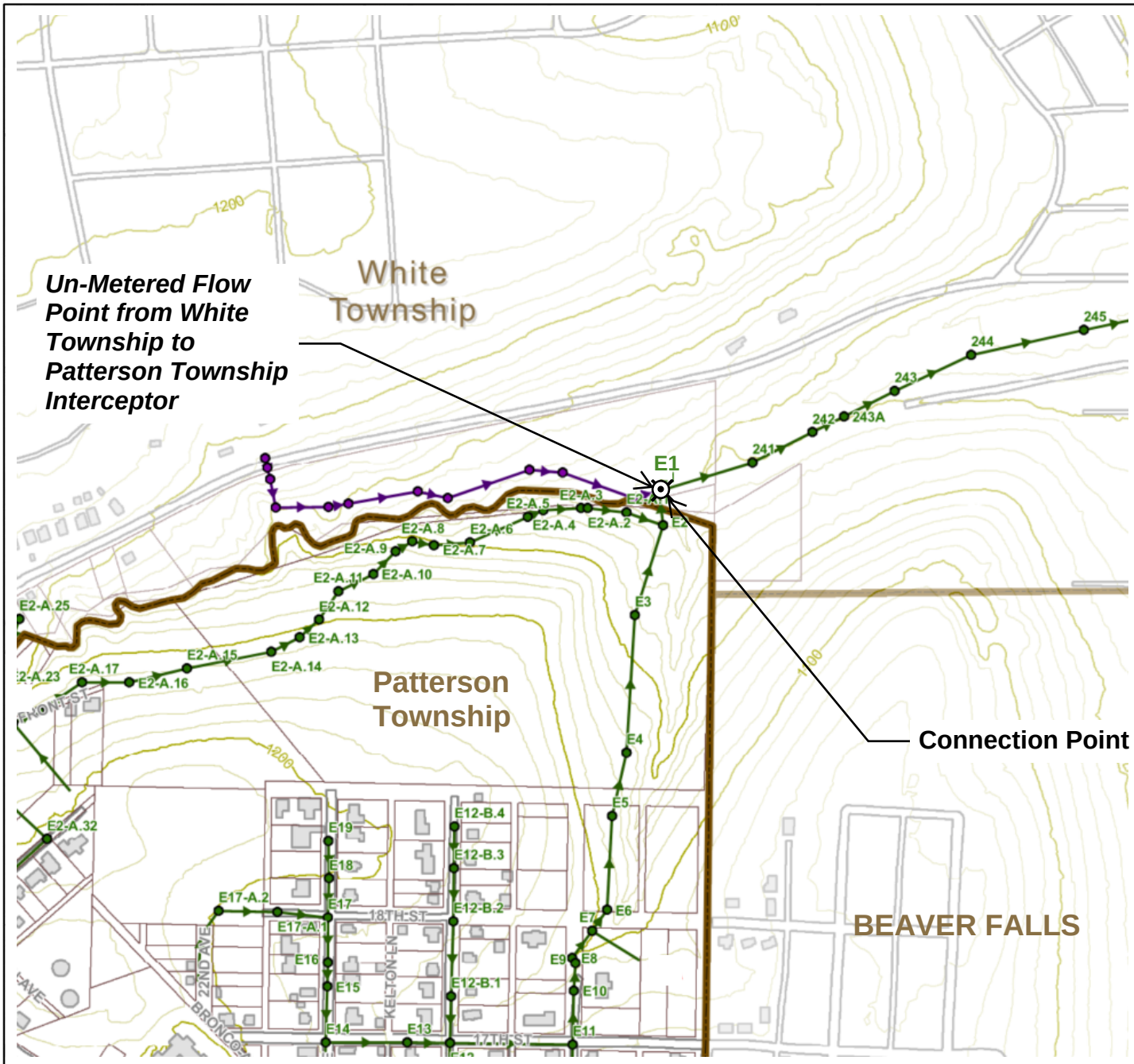
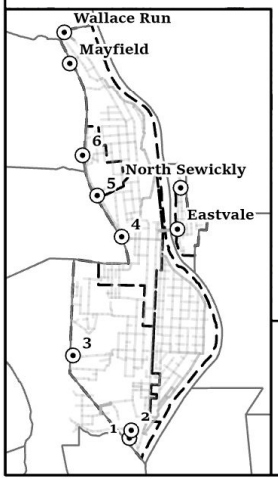
Exhibit C_5 - Un-metered Flow Located at Steffin Hill Road, MH E185A
White Township

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GANNETT FLEMING

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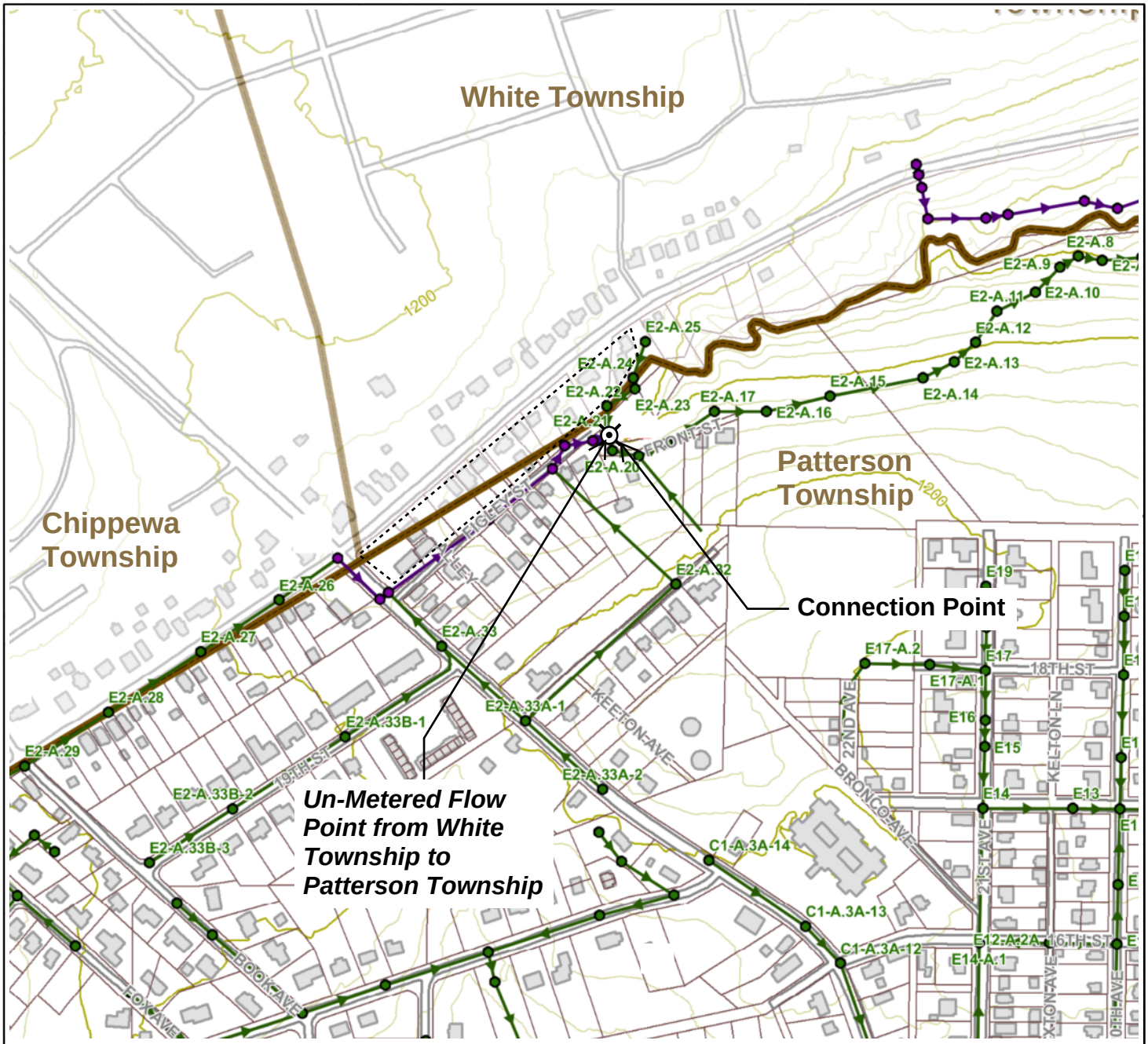
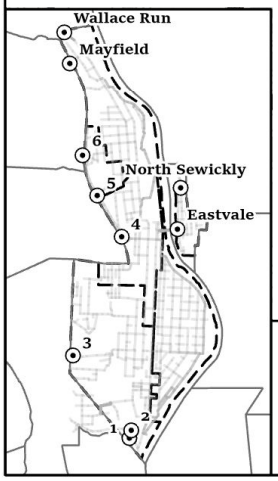
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_6 - Un-Metered Flow Located at NE Corner of Patterson Township, MH E1 White Township




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
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- Sanitary Sewer Manholes
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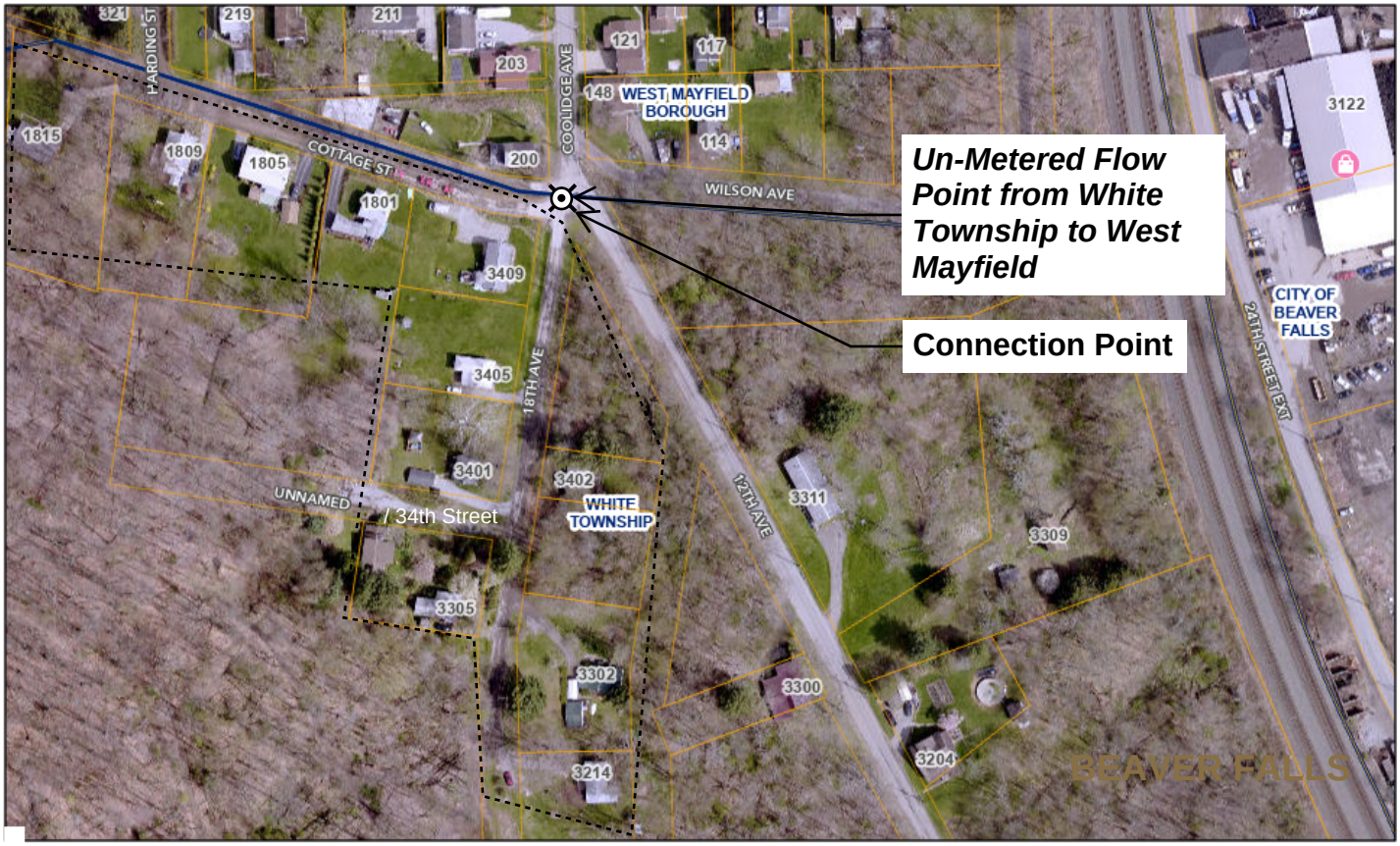
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_7 - Un-metered Flow Located at Figley St and Front St, MH E2-A.21
White Township




November 30, 2023

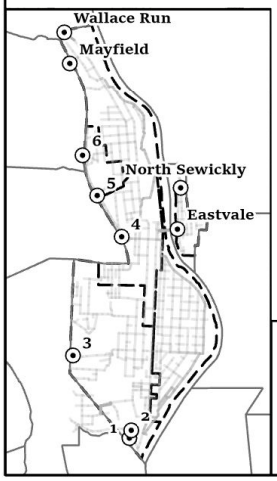
1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.09 km

Retail Parcels Municipalities

Addresses Centerline Labels




N

GANNETT FLEMING

Conection Point

Metered/Unmetered Flow Point

Sanitary Sewer Manholes

Sewer Gravity Mains

Monitoring Subsheds

*Municipal Boundaries*

Exhibit C_8 - Un-metered Flow Homes on 34th Street and 18th Avenue
White Township

# EXHIBIT F14

EXECUTION VERSION

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 14th day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the TOWNSHIP OF PATTERSON, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Agreement dated April 28, 1977 between the City and the Municipality (the "Existing Agreement"); and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Chapter 158 of the Code of the Municipality as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, Borough of Eastvale, City, North Sewickley Township Sewer Authority, Municipality, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and

deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any

Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate, and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the

"Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

20. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

21. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

22. Miscellaneous.

22.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

22.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

22.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

22.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

22.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

22.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

22.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

22.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Township of Patterson
1600 19th Avenue
Beaver Falls, PA 15010
Attn: President

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.

762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

22.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater**,** including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

22.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

22.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

22.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

22.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

22.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Mark A. Lucca

Title: President

MUNICIPALITY:

TOWNSHIP OF PATTERSON

By: _____

Name: Paula Wagoner

Title: President

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

EXHIBIT A
CONNECTION POINTS

Attached

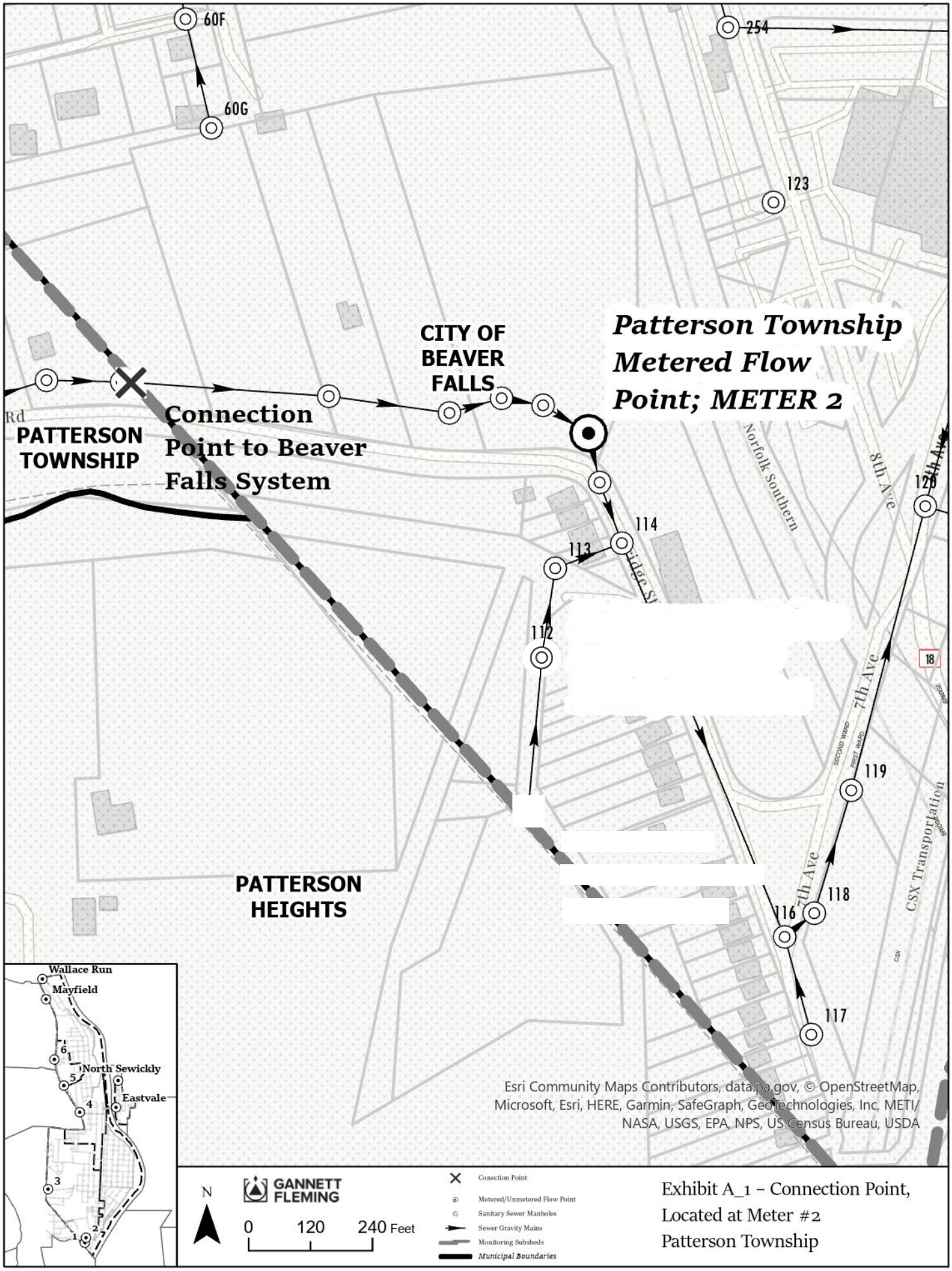
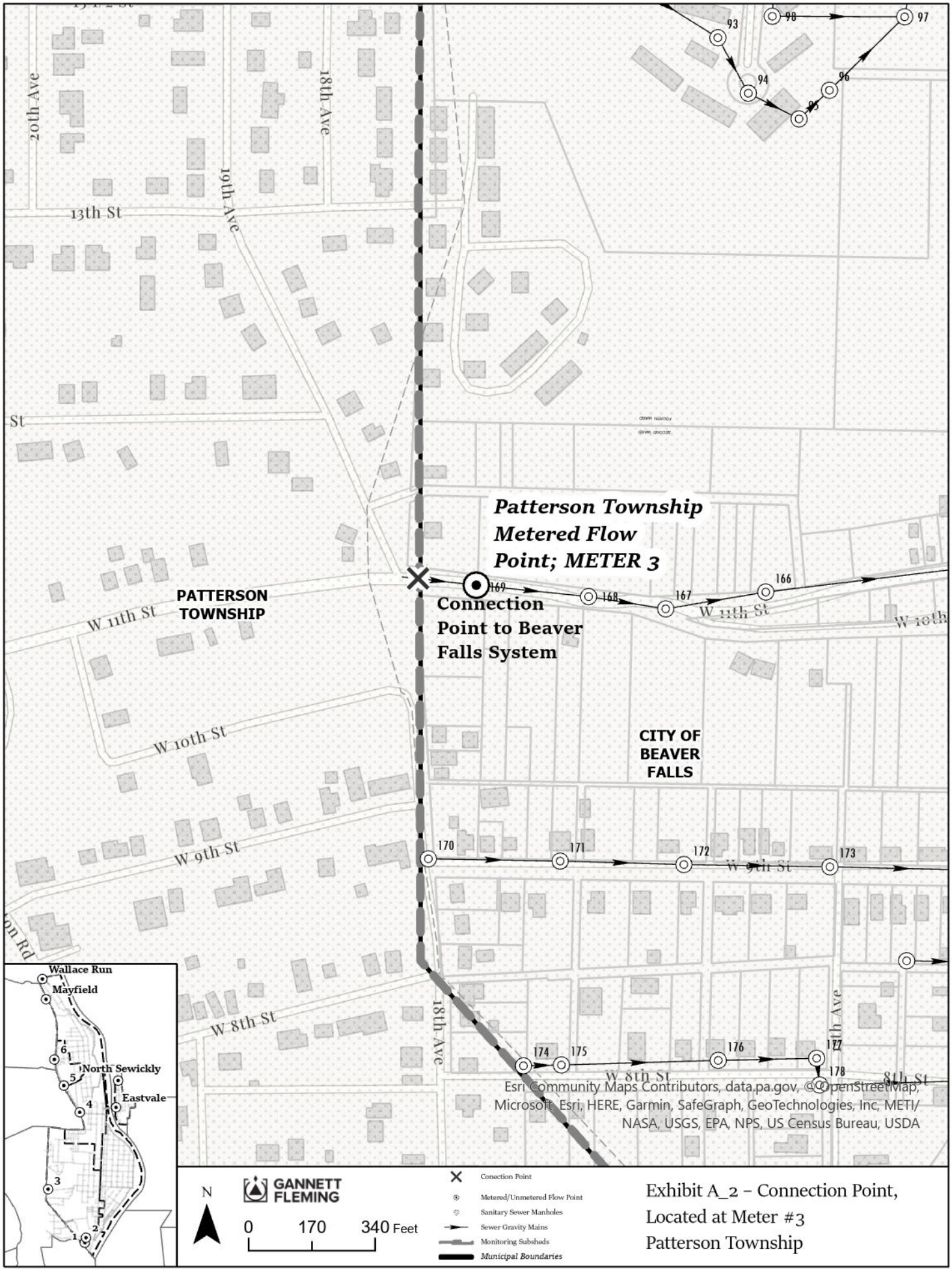


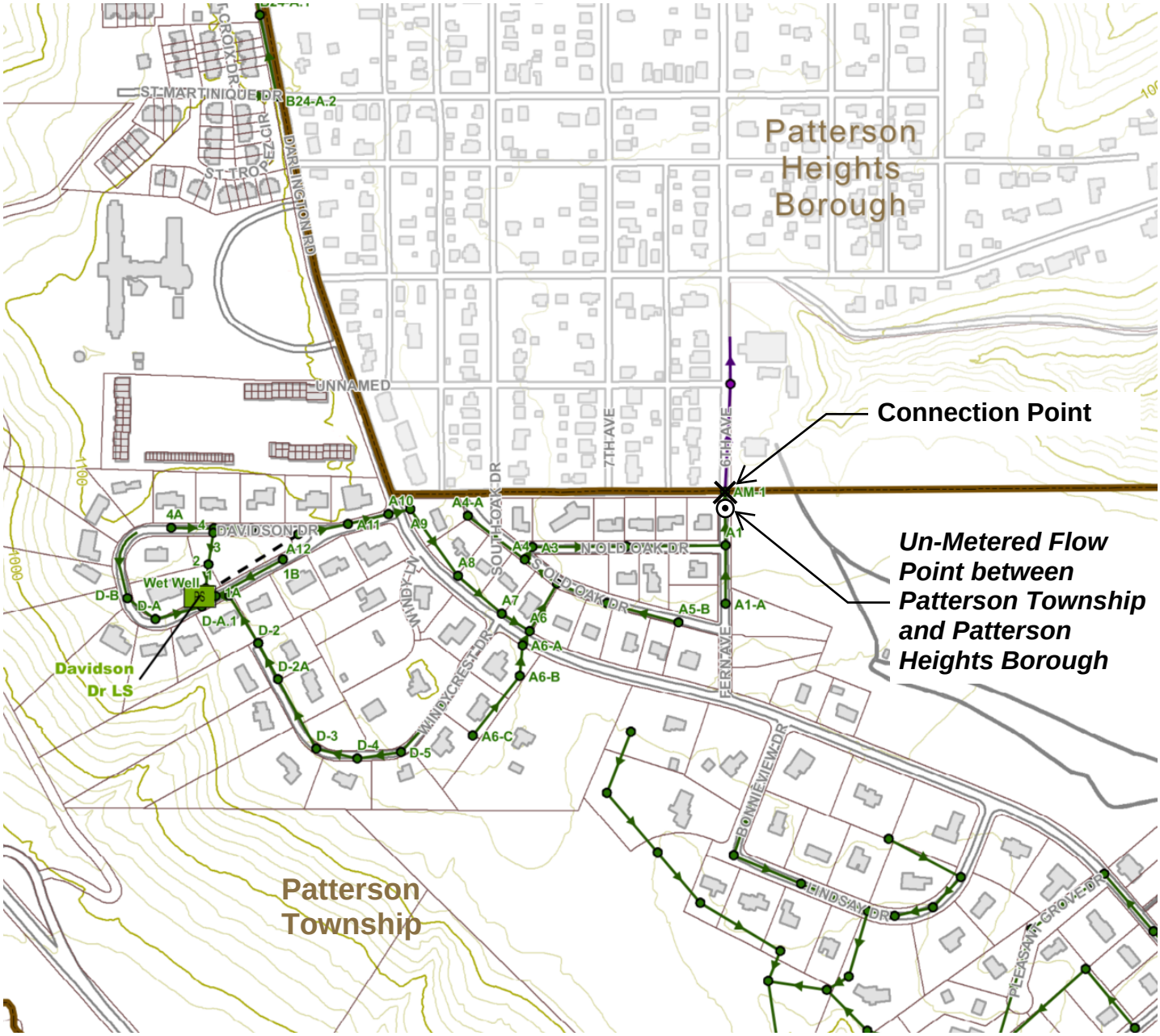

Exhibit A_1 – Connection Point, Located at Meter #2
Patterson Township

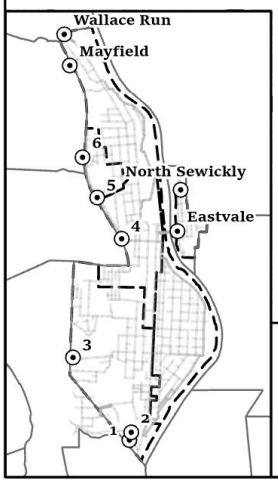



GANNETT FLEMING

Esri Community Maps Contributors, data.pa.gov, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Exhibit A_2 – Connection Point, Located at Meter #3
Patterson Township



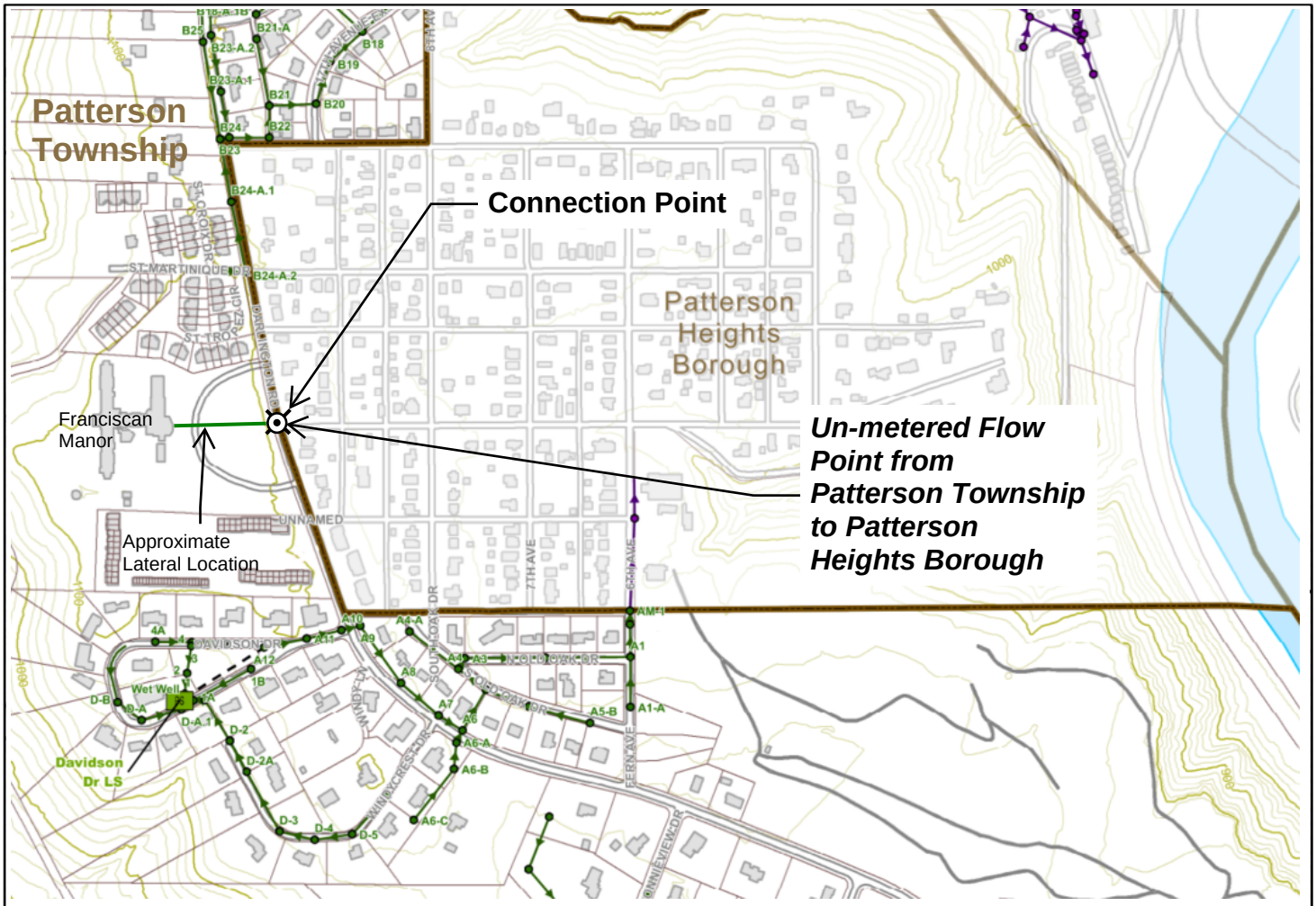

N

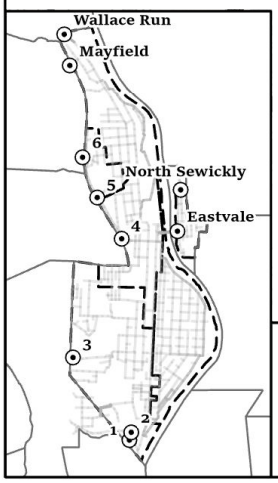
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_3 - Connection Point Located at 6th Ave/Fern Ave & Old Oak Drive North
Patterson Township



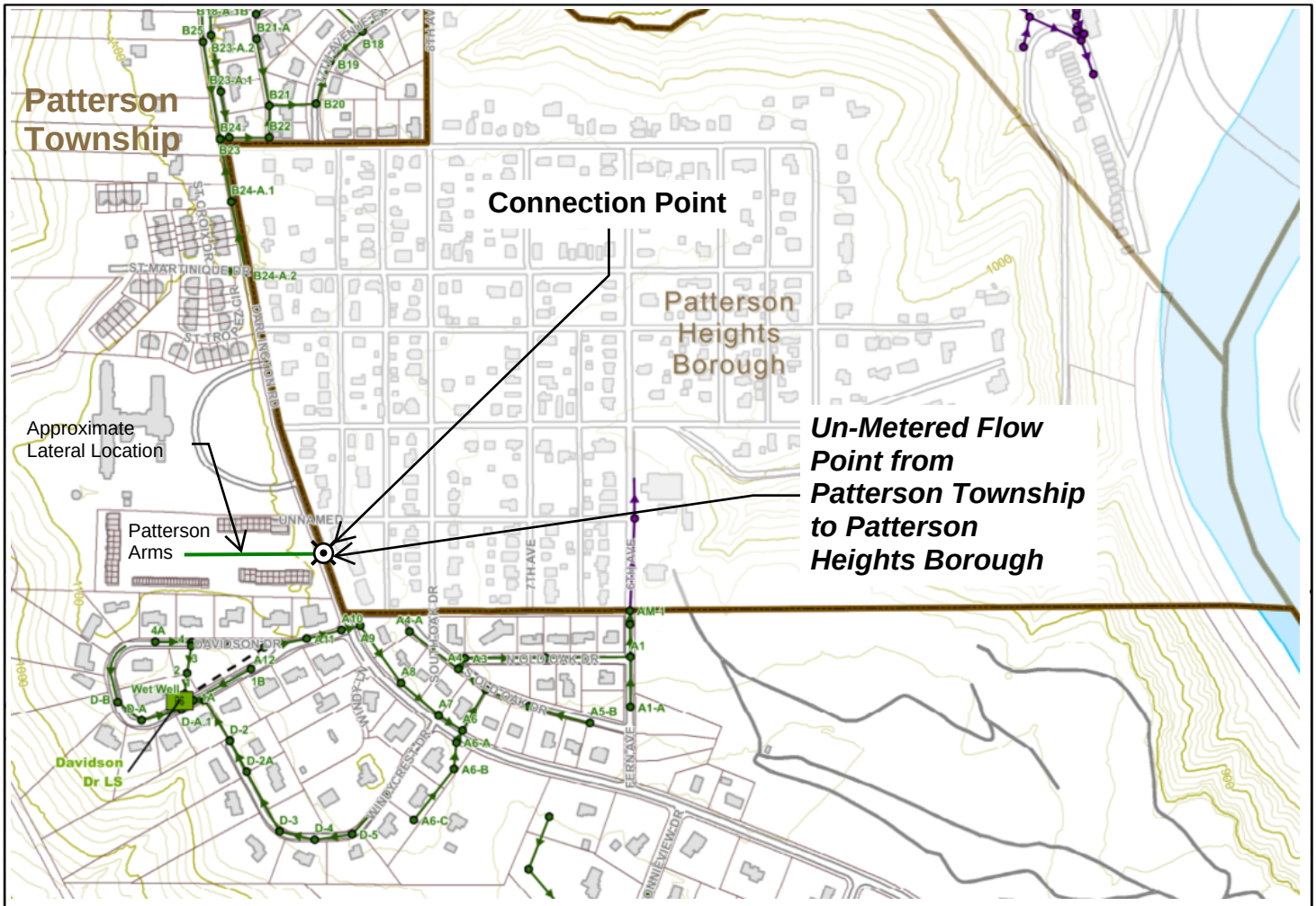

N

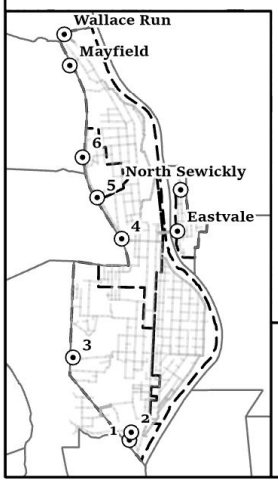
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_4 - Connection Point Located at Franciscan Manor Patterson Township



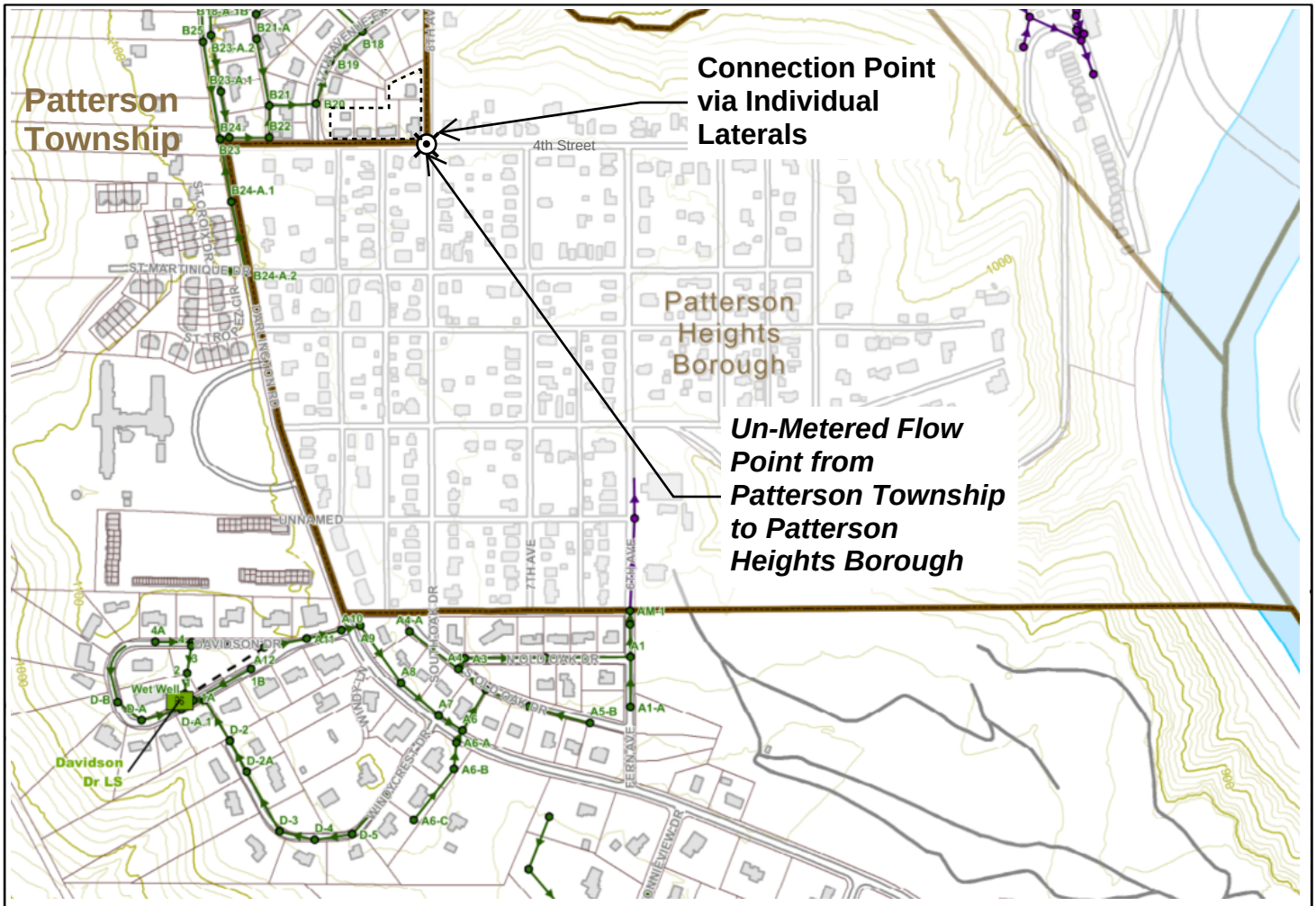

N

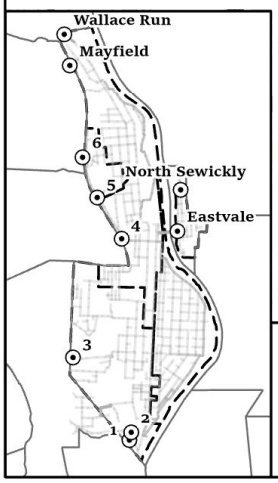
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_5 - Connection Point Located at Patterson Arms
Patterson Township



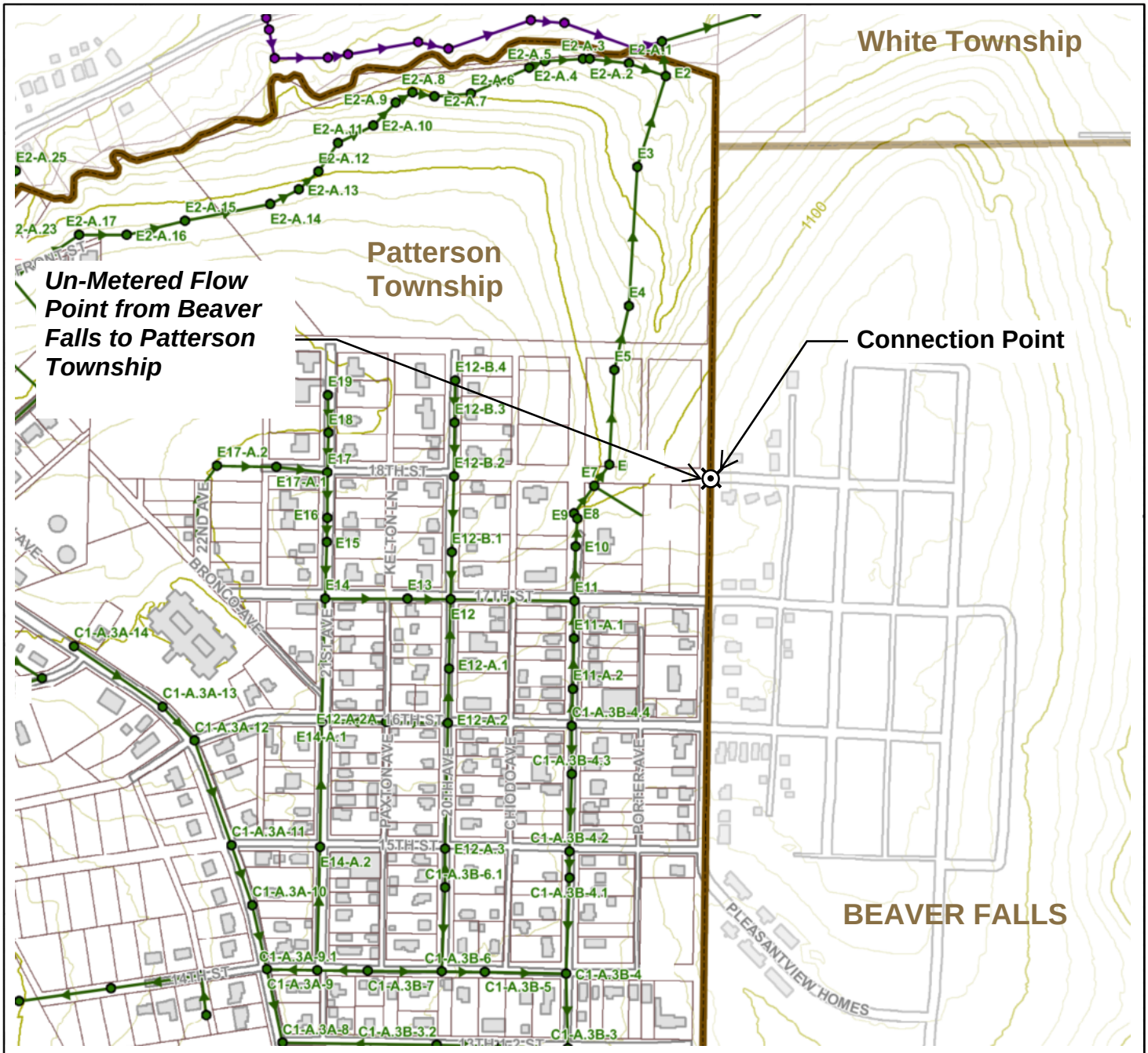

N

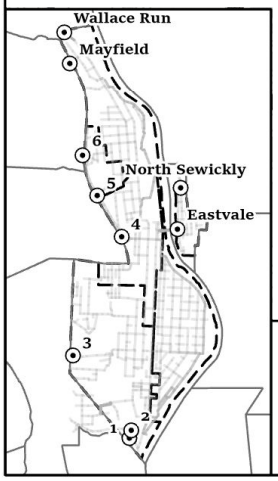
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_6 - Connection Point via Individual Laterals, Located at Fourth Street and 8th Ave Patterson Township



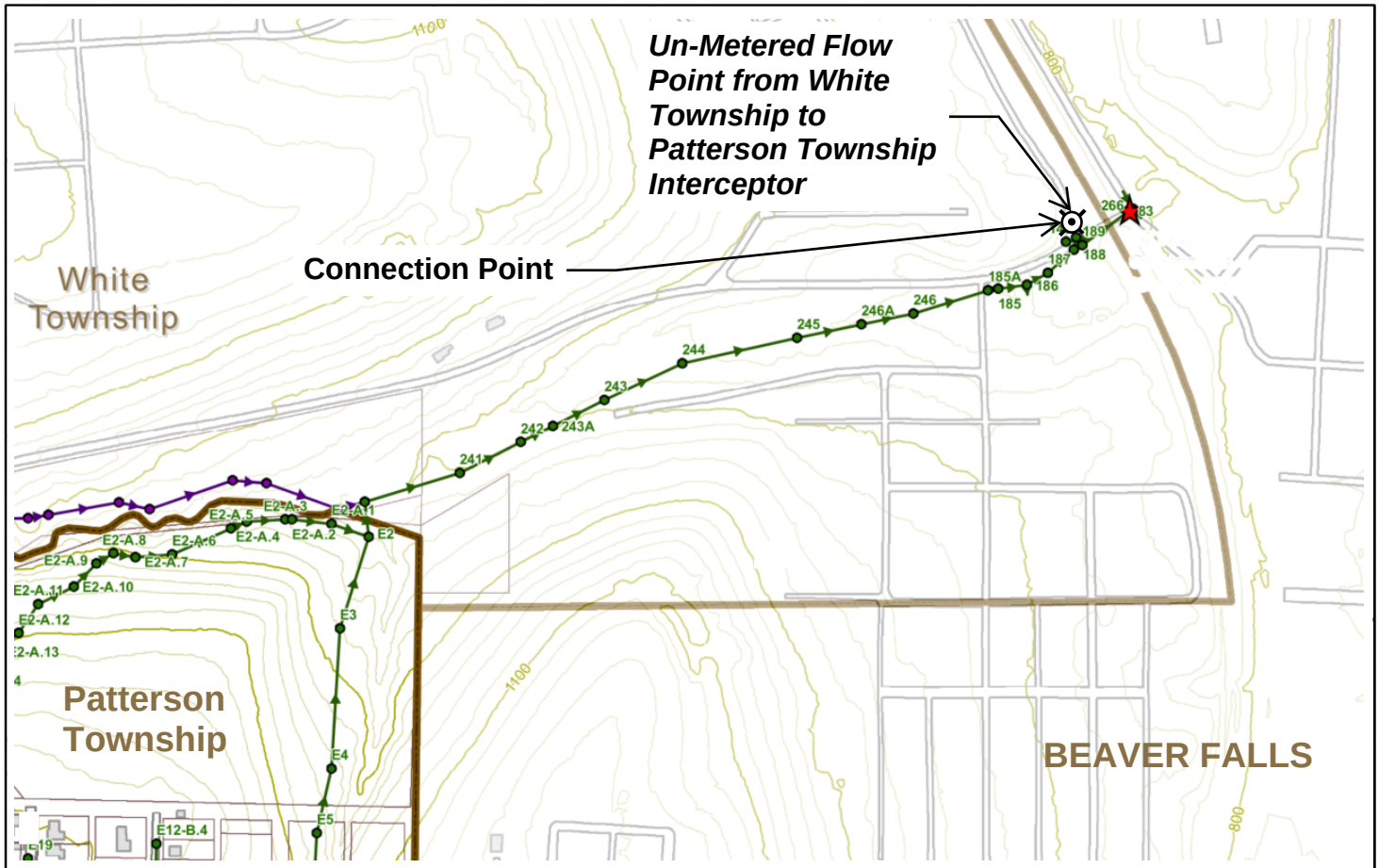

N

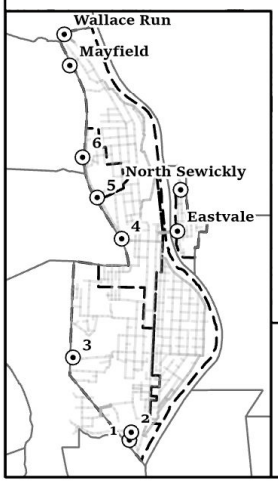
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_7 - Connection Point Located at 19th Ave and North of 17th Street, MH E7 Patterson Township



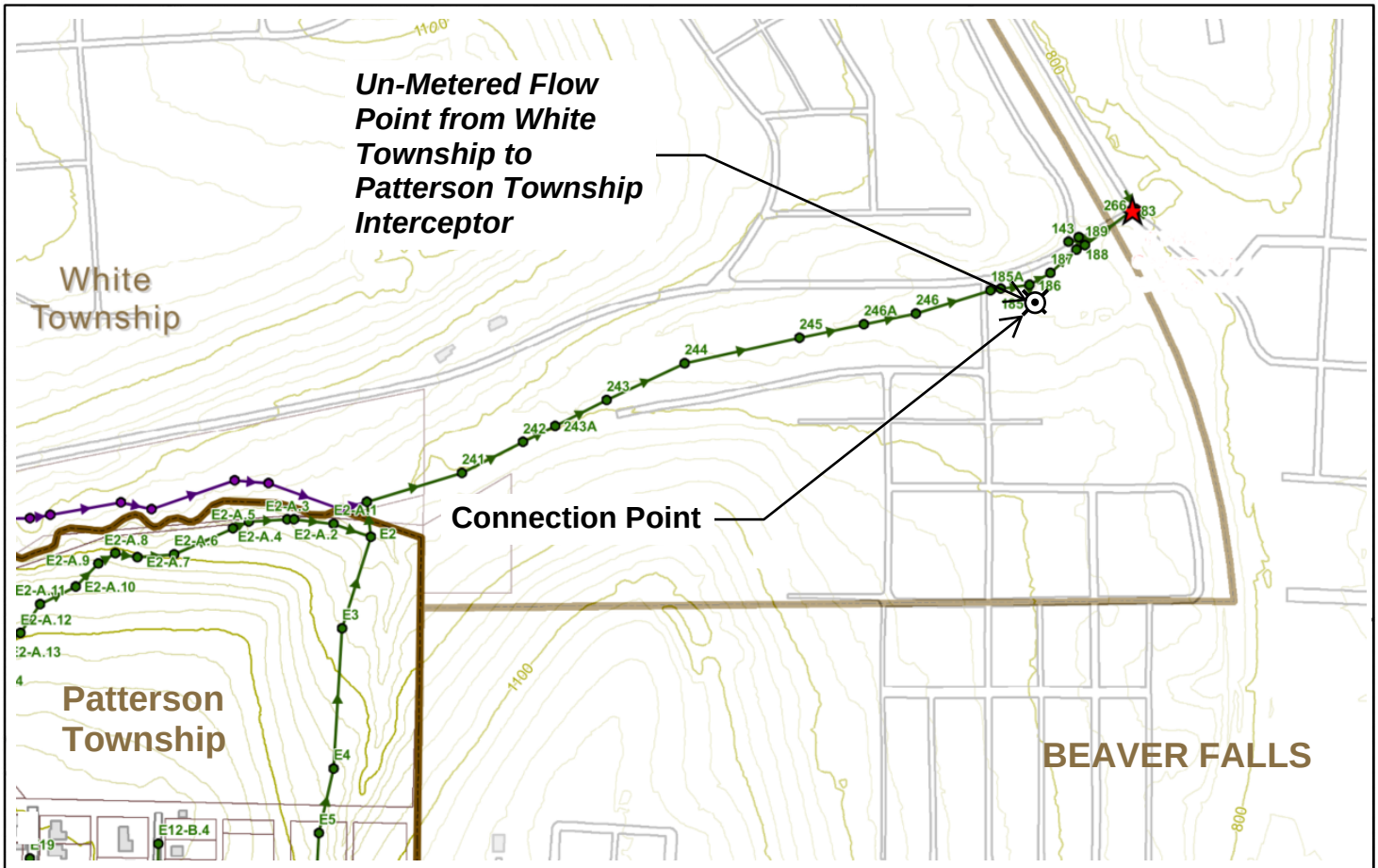

N

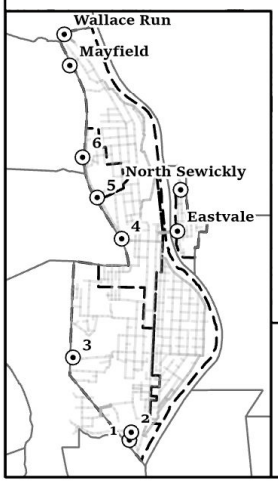
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_8 - Connection Point Located at Steffin Hill Road, MH E189
Patterson Township



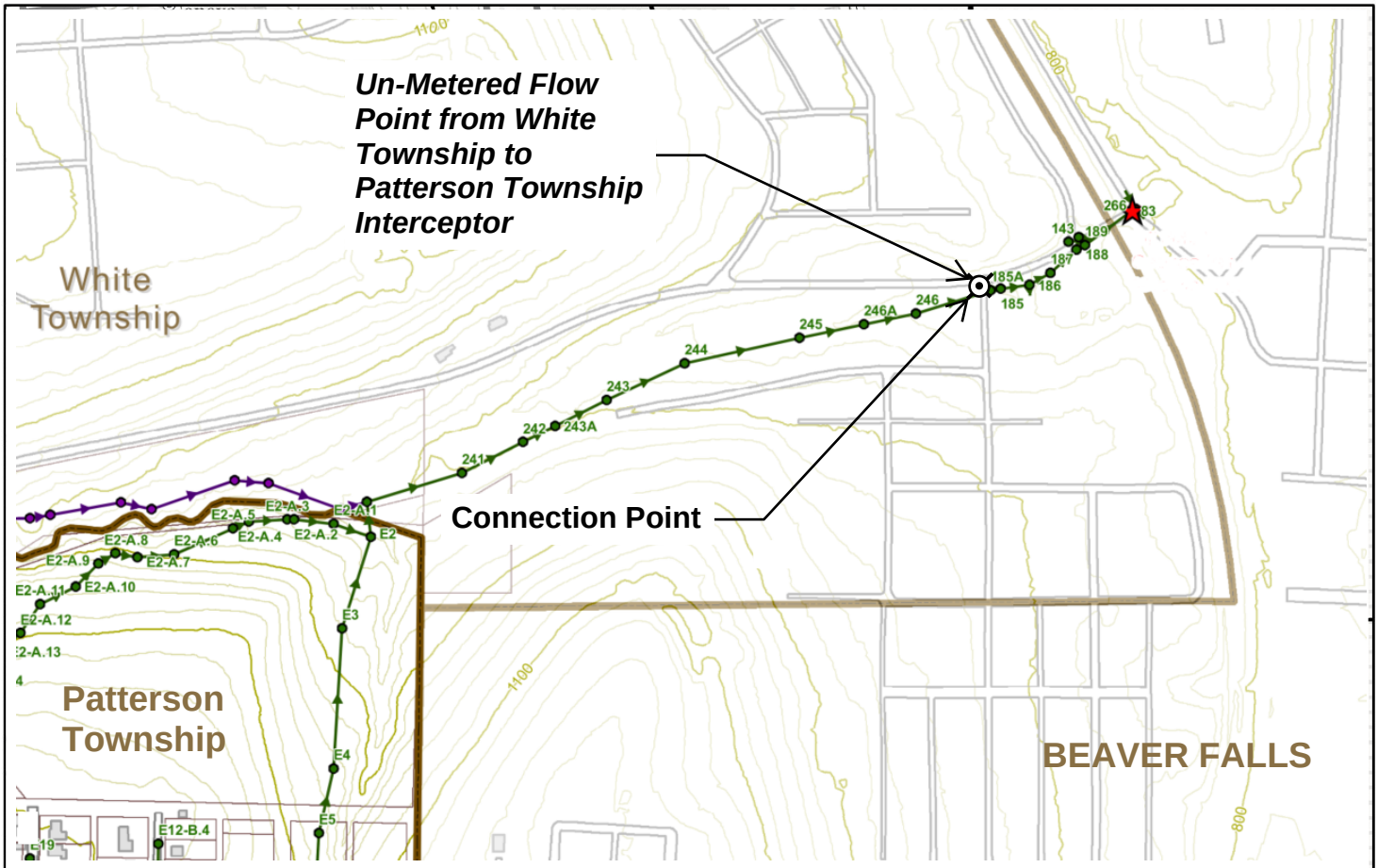

N

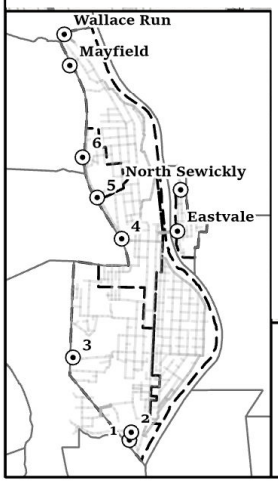
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_9 - Connection Point Located at Steffin Hill Road, MH E186
Patterson Township



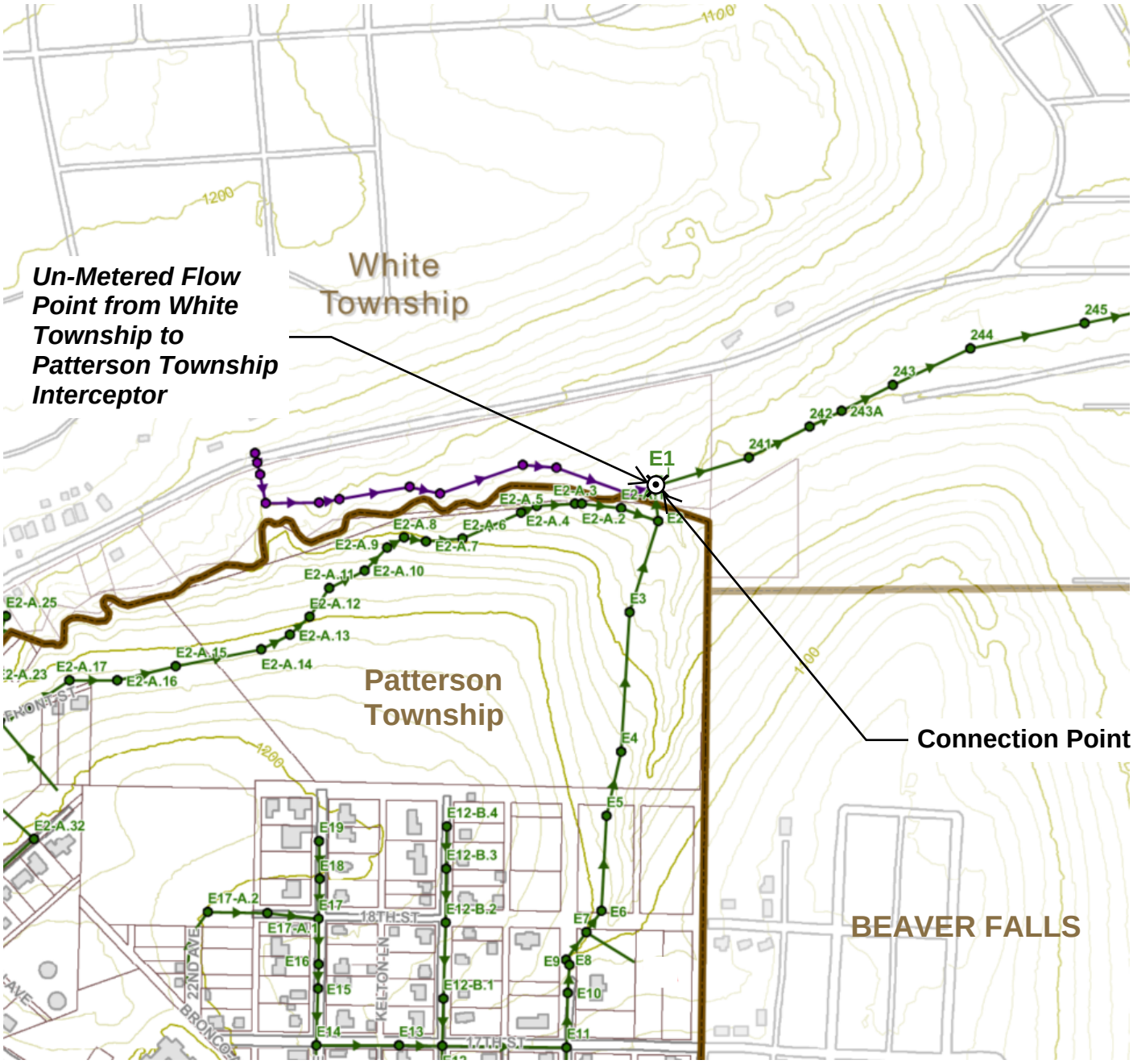

N

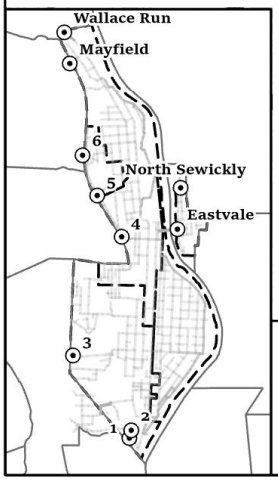
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_10 - Connection Point Located at Steffin Hill Road, MH E185A
Patterson Township



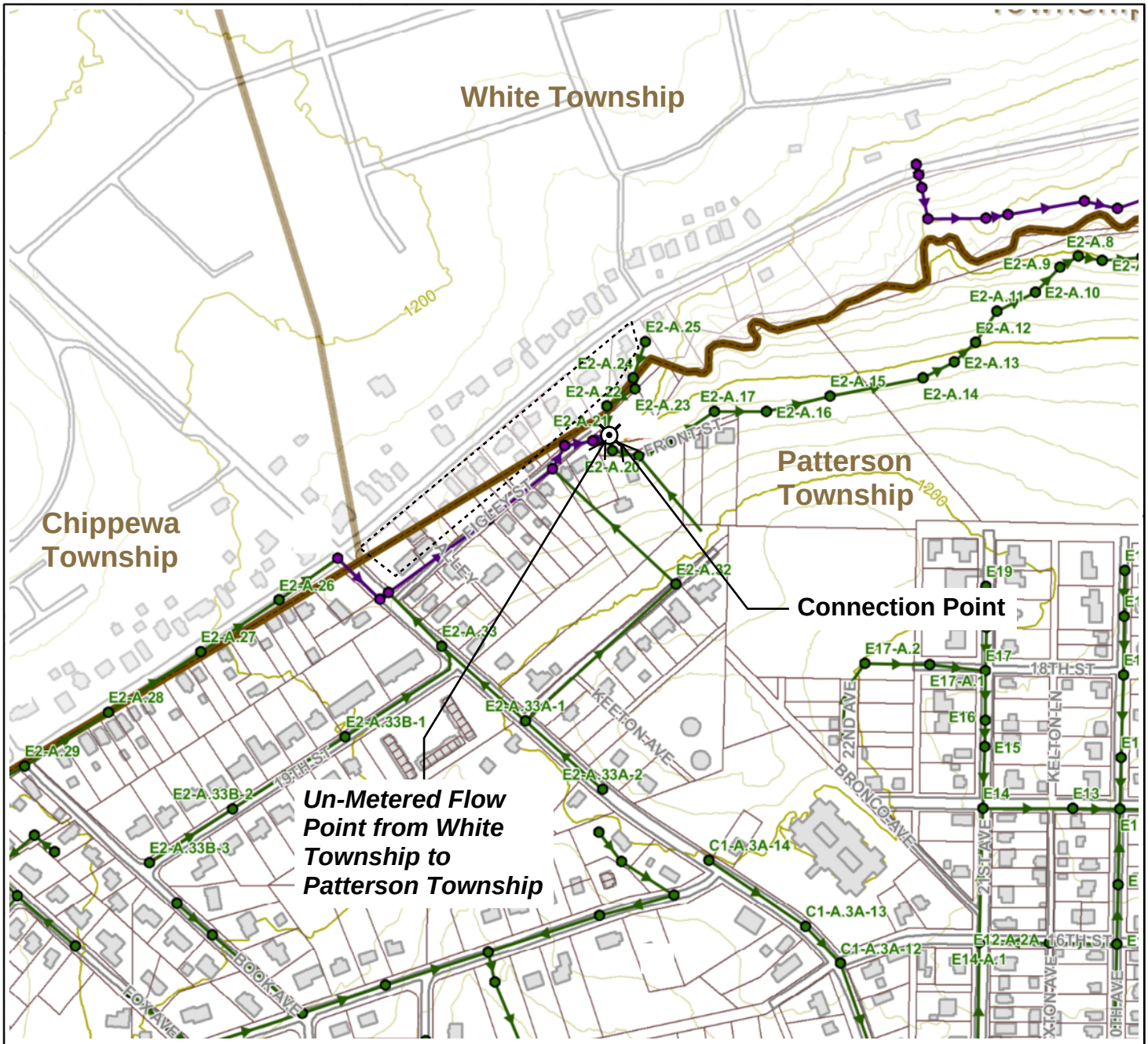

N

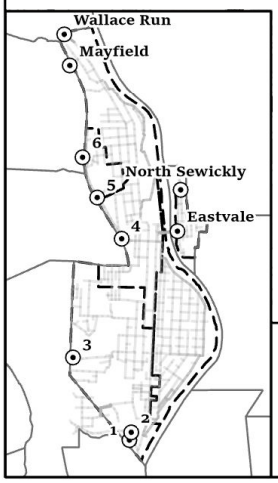
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_11 - Connection Point Located at NE Corner of Patterson Township, MH E1 Patterson Township




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit A_12 - Connection Point Located at Figley St and Front St, MH E2-A.21
Patterson Township

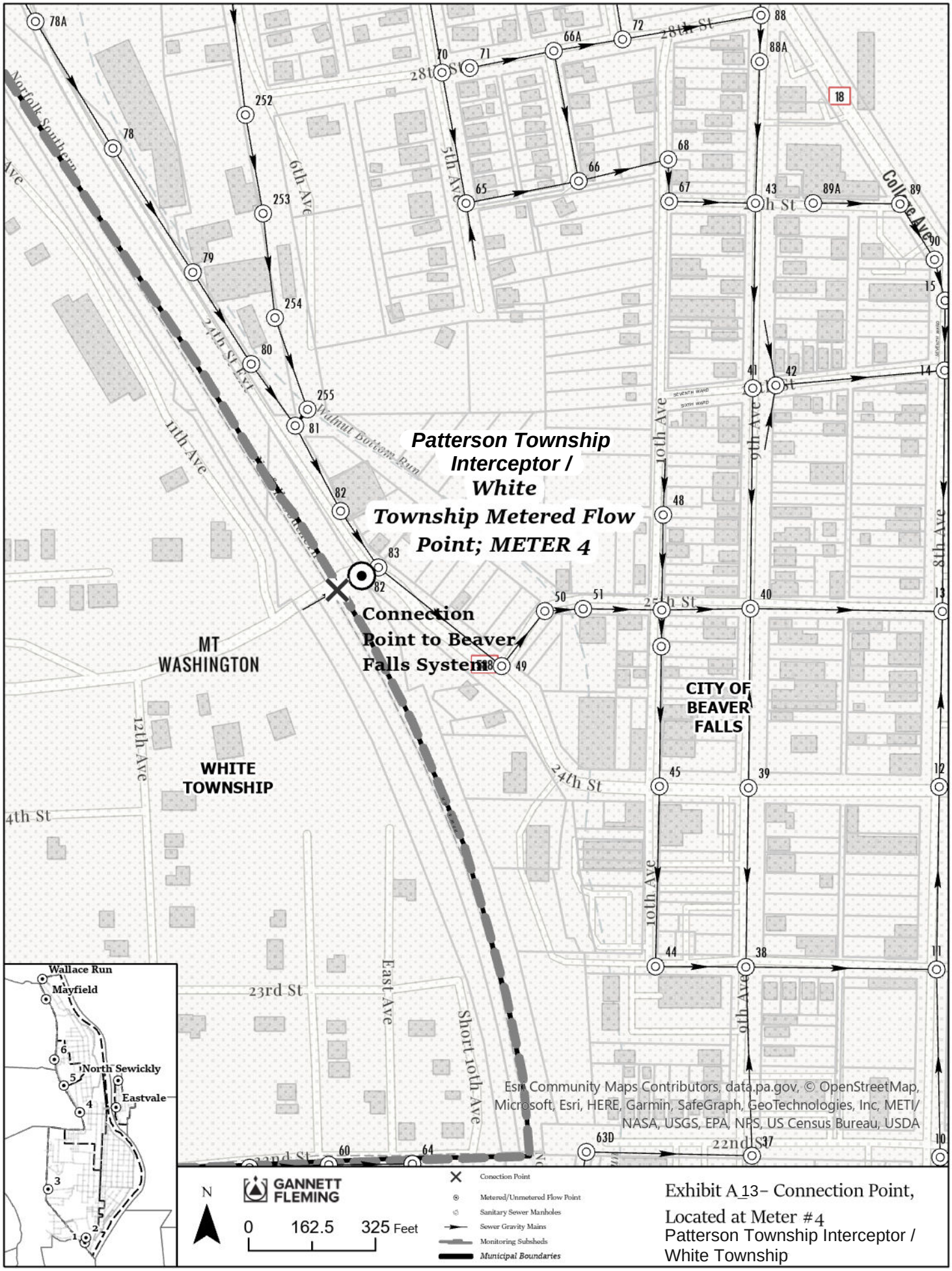



Exhibit A_13– Connection Point, Located at Meter #4
Patterson Township Interceptor / White Township

EXHIBIT B
CONNECTION POINTS HAVING FLOW METERS

Attached

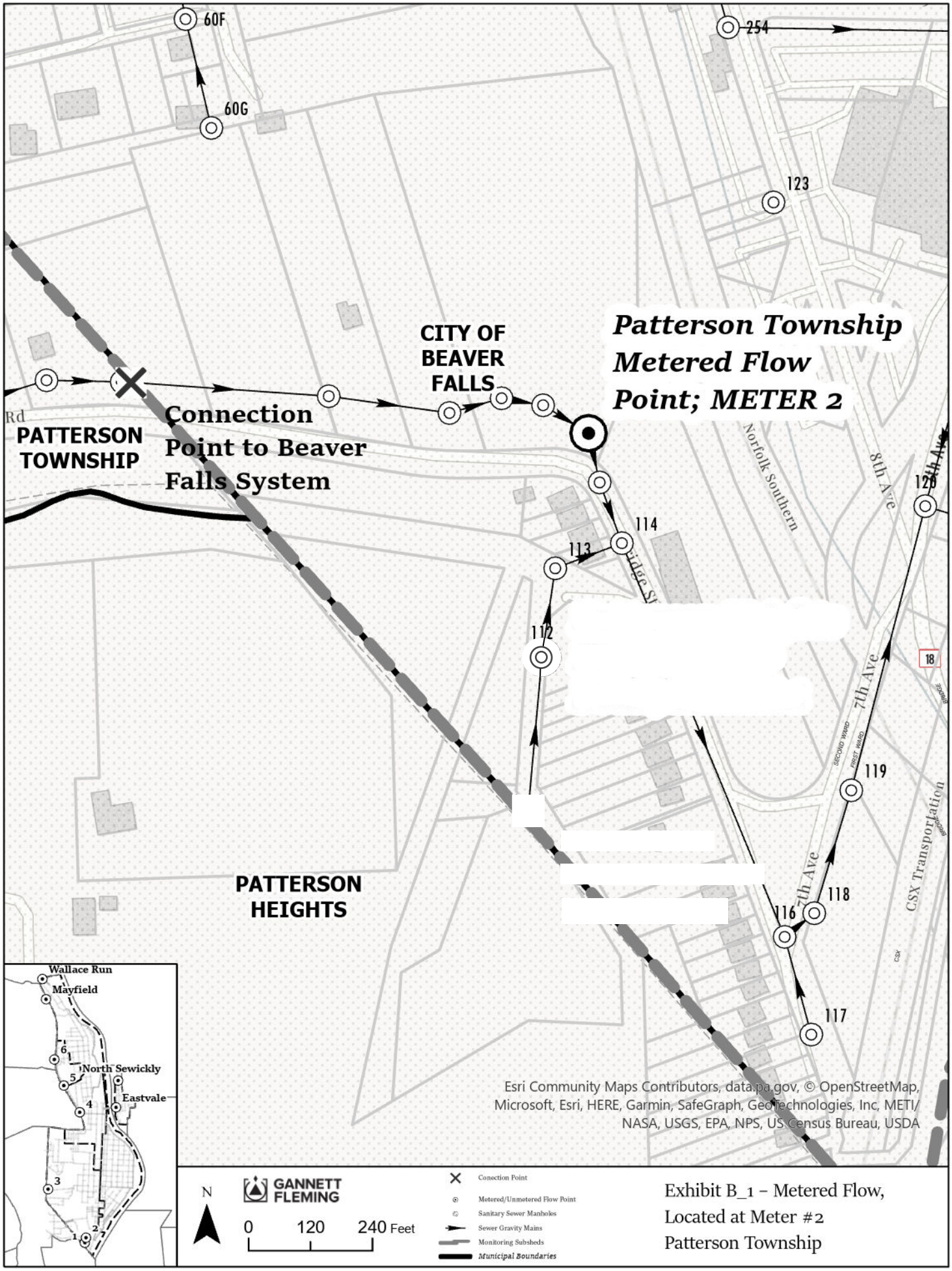
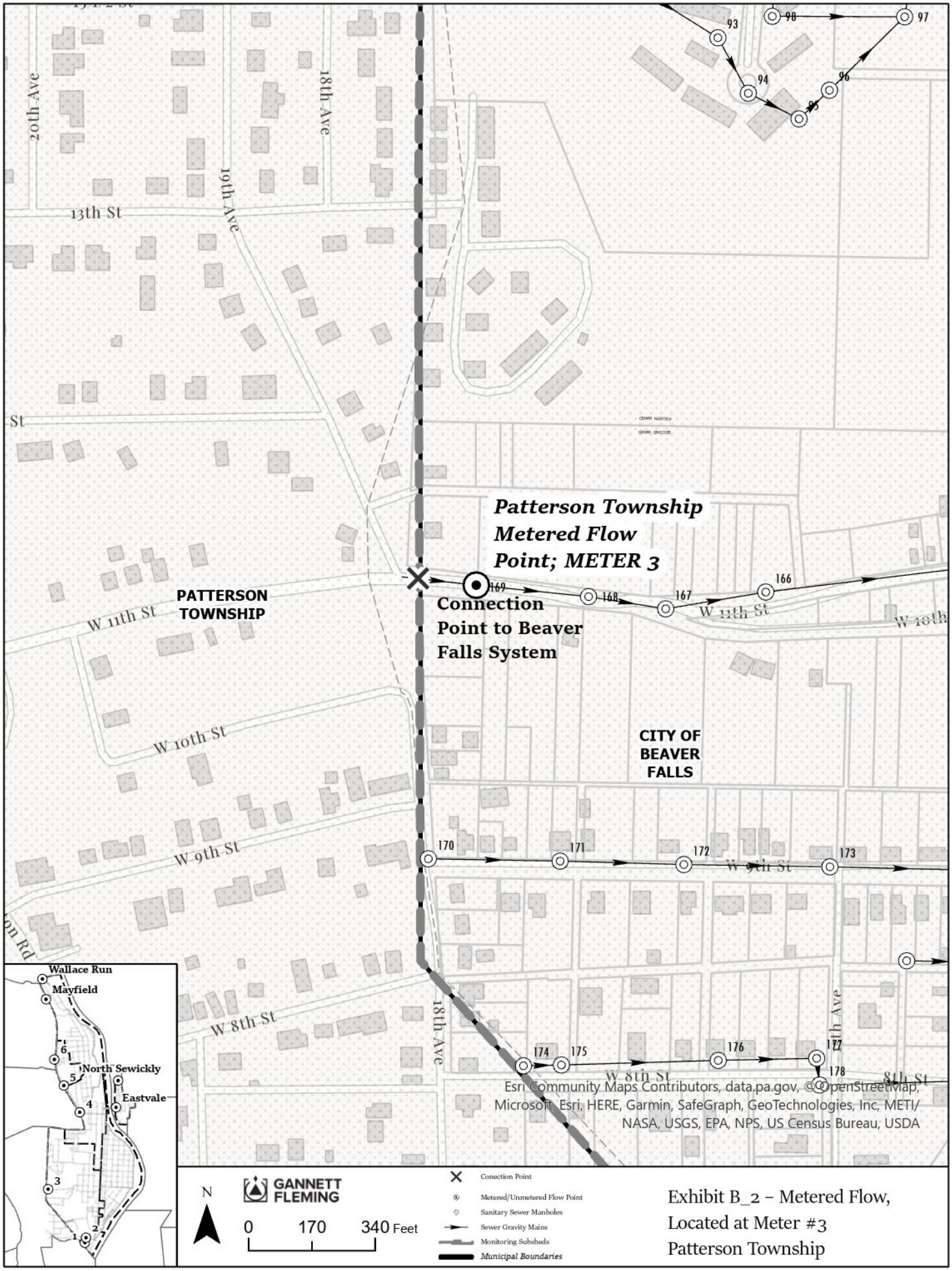



Exhibit B_1 – Metered Flow, Located at Meter #2
Patterson Township



GANNETT FLEMING

Exhibit B_2 – Metered Flow, Located at Meter #3 Patterson Township

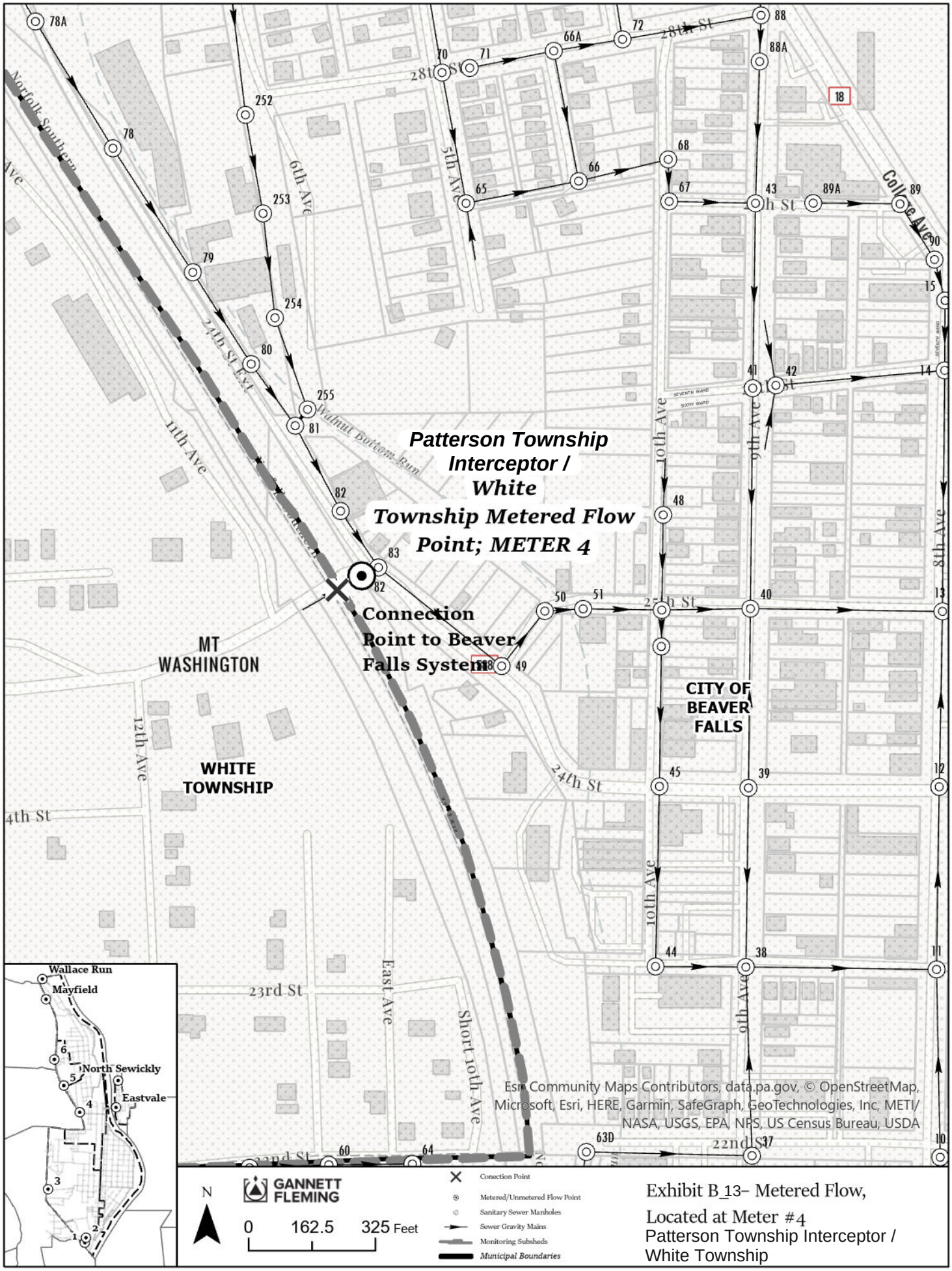
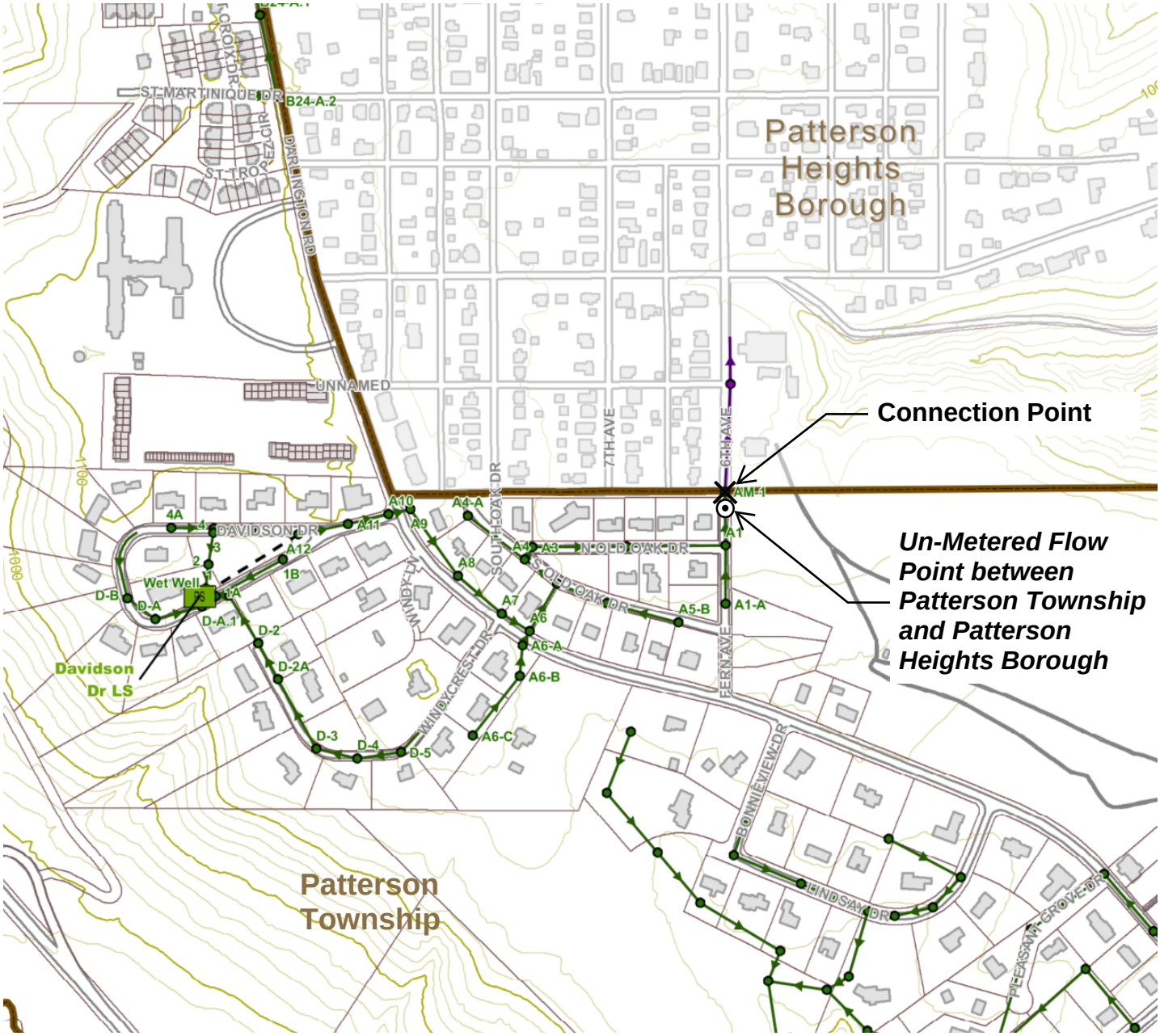
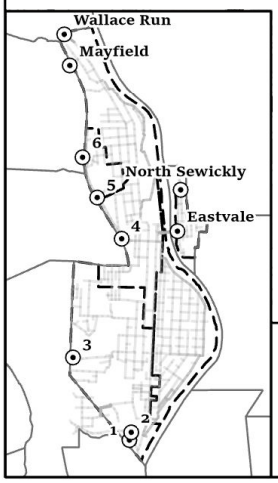



Exhibit B_13– Metered Flow, Located at Meter #4
Patterson Township Interceptor / White Township

EXHIBIT C
CONNECTION POINTS NOT HAVING FLOW METERS

Attached



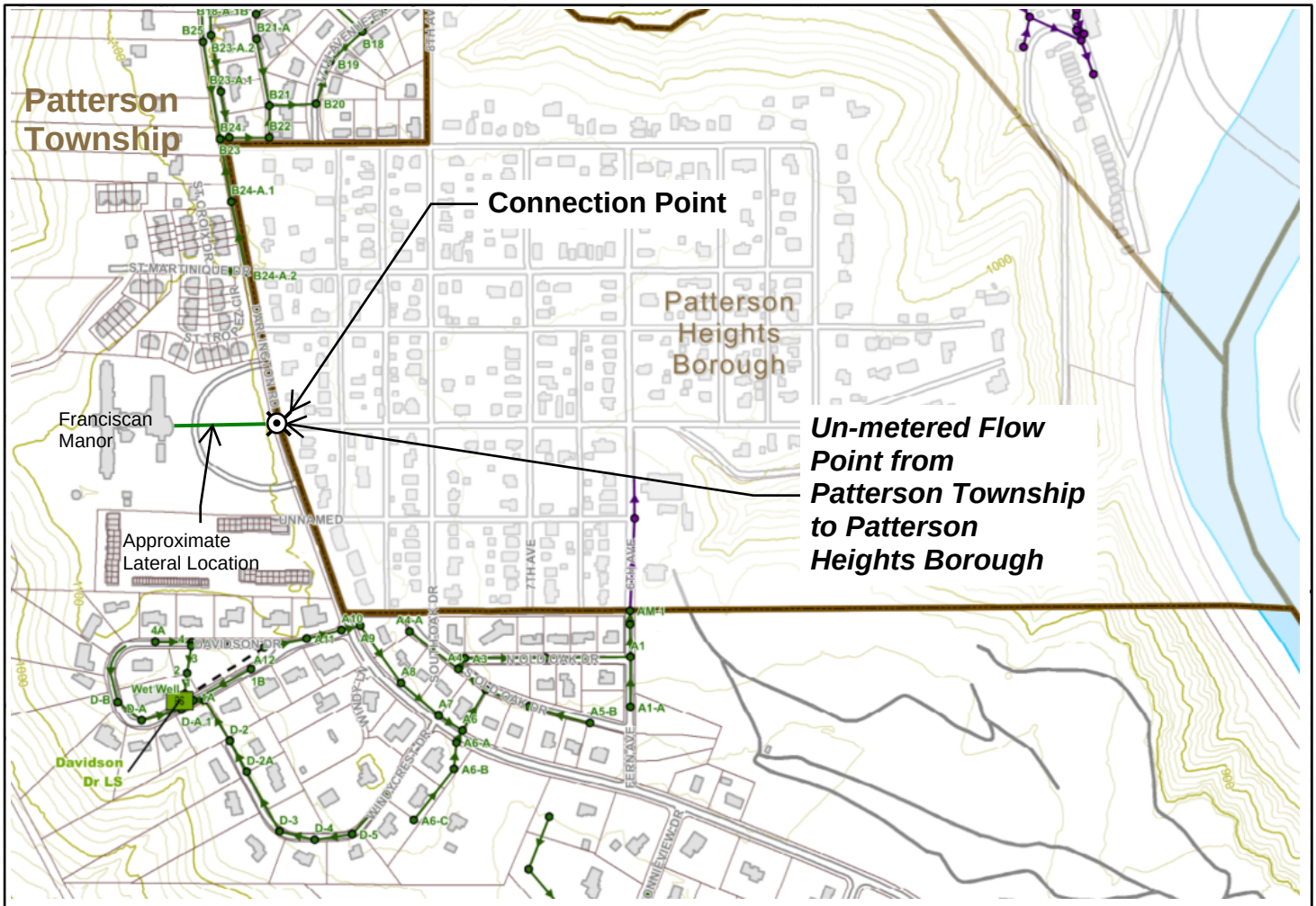

N

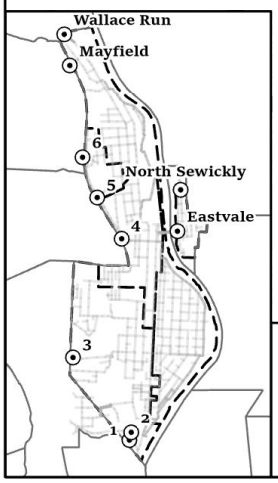
NOT TO SCALE

GANNETT FLEMING

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_3 - Un-Metered Flow Located at 6th Ave/Fern Ave & Old Oak Drive North Patterson Township



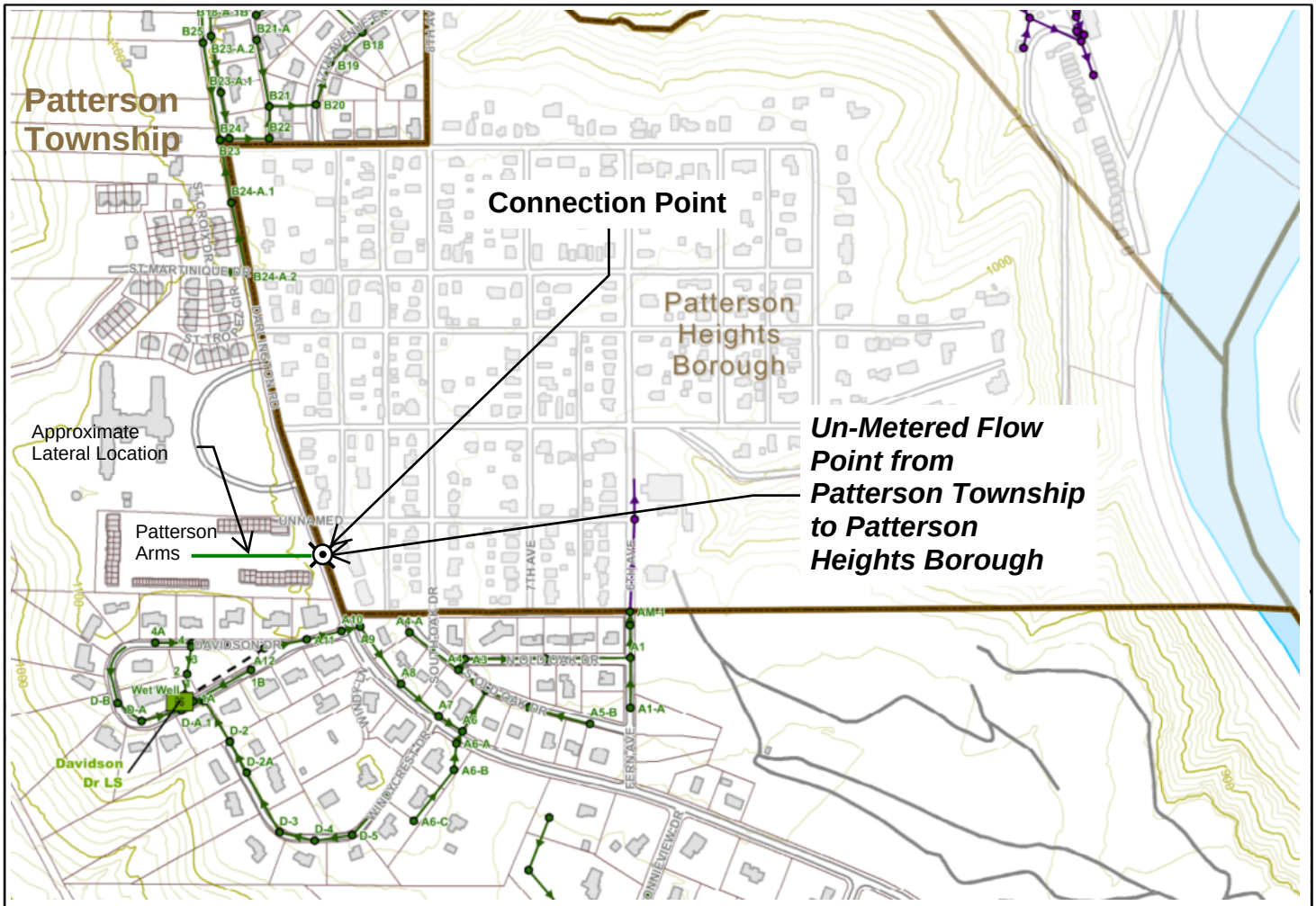

N

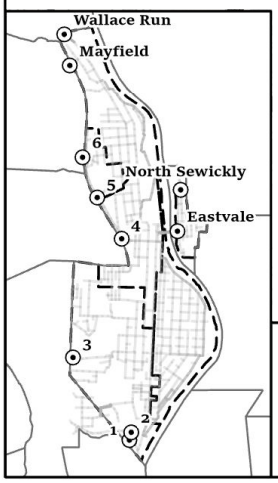
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_4 - Un-metered Flow Located at Franciscan Manor Patterson Township



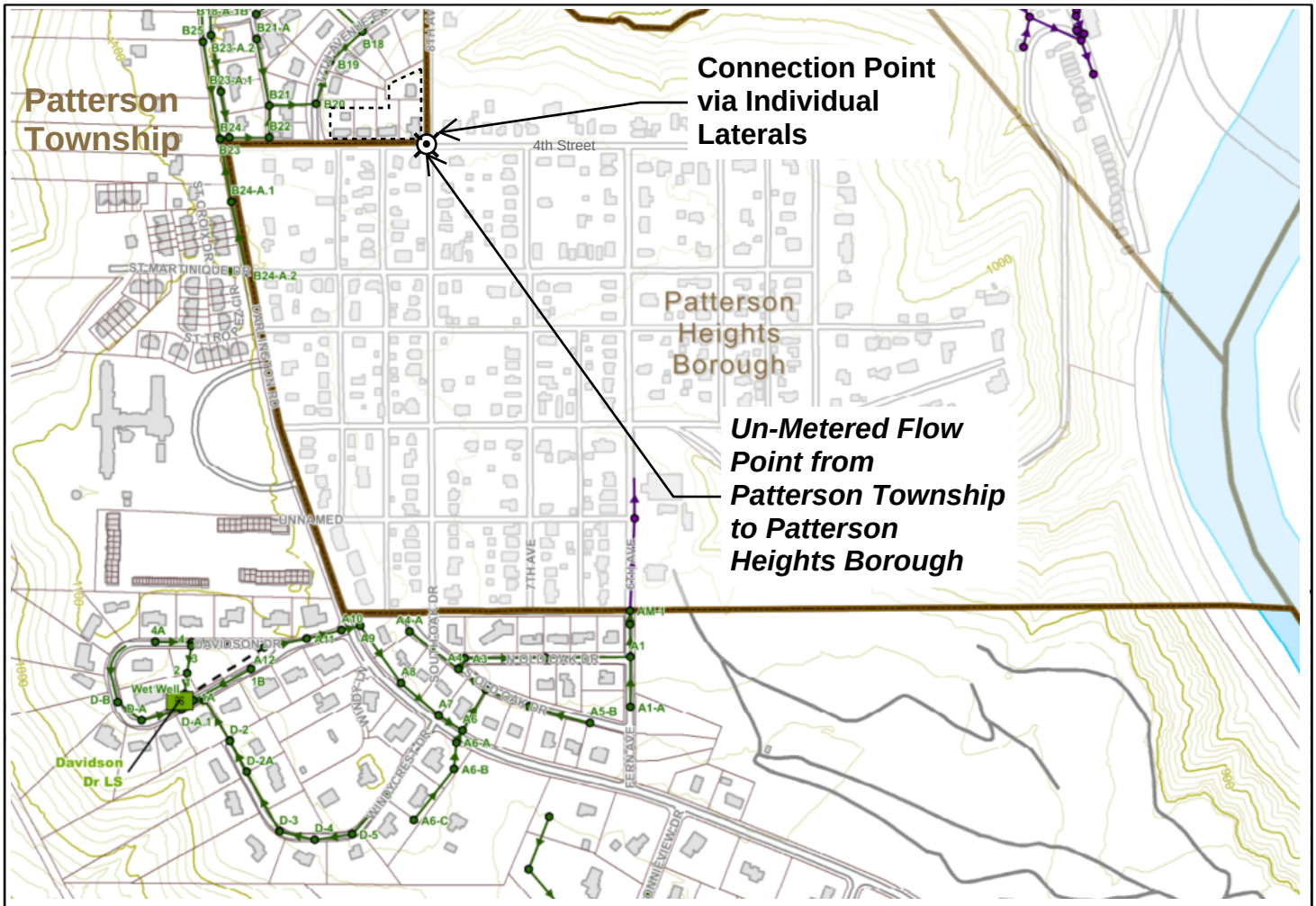

N

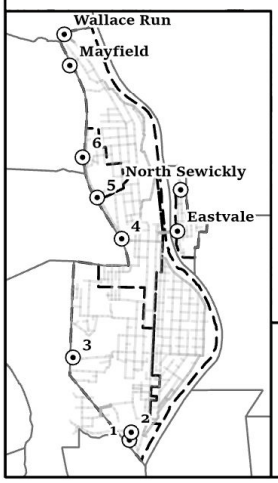
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_5 - Un-metered Flow Located at Patterson Arms
Patterson Township



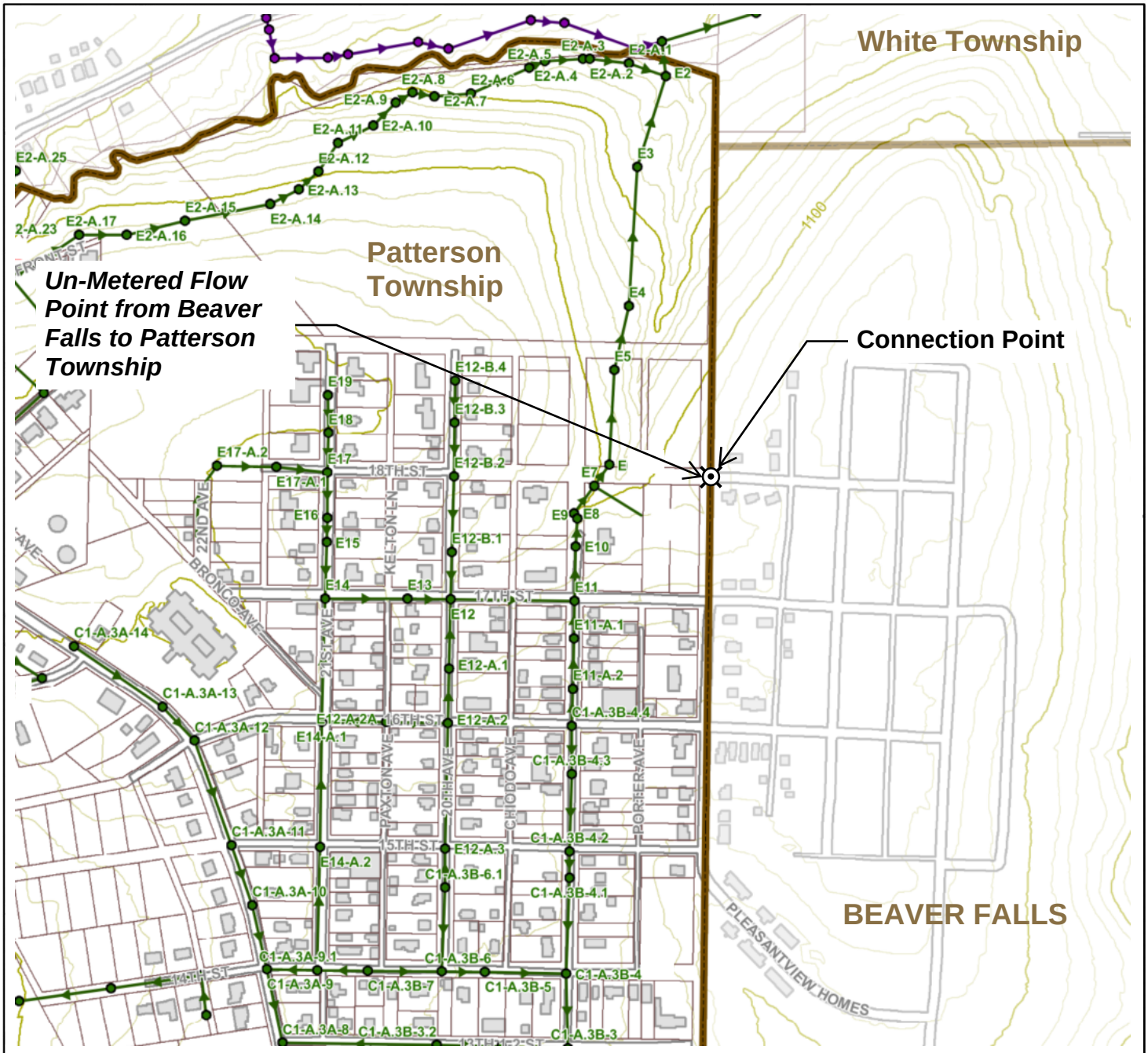

N

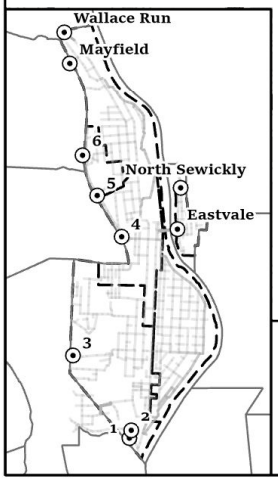
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_6 - Un-metered Flow via Individual Laterals, Located at Fourth Street and 8th Ave Patterson Township



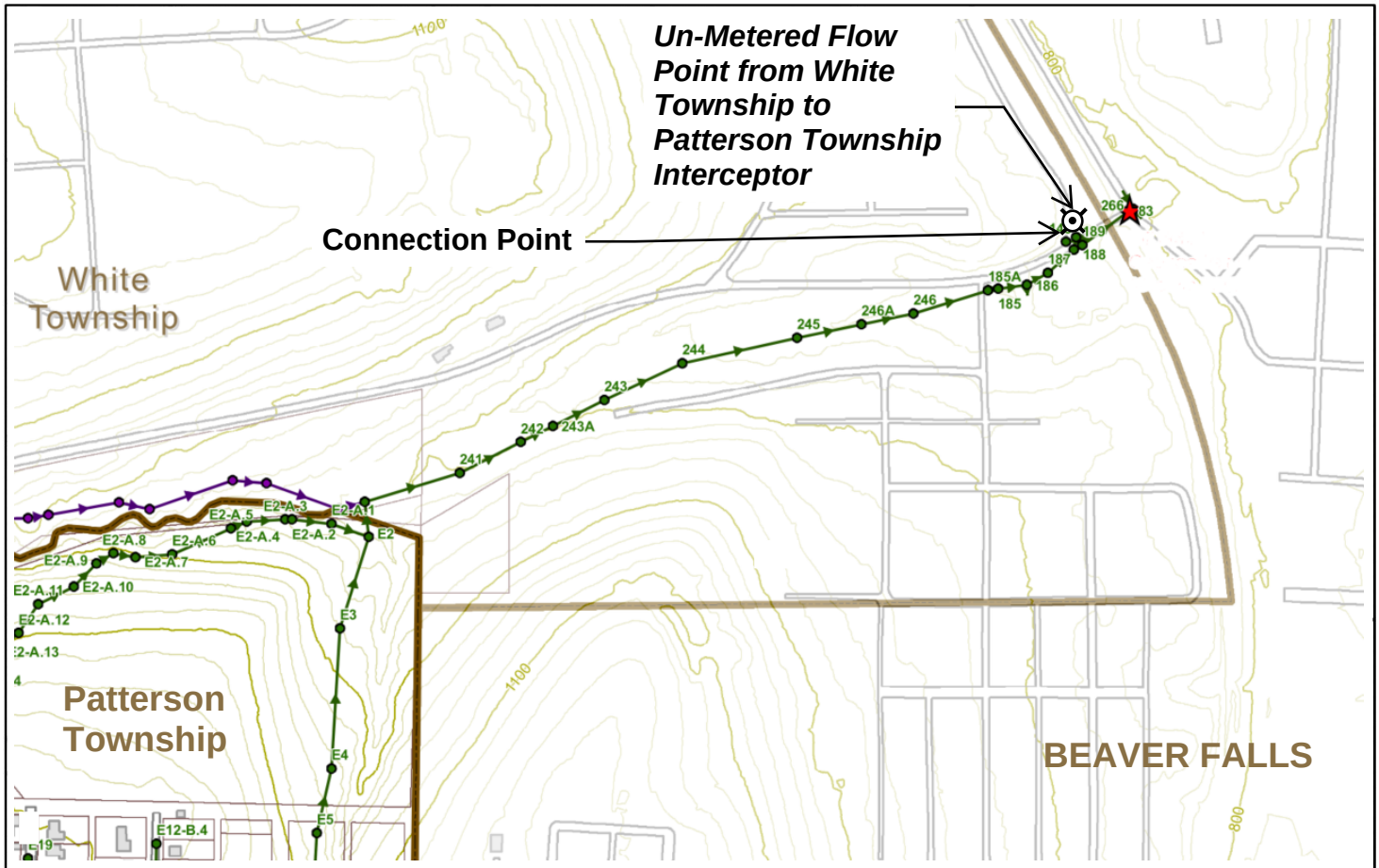

N

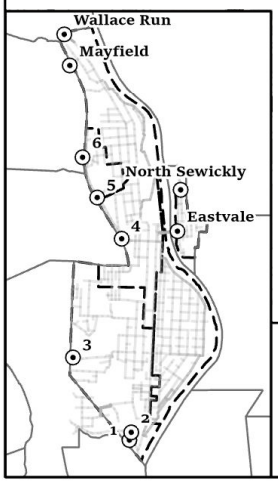
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C - Un-metered Flow Located at 19th Ave and North of 17th Street, MH E7 Patterson Township



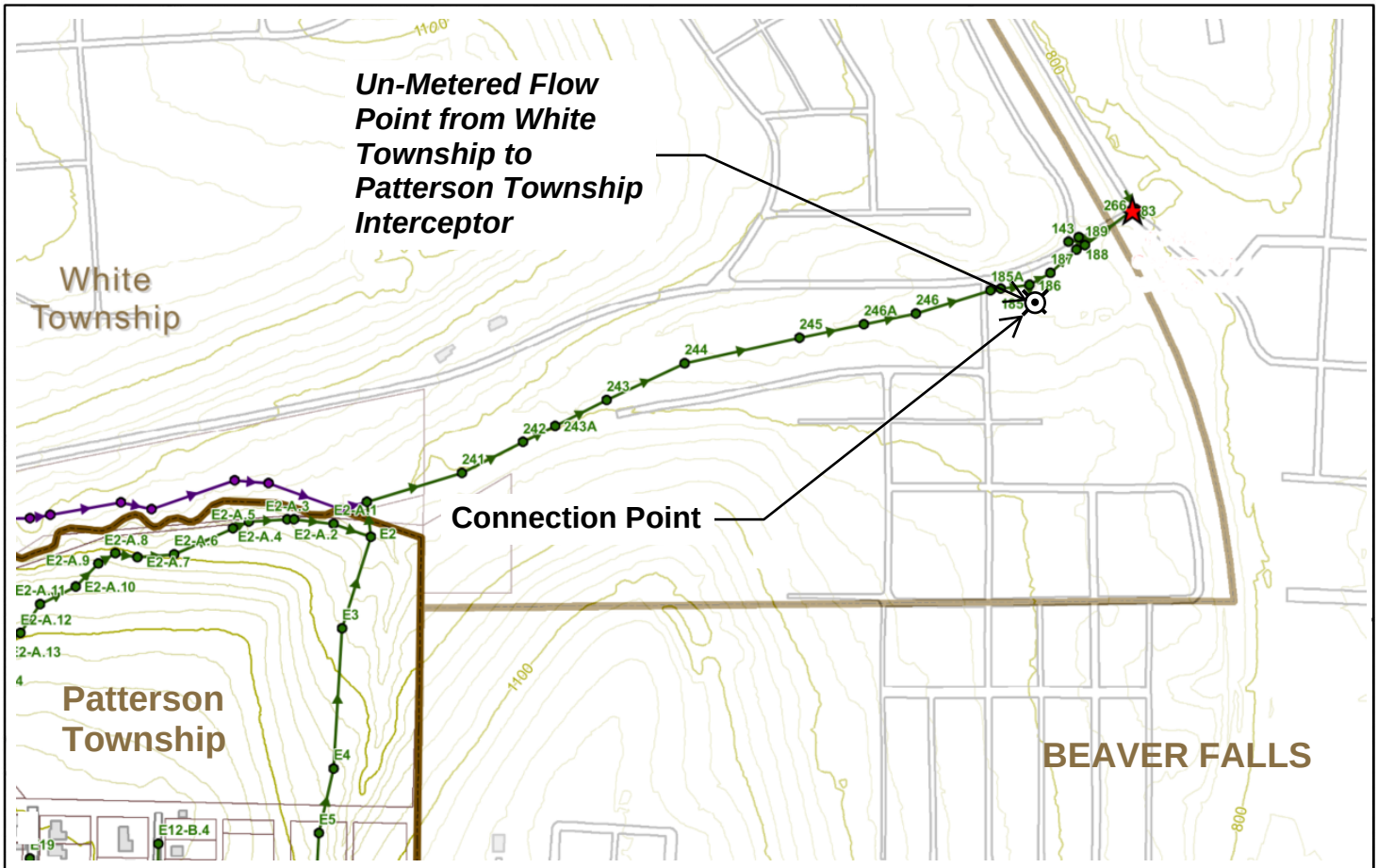

N

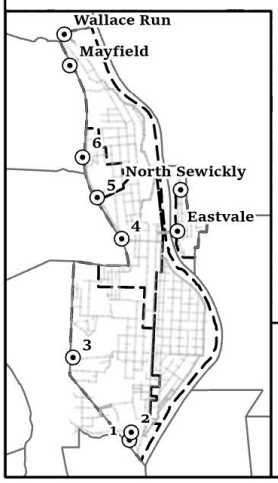
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_8 - Un-metered Flow Located at Steffin Hill Road, MH E189
Patterson Township

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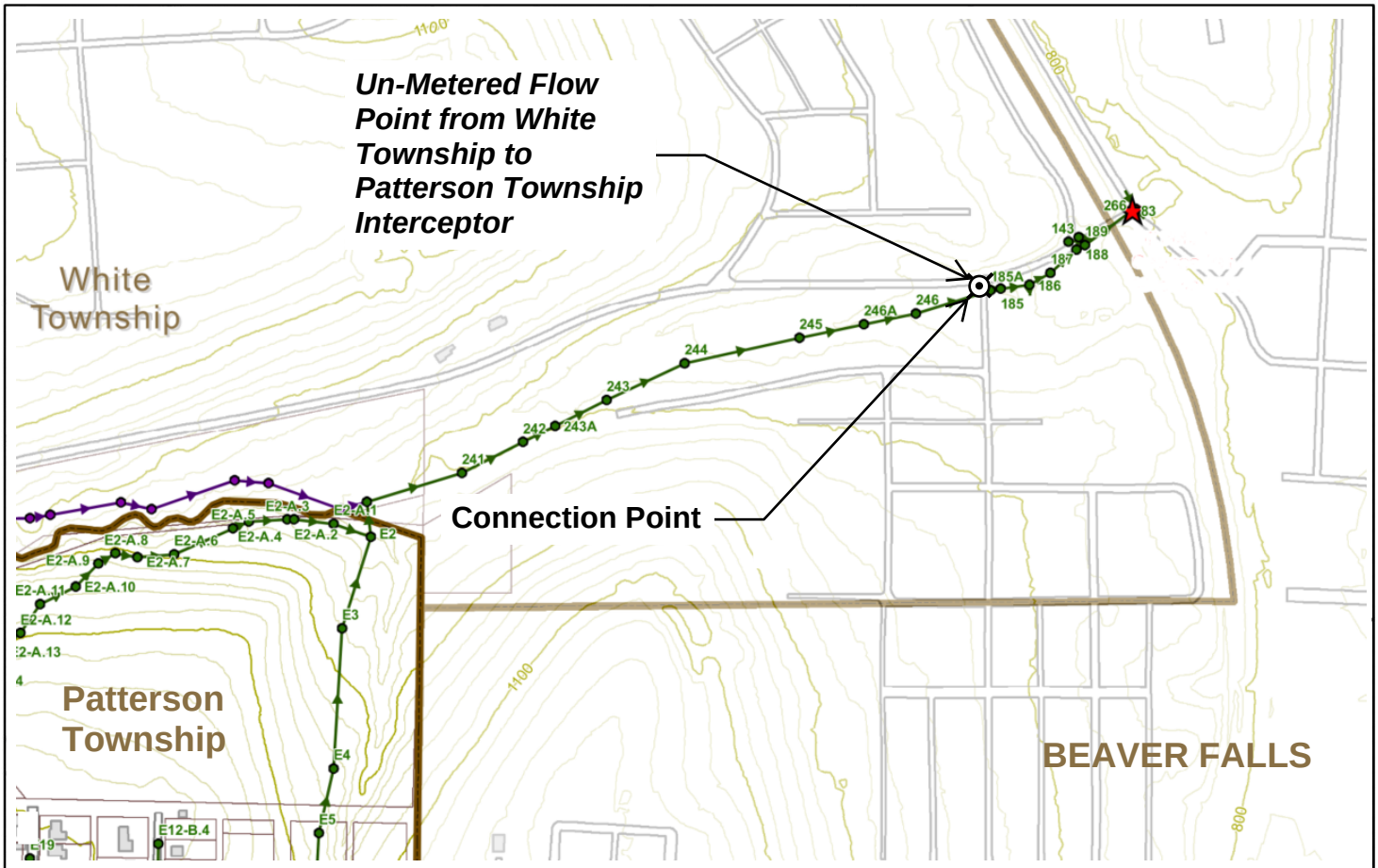
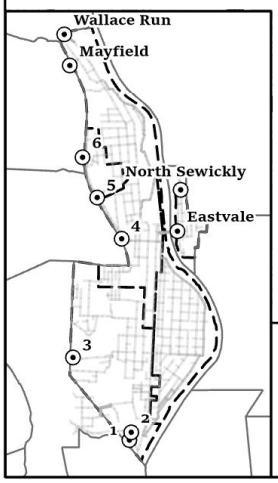
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_9 - Un-metered Flow Located at Steffin Hill Road, MH E186
Patterson Township

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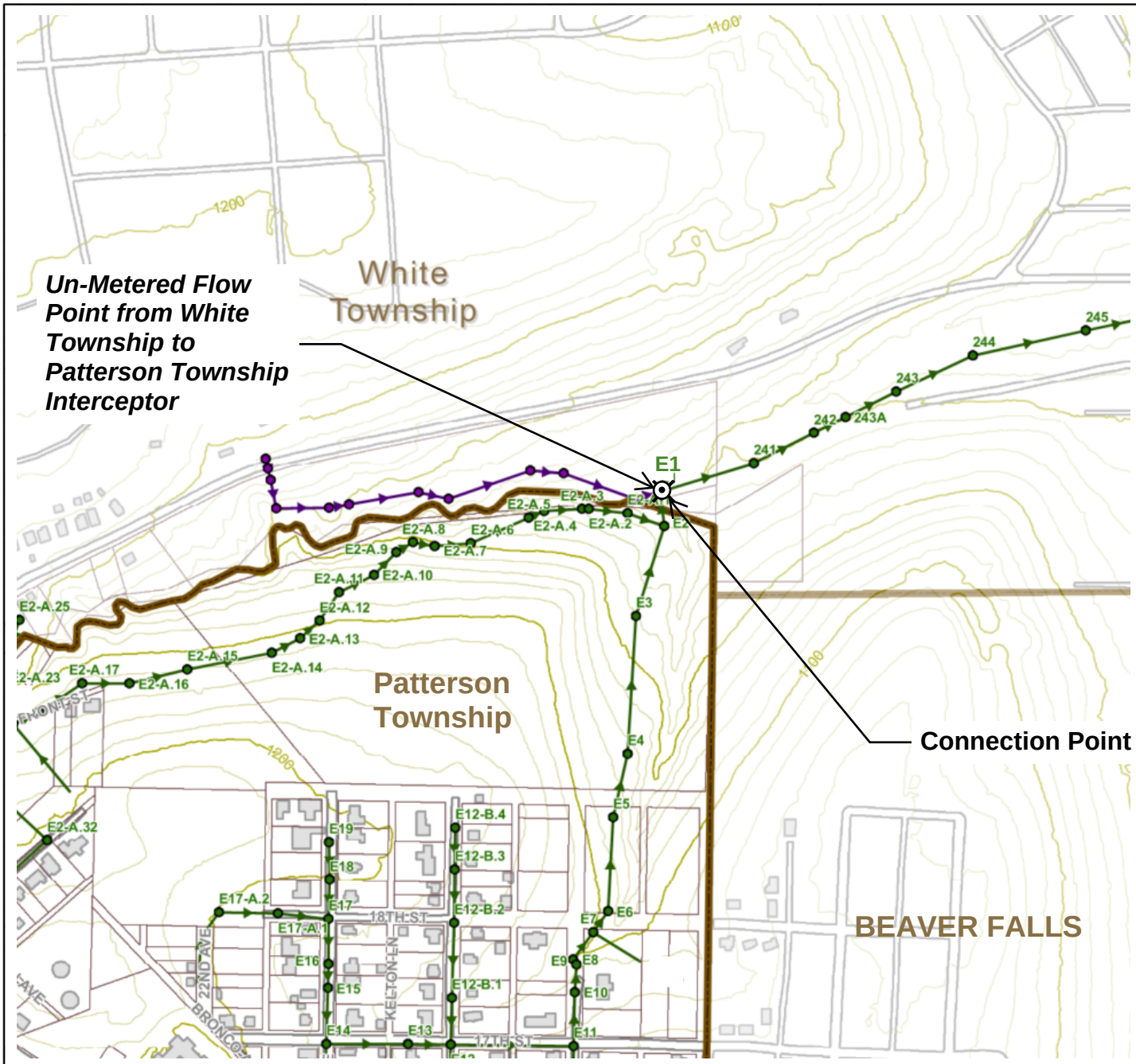
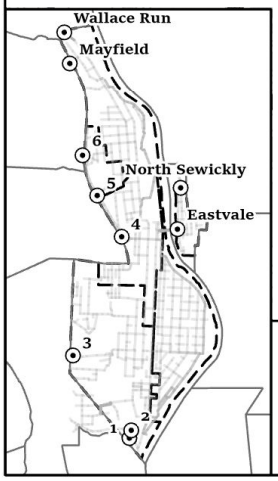
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_10 - Un-metered Flow
Located at Steffin Hill Road,
MH E185A
Patterson Township



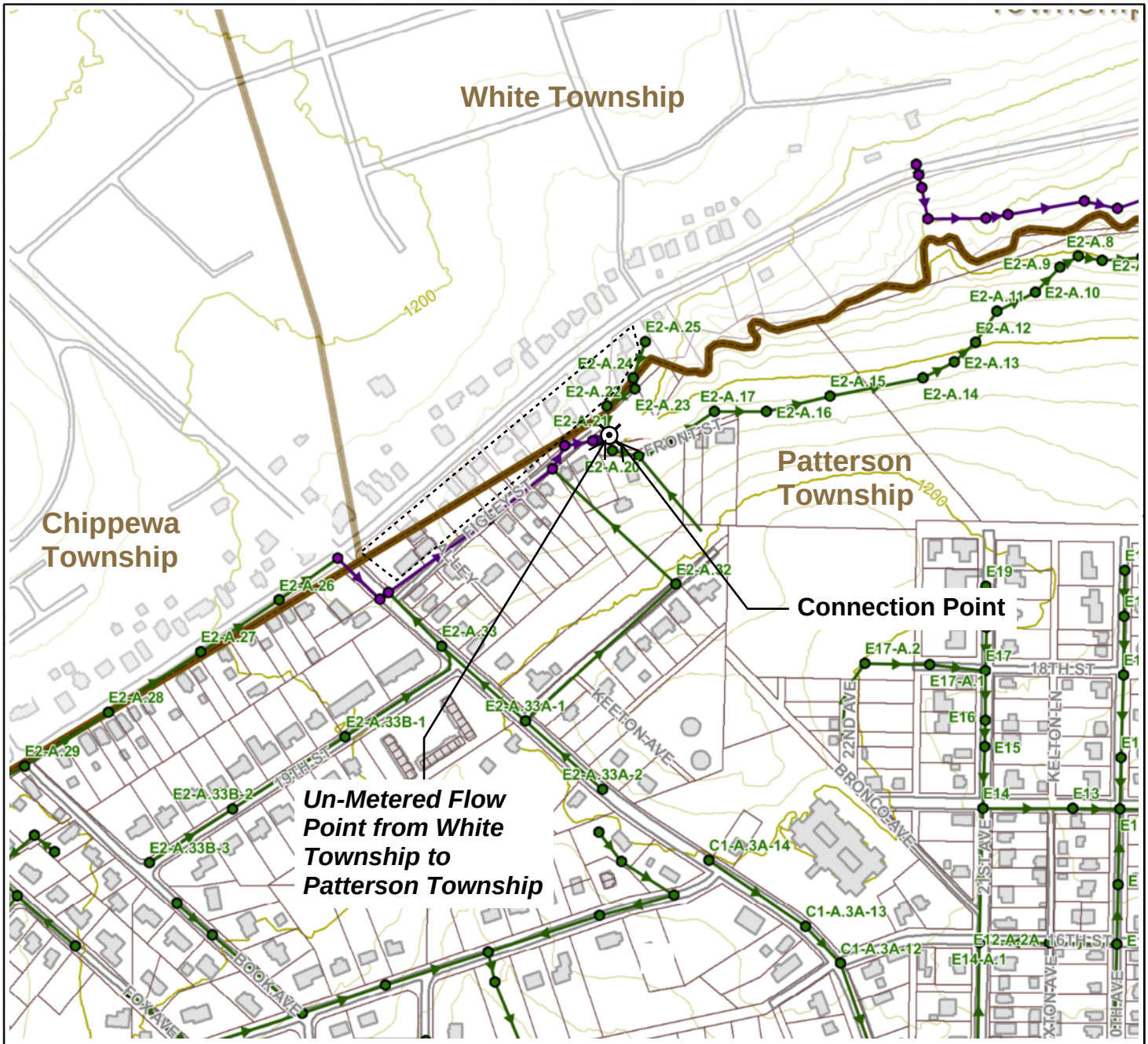

N

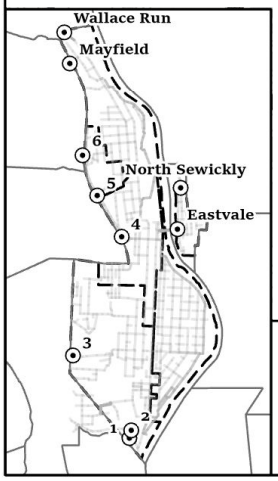
GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_11 - Un-Metered Flow Located at NE Corner of Patterson Township, MH E1 Patterson Township




N

GANNETT FLEMING

NOT TO SCALE

- Conection Point
- Metered/Unmetered Flow Point
- Sanitary Sewer Manholes
- Sewer Gravity Mains
- Monitoring Subsheds
- *Municipal Boundaries*

Exhibit C_12 - Un-metered Flow Located at Figley St and Front St, MH E2-A.21
Patterson Township

# EXHIBIT F15

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the 14th day of December, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and the BOROUGH OF WEST MAYFIELD, a municipal corporation of the Commonwealth of Pennsylvania (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System including, without limitation, that certain Agreement dated April 28, 1977 between the City and the Municipality; and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services.

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Municipality's ordinance applicable to the Municipality System as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, Borough of Eastvale, City, North Sewickley Township Sewer Authority, Township of Patterson, BOROUGH OF Patterson Heights, Municipality and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered

Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's Ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct

discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment

that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate, and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from

and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

20. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

21. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

22. Miscellaneous.

22.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

22.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

22.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

22.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

22.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

22.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

22.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

22.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: Borough of West Mayfield
4609 W. 8th Avenue
Beaver Falls, PA 15010
Attn: President

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.

762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

22.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater**,** including, but not limited to the Existing Agreement, shall terminate and be of no further force or effect.

22.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

22.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

22.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

22.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

22.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

AQUA:

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: Marc A. Lucca

Title: President

MUNICIPALITY:

BOROUGH OF WEST MAYFIELD

By: _____

Name: Louis Little

Title: President

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | BOROUGH OF WEST MAYFIELD |
| By: _____ | By: Louis E Little |
| Name: Marc A. Lucca | Name: Louis Little |
| Title: President | Title: President |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: Kenya Johns

Title: Mayor

# EXHIBIT A
# CONNECTION POINTS

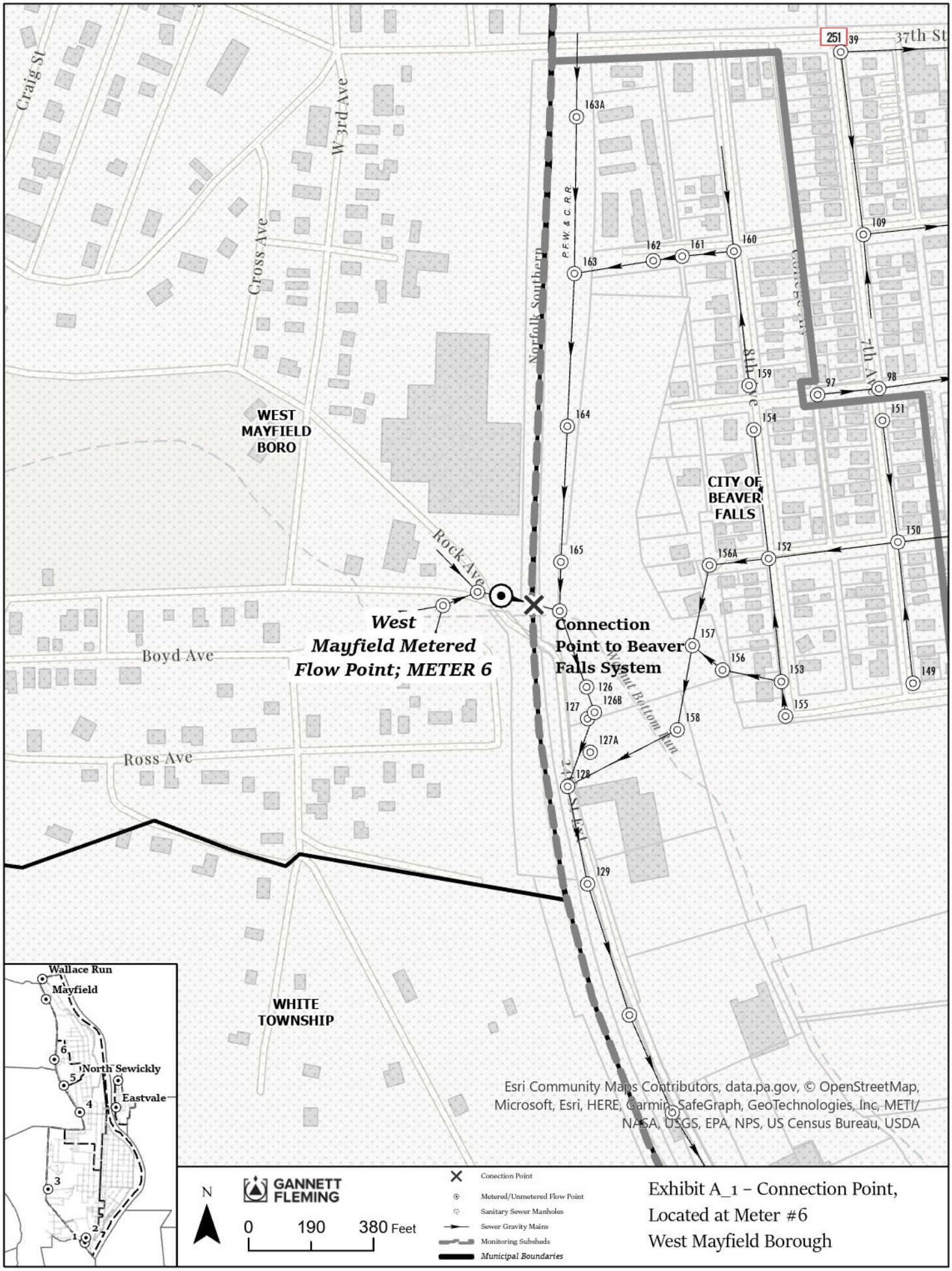
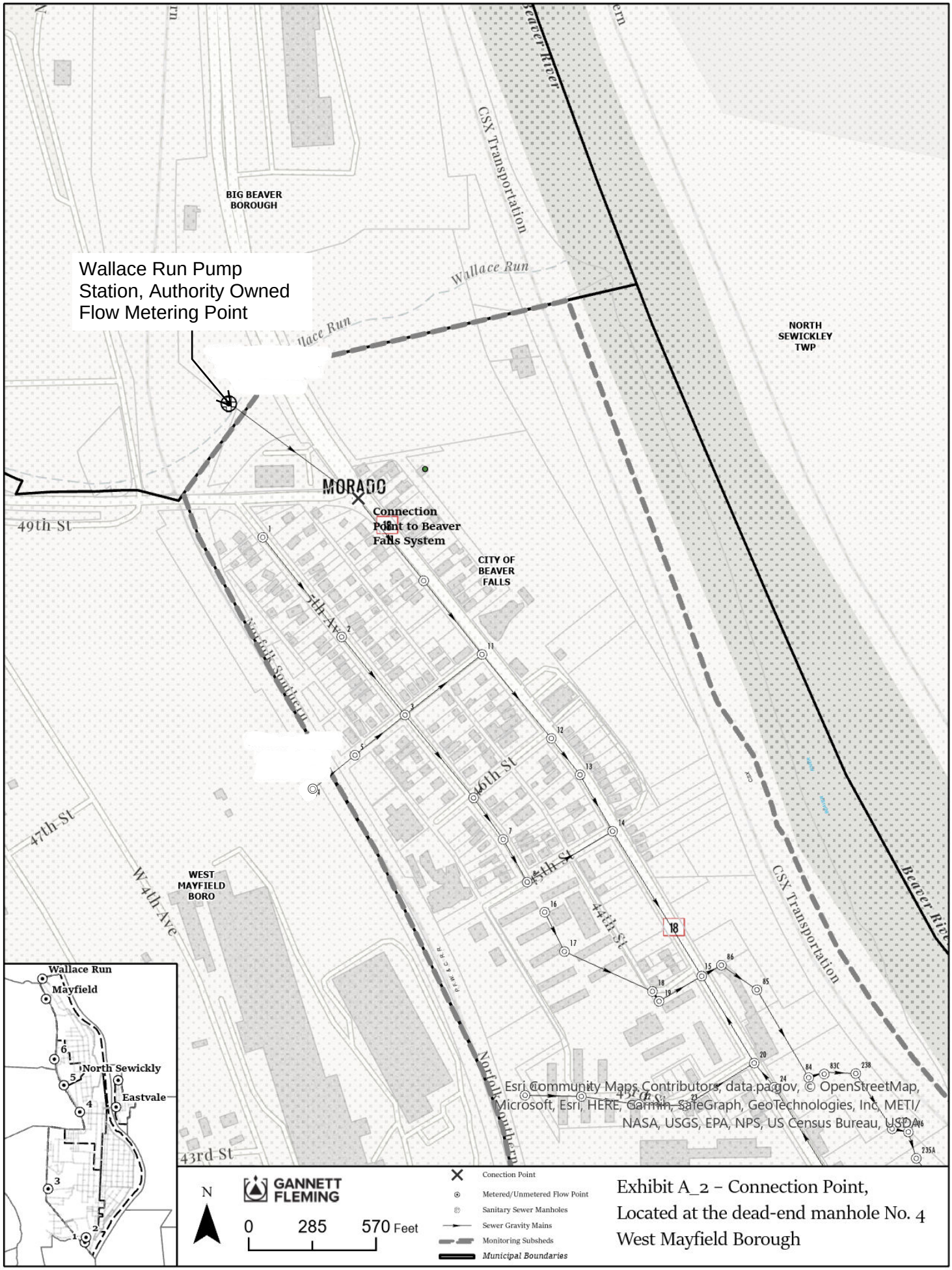
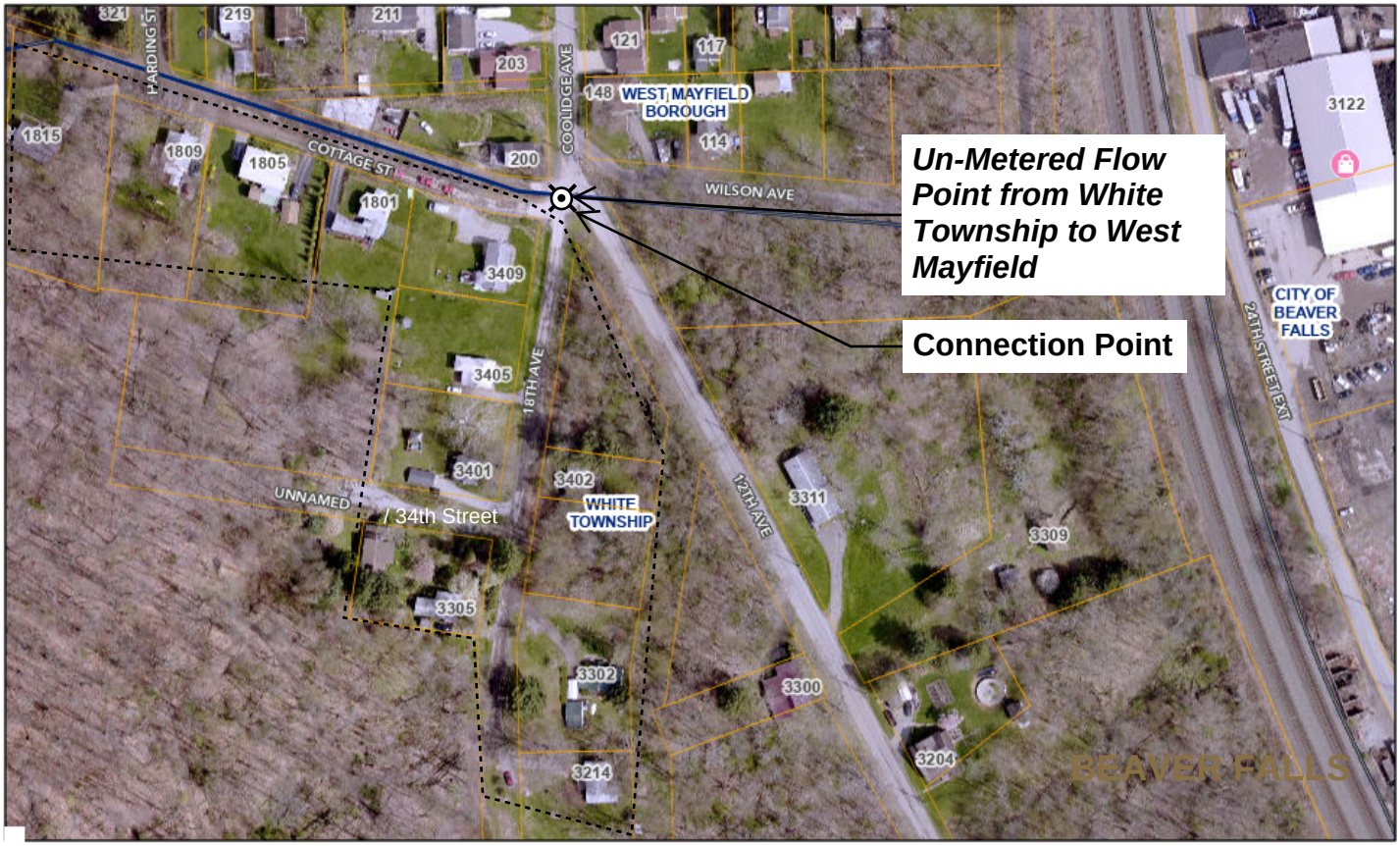



Exhibit A_1 – Connection Point, Located at Meter #6
West Mayfield Borough


Wallace Run Pump Station, Authority Owned Flow Metering Point
BIG BEAVER BOROUGH
NORTH SEWICKLEY TWP
CITY OF BEAVER FALLS
WEST MAYFIELD BORO
MORADO
Connection Point to Beaver Falls System
Wallace Run
CSX Transportation
Beaver River
Norfolk Southern
49th St
47th St
46th St
45th St
44th St
43rd St
W 4th Ave
5th Ave
Wallace Run
Mayfield
North Sewickly
Eastvale
Esri Community Maps Contributors, data.pa.gov, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, EPA, NPS, US Census Bureau, USDA
N
GANNETT FLEMING
0 285 570 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit A_2 – Connection Point, Located at the dead-end manhole No. 4 West Mayfield Borough




November 30, 2023

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.09 km

Retail Parcels Municipalities

Addresses Centerline Labels




N

GANNETT FLEMING

Conection Point

Metered/Unmetered Flow Point

Sanitary Sewer Manholes

Sewer Gravity Mains

Monitoring Subsheds

*Municipal Boundaries*

Exhibit A_3 - Connection Point
Homes on 34th Street and 18th Avenue
West Mayfield Borough

EXHIBIT B
CONNECTION POINTS HAVING FLOW METERS

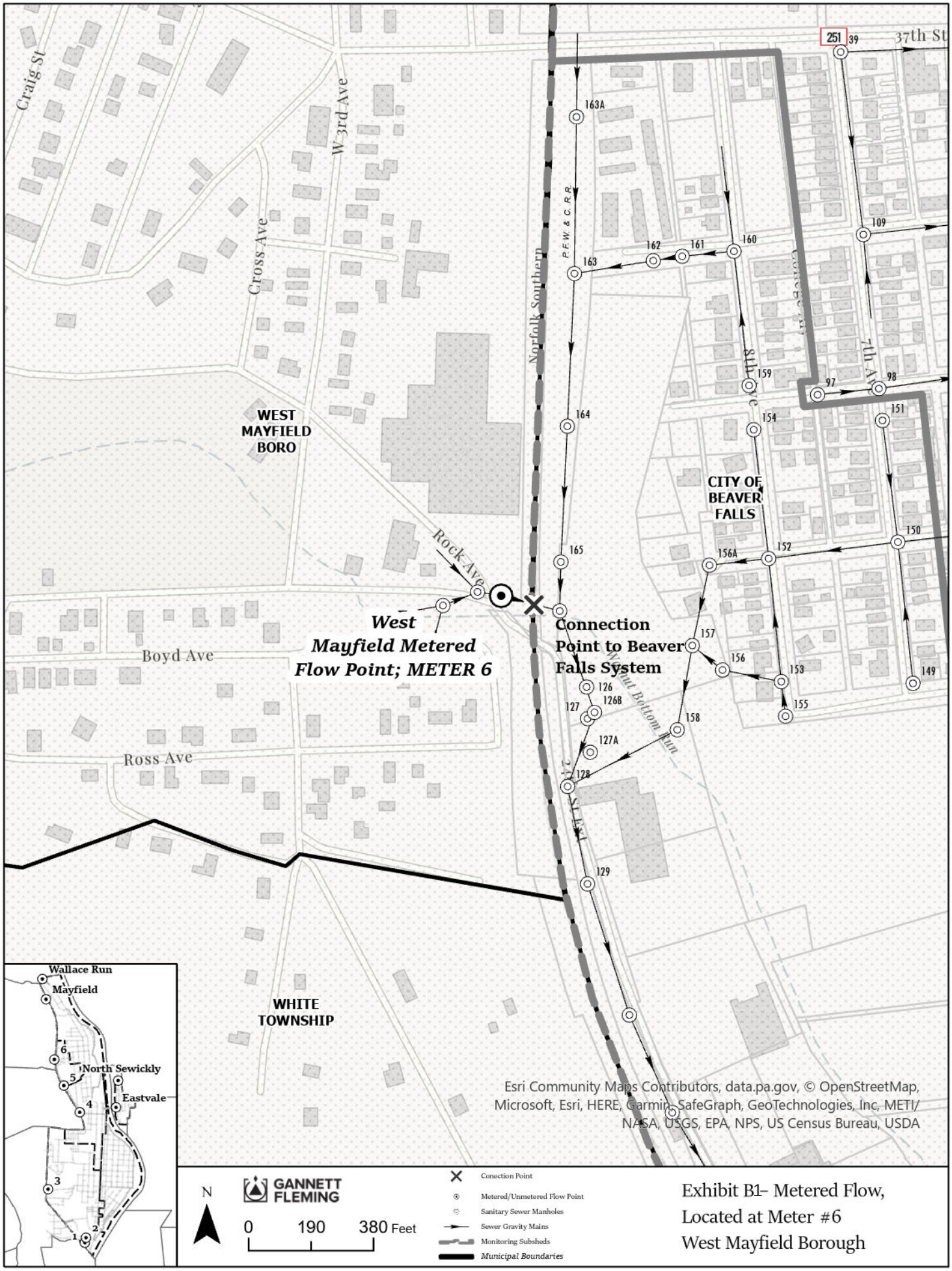
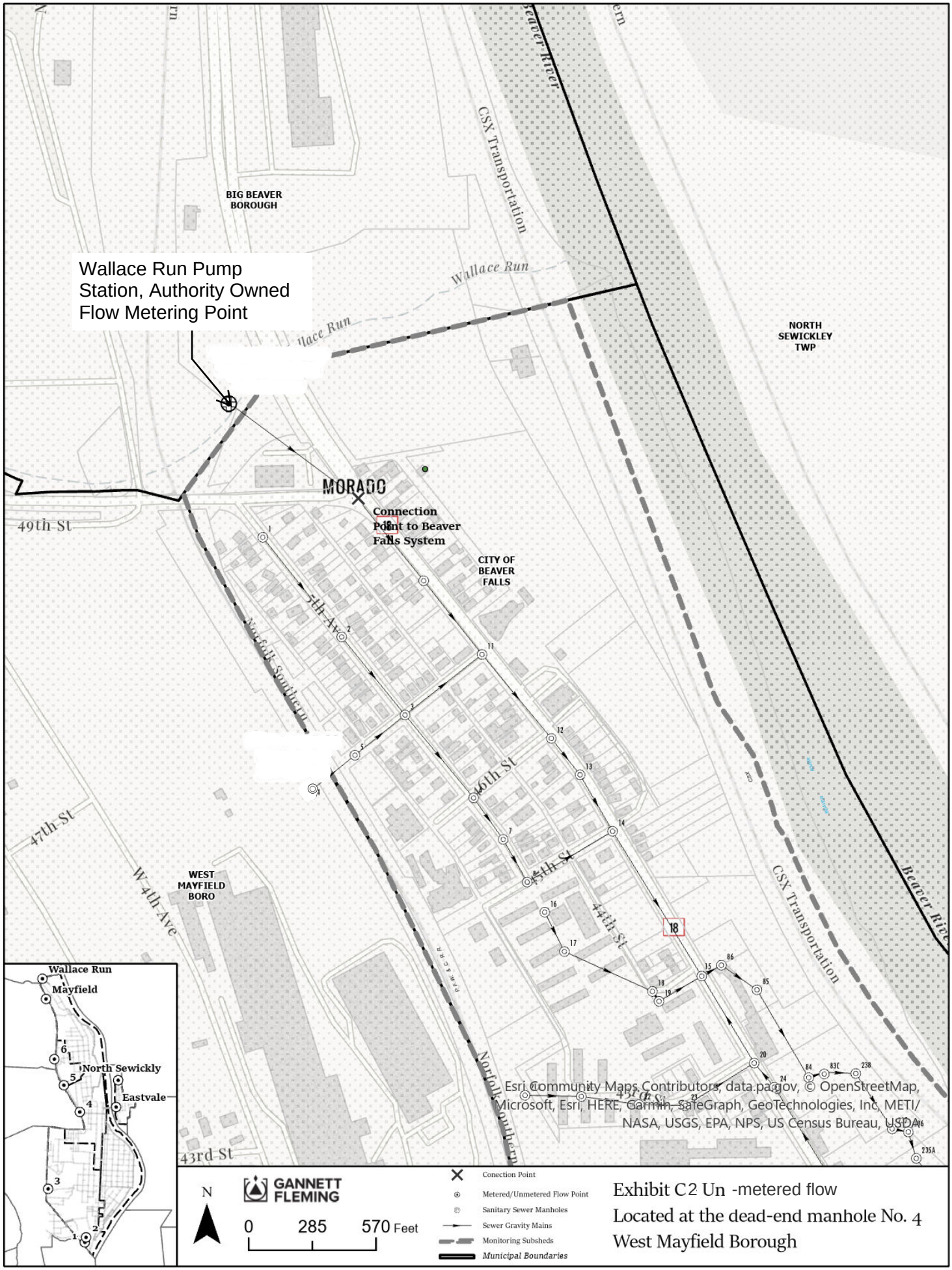



Exhibit B1– Metered Flow,
Located at Meter #6
West Mayfield Borough

# EXHIBIT C
# CONNECTION POINTS NOT HAVING FLOW METERS


Wallace Run Pump Station, Authority Owned Flow Metering Point
BIG BEAVER BOROUGH
NORTH SEWICKLEY TWP
CITY OF BEAVER FALLS
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MORADO
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5th Ave
Wallace Run
Mayfield
North Sewickly
Eastvale
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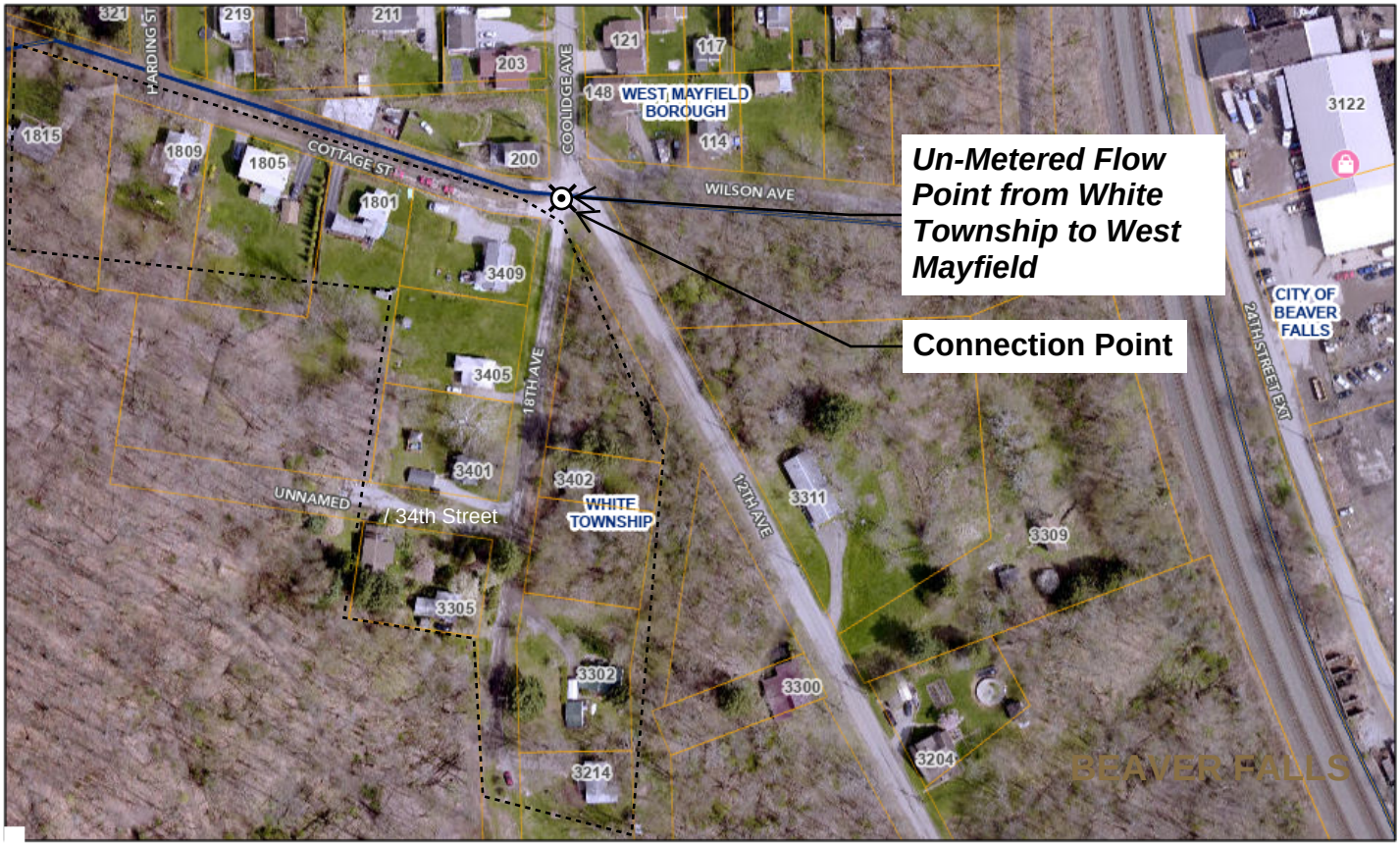
N
GANNETT FLEMING
0 285 570 Feet
Conection Point
Metered/Unmetered Flow Point
Sanitary Sewer Manholes
Sewer Gravity Mains
Monitoring Subsheds
Municipal Boundaries
Exhibit C2 Un -metered flow
Located at the dead-end manhole No. 4
West Mayfield Borough




November 30, 2023

1:2,257

0 0.01 0.03 0.05 mi

0 0.02 0.04 0.09 km

Retail Parcels Municipalities

Addresses Centerline Labels




N

GANNETT FLEMING

Conection Point

Metered/Unmetered Flow Point

Sanitary Sewer Manholes

Sewer Gravity Mains

Monitoring Subsheds

*Municipal Boundaries*

Exhibit C_3 - Un-metered Flow Homes on 34th Street and 18th Avenue
West Mayfield Borough

# EXHIBIT F16

October 19, 2021

Honorable Mayor George S Quay III
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

RE: **Charitable Contribution**

Dear Mr. Mayor:

Reference is made to that certain Asset Purchase Agreement (the "APA"), dated October 18, 2021, by and between: (i) Aqua Pennsylvania Wastewater, Inc., a Pennsylvania corporation ("Aqua"); and, (ii) the City of Beaver Falls, Pennsylvania (the "City") regarding the acquisition by Aqua of the City's wastewater collection and treatment system (the "Transaction"). Capitalized terms that are used but not otherwise defined herein shall have the meanings ascribed to such terms in the APA.

This letter is intended to memorialize the mutual understanding and agreement between Aqua and the City. In connection with the Transaction, and conditioned upon the Closing of the Transaction, Aqua, or an affiliate of it, agrees to participate in and contribute to certain charitable activities or entities located in and around the City in an amount of at least One Million Two Hundred and Fifty Thousand dollars ($1,250,000) (the "minimum contribution") over a period of eighteen months following the Closing. The City has identified the charitable events or entities attached hereto on Exhibit A as being eligible for Aqua to participate in; however, the City expressly reserves its rights to supplement and/or edit the charitable events or entities listed on Exhibit A. For the sake of clarity, nothing herein shall require Aqua or any of its affiliates to contribute more than the minimum contribution, and the minimum contribution shall only be made to duly qualified charitable entities.

If the foregoing is acceptable, please sign below and return this letter to the undersigned.

Sincerely,

By: Matthew Rhodes
Name: Matthew Rhodes
Title: Executive Vice President

AGREED AND ACCEPTED:

By: George S. Ryan III
Name: George S. Ryan III
Title: Mayor City of Beaver Falls, PA
Date: Oct 21, 2021

**Exhibit A**

**Beaver Falls Fire Department Ladder Truck**
**Beaver Falls Carnegie Library**

# EXHIBIT F17

# WATER USAGE AGREEMENT

THIS AGREEMENT made this _____ day of _____, 20____ by and between the BEAVER FALLS MUNICIPAL AUTHORITY, a body corporate politic, organization under the laws of the Commonwealth of Pennsylvania, having its principal office located at 1425 8th Avenue, Beaver Falls, Pennsylvania 15010, hereinafter called "Authority".

AND

Aqua Pennsylvania Wastewater, Inc. a corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania with its principal office located at 762 W. Lancaster Avenue, Bryn Mawr, Pennsylvania 19010, hereinafter called "Aqua".

WHEREAS, Authority provides public water service to various customers within the City of Beaver Falls, hereinafter "Beaver Falls"; and

WHEREAS, Aqua has acquired the Beaver Falls wastewater collection and treatment system from Beaver Falls ("Aqua-Beaver Falls Transaction"); and

WHEREAS, Aqua and Beaver Falls require meter reading information in order to bill the acquired Beaver Falls wastewater customers at the volumetric rates in Beaver Falls.

WHEREAS, the parties hereto desire to enter into a written agreement concerning the provision of water meter read information and the payment therefore.

NOW WITNESSETH that in consideration of the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. Authority hereby agrees to provide Aqua with a report of the water usage for its public water service customers who are likewise wastewater customers of Aqua's wastewater system in Beaver Falls on at least a quarterly basis, except for those customers that are billed monthly by the Authority as described in paragraph five (5) herein.

2. The report to be provided by the Authority shall be sent to Aqua in the same month the water bill was issued, and no later than within five (5) days of the report being available.

3. The report to be provided by the Authority shall be in excel format or other electronic format and shall provide Aqua with the actual (or estimated) water usage as read and billed by the Authority. The report shall provide any changes in billing addresses and any separate billing address if the service address is not the same as the billing address. The report shall also provide move-in and move-out dates for customers that have opened or closed an account during the billing period.

4. Upon receipt of the water usage report, Aqua shall pay the Authority the sum of One Dollar ($1.00) per each meter reading (actual or estimate) contained in the report. A bill for

the total cost of the report shall be prepared by the Authority and sent out at least quarterly, or at least monthly in the case of customers that the Authority bills monthly as described in paragraph five (5) herein. Payment for the report shall be made by Aqua to the Authority within 45 days of the receipt of the statement. Should Aqua fail to pay the statement within the payment period, the Authority shall be under no duty or obligation to furnish Aqua with any subsequent reports until the bill is paid and payment in advance is made for any subsequent reports.

5. The Authority hereby reserves its right to bill its water customers on a basis which may be more frequently than quarterly, and may bill certain large volume customers monthly, in which case water usage information as described in paragraph three (3) shall be furnished to Aqua on a basis no more frequently than monthly for those customers billed by the Authority on a monthly basis.

6. This Agreement shall be effective as of the date Aqua and Beaver Falls close on the Aqua-Beaver Falls Transaction and shall remain in effect for four (4) years from the effective date. Agreement shall renew annually thereafter unless one party requests a renegotiation no less than 60-days prior to expiration.

7. This Agreement can be terminated by Aqua upon Aqua giving the Authority at least sixty (60) days written notice of its desire to terminate the Agreement and do without public water meter read reports, or if such Agreement shall be either terminated or suspended pursuant to the provision of paragraph four (4) supra.

8. This Agreement is entered into pursuant to a resolution of the Beaver Falls Municipal Authority Board of Directors duly held on the _____ day of _____, 20_____, and authorizing its Chairman to sign this Agreement on its behalf, the same to be attested by its Secretary.

9. This Agreement is entered into by Aqua, authorizing its President to sign this Agreement on its behalf, and attested to by Aqua's corporate secretary.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK; SIGNATURES ON NEXT PAGE]

DRAFT

IN WITNESS WHEREOF AND INTENDING TO BE LEGALLY BOUND HEREBY, the parties hereto by their fully designated officers have executed this Agreement the day and year first above written.

ATTEST: BEAVER FALLS MUNICIPAL AUTHORITY

_____ By:_____
Secretary

Printed:_____

Its: Chairman

ATTEST: AQUA PENNSYLVANIA WASTEWATER, INC.

_____ By:_____
Secretary

Printed: Marc A. Lucca

Its: President

DRAFT

# EXHIBIT F18

# SETTLEMENT AGREEMENT

This Settlement Agreement (the "**Agreement**") is dated December 20, 2023, and is by and between Aqua Pennsylvania Wastewater, Inc., a Pennsylvania Public Utility Company ("**Aqua**"); the City of Beaver Falls, a Pennsylvania Municipality ("**Beaver Falls**"); Patterson Township, a Pennsylvania Municipality ("**Patterson Township**"); Patterson Heights Borough, a Pennsylvania Municipality ("**Patterson Heights**"); White Township, a Pennsylvania Municipality ("**White Township**"); and West Mayfield Borough, a Pennsylvania Municipality ("**West Mayfield**").

* * *

Whereas, Beaver Falls owns and operates a sanitary wastewater collection and treatment system (the "**System**").

Whereas, the System includes the wastewater treatment plant located within Beaver Falls (the "**Plant**").

Whereas, the Plant is utilized for wastewater treatment by Beaver Falls and also to treat wastewater from seven outside municipalities, including Patterson Township, Patterson Heights, White Township, and West Mayfield (each, a "**Plaintiff Municipality**," and collectively, the "**Plaintiff Municipalities**").

Whereas, in 2020, Beaver Falls explored options for selling the System and invited public bids for the purchase and continued operation of the System.

Whereas, Aqua is a regulated Pennsylvania utility, and in August 2020, Aqua responded to the request for bids issued by Beaver Falls and submitted a bid for the purchase and continued operation of the System.

Whereas, in September 2021, Beaver Falls accepted Aqua's bid as the winning bid and enacted an ordinance authorizing the execution of an asset purchase agreement between Aqua and Beaver Falls in connection with the sale of the System.

Whereas, on or about September 27, 2022, the Plaintiff Municipalities filed suit against Aqua and Beaver Falls in the Court of Common Pleas of Beaver County, Pennsylvania, at Case No. 11219 of 2022 (the "**Suit**"). The complaint in the Suit alleged, inter alia, that the Plaintiff Municipalities are part owners of the Plant and that Beaver Falls would be unjustly enriched by the sale of the Plant.

Whereas, Aqua and Beaver Falls answered the Plaintiff Municipalities' complaint and denied that the Plaintiff Municipalities were part owners of the Plant and that Beaver Falls would be unjustly enriched by the sale of the Plant.

Whereas, on February 17, 2023, Aqua filed an Application to the Pennsylvania Public Utility Commission (the "**PUC**") for approval of the acquisition of the wastewater system assets of Beaver Falls and, among other things, to begin providing wastewater service to the public in Beaver Falls (the "**Application**").

Whereas, in order to avoid the time and expense of the Suit, and to settle any and all claims, demands, damages, rights, disputes, and causes of action that exist, whether at law or in equity, that were made in the Suit, Beaver Falls, Aqua, and the Plaintiff Municipalities (each a "**Party**" and all collectively the "**Parties**") have now reached a settlement of their dispute.

Now therefore, in consideration of their mutual promises and intending to be legally bound by this Agreement, the Parties agree as follows.

* * *

1. **Recitals**. The foregoing recitals are hereby incorporated into and made a material part of this Agreement, and this Agreement will be interpreted in light of those recitals.

2. **Payments at Closing by Beaver Falls**. Upon the closing of the sale of the System to Aqua (the "**Closing**"), Beaver Falls shall pay to the Plaintiff Municipalities the aggregate amount of $1,500,000 (the "**Beaver Falls Funds**"), with Beaver Falls paying, by way of wire transfer, to the IOLTA Account of Bowers, Fawcett and Hurst, LLC. The Parties agree that these funds received by a Plaintiff Municipality from Beaver Falls are unrestricted and may be spent by the Plaintiff Municipality in its discretion.

3. **Payments at Closing by Aqua**. Upon the Closing:

**(a)** Aqua shall pay to the Plaintiff Municipalities the aggregate amount of $200,000 (the "**Aqua Unrestricted Funds**"), with Aqua paying, by way of wire transfer, to the IOLTA Account of Bowers, Fawcett and Hurst, LLC. The Aqua Unrestricted Funds are unrestricted and a Plaintiff Municipality may spend the portion of the Aqua Unrestricted Funds the Plaintiff Municipality receives in the Plaintiff Municipality's discretion.

**(b)** Aqua shall pay to the Plaintiff Municipalities the aggregate amount of $500,000 (the "**Aqua Restricted Funds**"), with Aqua paying, by way of wire transfer, to the IOLTA Account of Bowers, Fawcett and Hurst, LLC. In a document executed by all Plaintiff Municipalities and delivered to Aqua at least 5 business days prior to the Closing Date, the allocation of the Aqua Restricted Funds will be reported to Aqua. The Aqua Restricted Funds are restricted and a Plaintiff Municipality may only use the portion of the Aqua Restricted Funds the Plaintiff Municipality receives for the maintenance, repair,

or capital improvement of the Plaintiff Municipality's wastewater-collection system and associated facilities. Each Plaintiff Municipality shall provide Aqua a letter by March 30 each year, verified by its municipal manager or public works director, of the use of any of the Aqua Restricted Funds in the preceding calendar year. If no Aqua Restricted Funds are used in the preceding calendar year, the letter shall state that and the amount of Aqua Restricted Funds remaining.

4. **Closing Does not Occur.** If the Closing does not occur, the obligations of Beaver Falls to make the payments to the Plaintiff Municipalities set forth in Paragraph 2 and Aqua to make the payments to the Plaintiff Municipalities set forth in Paragraph 3 shall be null and void.

5. **Post-closing Judicial Action Regarding Application.** If, after the Closing, a court of competent jurisdiction issues a final, non-appealable order denying the Application or otherwise invalidating the sale of the System to Aqua for any reason, within 180 days of Aqua providing to a Plaintiff Municipality written notice of such order and a copy of such order, the Plaintiff Municipality will repay to (a) Beaver Falls, the amount Beaver Falls paid to the Plaintiff Municipality set forth in Paragraph 2, and (b) Aqua, the amount Aqua paid to the Plaintiff Municipality set forth in Paragraph 3.

6. **Stay; Dismissal of the Suit.**

**(a)** The Parties agree upon the execution of this Agreement, the Suit will be stayed, and within 5 days from the execution of this Agreement, the Parties will inform the Court of Common Pleas of Beaver County that a settlement has been reached and the Parties will submit a joint consent order requesting that the Suit be stayed.

**(b)** Within 5 days of the Closing and the making of the payments described in Paragraphs 2 and 3 above, the Parties shall file a joint praecipe with the Court of Common Pleas of Beaver County to settle and discontinue the Suit, with prejudice.

7. **No Admissions of Fact or Law**. The Parties agree and acknowledge that nothing contained in this Agreement constitutes an admission of any fact, the recognition of the application of any legal principle, the acknowledgement of any duty, liability, or breach, or any other violation of any law or legal obligation whatsoever.

8. **Release of Claims by Plaintiff Municipalities**. Each of the Plaintiff Municipalities hereby releases, remises, forgives, and forever discharges Beaver Falls and Aqua and their respective commissioners, managers, clerks, officials, directors, shareholders, officers, representatives, employees, agents, affiliates, parents, subsidiaries, and assigns from any and all claims, demands, damages, rights, disputes, and causes of action that exist, whether at law or in equity, that were made in the Suit, including but not

limited to any and all claims that arise out of or relate to the ownership of the Plant, the sale of the Plant by Beaver Falls, the purchase of the Plant by Aqua, the ability to object to or seek to block the sale of the System, the ability to refuse to consent to the sale of the System, and the right of the Plaintiff Municipalities to receive any proceeds from the sale of the Plant (other than the payments described in Paragraphs 2 and 3 above).

**9. Consent and No Objection to Sale**. Each Plaintiff Municipality (a) hereby consents to Aqua's purchase and acquisition of the System and related assets and shall communicate this affirmative consent to third parties upon request by either Beaver Falls or Aqua, (b) shall not oppose or object to Beaver Fall's sale and Aqua's acquisition of the System and related assets, whether in court, before the PUC or before any other administrative agency or body, (c) shall, within 5 days of the execution of this Agreement, withdraw its protest filed before the PUC regarding Aqua's acquisition of the System, and (d) shall take any and all actions reasonably requested by Aqua and/or the Beaver Falls to effectuate Beaver Fall's sale and Aqua's acquisition of the System and related assets, including, without limitation, executing and delivering any consents or other documents or passing any ordinance or resolution.

**10. Execution of New Wastewater Service Agreements**. On the execution of this Agreement, each Plaintiff Municipality and Aqua will execute a wastewater service agreement in substantially the form attached to this Agreement as Exhibit A.

**11. Advice of Counsel.** By signing this Agreement, the Parties acknowledge that they have been afforded adequate time to seek legal advice and have sought and received legal advice as they deemed appropriate, and that they have entered into and agreed to the terms of this Agreement voluntarily, under no coercion or duress, and of their own free will. By signing this Agreement, the Parties acknowledge that they have read and fully understand the terms and consequences of this Agreement, that approving this instrument has been undertaken in a proper, lawful manner, and that the signatories are properly authorized to act for the entities for which they are acting.

**12. Binding Effect.** This Agreement legally binds the Parties and their respective heirs, successors, and assigns. This paragraph does not address whether rights under this Agreement are in fact assignable or delegable.

**13. Amendment.** Unless otherwise provided in this Agreement, this Agreement may only be amended, modified, or supplemented by a written instrument executed by the Parties that identifies itself as an amendment to this Agreement.

**14. Entire Agreement.** This Agreement represents the entire and complete Agreement between the Parties and supersedes all prior oral or written agreements as to

its subject matter. There are no other written or oral understandings or agreements that change or affect the terms of this Agreement.

**15. Assignment and Delegation.** A Party may not assign its rights or delegate its duties under this Agreement without the prior written consent of the other Parties. All assignments of rights without such consent are prohibited under this section, whether they are voluntary or involuntary, by merger, consolidation, dissolution, operation of law, or any other manner. A purported assignment or delegation that does not comply with this section is void.

**16. Breach; Attorneys' Fees.** In the event of a breach of any of the provisions of this Agreement, an aggrieved Party may pursue all legal or equitable remedies available, including, but not limited to, seeking damages for the breach of this Agreement or seeking enforcement of the provisions of this Agreement in court. In connection with any litigation between the Parties concerning the subject matter of this Agreement, the prevailing Party is entitled to recover its reasonable attorneys' fees and costs, including fees and costs incurred at trial, on appeal, and during post-judgment collection proceedings.

**17. Governing Law.** The laws of the Commonwealth of Pennsylvania, without regard to conflict-of-law provisions, govern all disputes arising out of this Agreement, including torts.

**18. Venue and Jurisdiction.** Any action or proceeding brought under or in connection with this Agreement may only be brought in either the Court of Common Pleas of Beaver County, Pennsylvania, or in the United States District Court for the Western District of Pennsylvania. The Parties hereby consent to jurisdiction over them in those courts.

**19. Waiver.** The failure of a Party to insist upon the strict performance of any of the covenants or conditions of this Agreement or to exercise any option or power granted by this Agreement does not constitute a waiver by that Party of its rights with respect to this Agreement or a consent to any breach or default in performance by any other Party. A waiver of any provision of this Agreement is only binding if it is in writing and is signed by the waiving Party.

**20. Consent.** Except as otherwise provided, if and whenever the consent or approval of a Party is required under the terms of this Agreement, that consent or approval will not be unreasonably withheld or delayed.

**21. Severability.** If the enactment or amendment of a state or federal law or regulation, or a judicial, administrative, or other interpretive ruling from an applicable

court or agency holds or renders any provision of this Agreement illegal or unenforceable, the offending provision will be deleted or modified, as necessary, in order to render this Agreement valid and enforceable. In any event, the balance of this Agreement will be enforced to the fullest extent possible without regard to such unenforceable, void, or invalid provision.

**22. Headings.** The headings in this Agreement are for reference only and will not affect the interpretation of this Agreement.

**23. Counterparts.** This Agreement may be executed simultaneously in multiple counterparts. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof. All executed counterparts are part of the same Agreement.

(The remainder of this page is intentionally left blank.)

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

**The City of Beaver Falls**

By: _____

Print: Kenya Johns

Title: Mayor

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: _____

Title: _____

**Patterson Township**

By: _____

Print: _____

Title: _____

**Patterson Heights Borough**

By: _____

Print: _____

Title: _____

**White Township**

By: _____

Print: _____

Title: _____

**West Mayfield Borough**

By: _____

Print: _____

Title: _____

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

**The City of Beaver Falls**

By: _____

Print: _____

Title: _____

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: Mark A. Lucas

Title: President

**Patterson Township**

By: _____

Print: _____

Title: _____

**Patterson Heights Borough**

By: _____

Print: _____

Title: _____

**White Township**

By: _____

Print: _____

Title: _____

**West Mayfield Borough**

By: _____

Print: _____

Title: _____

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

**The City of Beaver Falls**

By: _____

Print: _____

Title: _____

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: _____

Title: _____

**Patterson Township**

By: Paula J. Wagoner

Print: Paula J. Wagoner

Title: President Commissioner

**Patterson Heights Borough**

By: _____

Print: _____

Title: _____

**White Township**

By: _____

Print: _____

Title: _____

**West Mayfield Borough**

By: _____

Print: _____

Title: _____

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

**The City of Beaver Falls**

By: _____

Print: _____

Title: _____

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: _____

Title: _____

**Patterson Township**

By: _____

Print: _____

Title: _____

**Patterson Heights Borough**

By: W.A. Starn

Print: W.A. STARN

Title: Council Pres

**White Township**

By: _____

Print: _____

Title: _____

**West Mayfield Borough**

By: _____

Print: _____

Title: _____

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

**The City of Beaver Falls**

By: _____

Print: _____

Title: _____

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: _____

Title: _____

**Patterson Township**

By: _____

Print: _____

Title: _____

**Patterson Heights Borough**

By: _____

Print: _____

Title: _____

**White Township**

By: Ray A Evans Jr

Print: Ray A Evans Jr

Title: Chairman

**West Mayfield Borough**

By: _____

Print: _____

Title: _____

The Parties, intending to be legally bound and intending to settle the claims set forth herein, have read the foregoing and fully understand and agree to the terms and conditions set forth herein. The Parties are signing this Agreement on the date set forth in the introductory clause.

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Print: _____

Title: _____

**Aqua Pennsylvania Wastewater, Inc.**

By: _____

Print: _____

Title: _____

**Patterson Township**

By: _____

Print: _____

Title: _____

**Patterson Heights Borough**

By: _____

Print: _____

Title: _____

**White Township**

By: _____

Print: _____

Title: _____

**West Mayfield Borough**

By: Louis Little

Print: LOUIS LITTLE

Title: President

**Exhibit A**

Form of Wastewater Service Agreement

Attached

# WASTEWATER SERVICE AGREEMENT

THIS WASTEWATER SERVICE AGREEMENT (the "Agreement "), is made as of the ____ day of _____, 2023 (the "Execution Date"), by and between AQUA PENNSYLVANIA WASTEWATER, INC., a Pennsylvania public utility company ("Aqua") and [•] (the "Municipality"). Aqua and the Municipality are each a "Party," and collectively, the "Parties."

## RECITALS

WHEREAS, Aqua and the City of Beaver Falls (the "City") have entered into an Asset Purchase Agreement dated October 20, 2021 (the "APA"), which provides that the City has agreed to sell and convey to Aqua the wastewater collection system that the City owns (the "Acquired Collection System"), the wastewater treatment plant that the City owns (the "Acquired Treatment Plant," and collectively together with the Acquired Collection System, the "Acquired System") and substantially all of the City's assets related to the Acquired System; and

WHEREAS, the Municipality owns, maintains and operates a system of gravity sewer mains, force mains, laterals and other necessary infrastructure and means for the collection and conveyance of wastewater emanating from the Municipality (the "Municipality System") which is connected to the Acquired System (either directly or indirectly through a third party's collection system) and wastewater emanating from the Municipality System is collected and conveyed to and treated and disposed of by the Acquired System; and

WHEREAS, prior to the closing of the transaction contemplated by the APA (the "Closing"), the City is providing for the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System; and

WHEREAS, effective as of the date that the Closing occurs (the "Closing Date"), the City and the Municipality desire to terminate any and all existing agreements between them regarding the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System **[including, without limitation, [•] (the "Existing Agreement")]**[1]; and

WHEREAS, effective as of the Closing Date, this Agreement shall govern the collection, conveyance, treatment and disposal of the Municipality's wastewater emanating from the Municipality System by the Acquired System and the charge for such services; and

WHEREAS, operation of the Municipality sanitary sewer system is, and shall remain, subject to the sole requirements of the Pennsylvania Department of Environmental Protection ("DEP") and Municipality's Ordinance **[to be identified]** as may be modified from time to time by the Municipality and that further modification requested by Aqua shall not be unreasonably withheld by Municipality.

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[1] **Note to Draft:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereto agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into and made part of this Agreement as though fully set forth herein.

2. Definitions

2.1. Defined Terms. The following terms shall have the following meanings, except as otherwise expressly provided or unless the context otherwise requires. Other terms are defined in the text of this Agreement, and throughout this Agreement, those terms shall have the meanings respectively ascribed to them.

2.1.1. "Aqua Tariff." Aqua's tariff on file with and approved by the PUC as the same may be amended, supplemented, restated, replaced or revised from time to time.

2.1.2. "Connection Points." The locations at which the Municipality System connects to the Acquired Collection System or a Third-Party System as identified on Exhibit A attached hereto.

2.1.3. "Contributing Users." The Borough of Big Beaver, Borough of Eastvale, the City, North Sewickley Township Sewer Authority, Township of Patterson, Borough of Patterson Heights, Borough of West Mayfield and Township of White and any other municipality or authority that enters into an agreement with Aqua during the Term related to the collection, conveyance and treatment of such municipality's or authority's wastewater through the Acquired System.

2.1.4. "Effective Date." The Effective Date as defined in Section 3.1.

2.1.5. "Facilities." Facilities means with respect to (a) Aqua, the components of the Acquired System, and (b) the Municipality, the components of the Municipality System.

2.1.6. "Flow." The quantity or volume of wastewater that emanates from the Municipality System and is collected, conveyed, treated and discharged by the Acquired System.

2.1.6.1. "Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or a Third-Party System which have a flow metering device at the Connection Points and are identified on Exhibit B attached hereto.

2.1.6.2. "Un-Metered Flow." Any Flow through interconnections of the Municipality System and the Acquired Collection System or Third-Party System which do not employ a formal wastewater flow metering device and are identified on Exhibit C attached hereto. The Flow values for these interconnection points are based on water consumption data provided to Aqua by the Contributing User or its water provider, multiplied by a factor of 1.5 to account for inflow and infiltration. Un-Metered Flow originating from the Acquired Collection System flowing to the Municipality System will be deducted from the bill to the Municipality System. Un-

Metered Flow originating from the Municipality System flowing to the Acquired Collection System will be added to the bill of the Municipality System. Un-Metered Flow between Outside Users will be added to the bill of the Outside User where the Un-Metered Flow originated, and deducted from the bill of the Outside User who received the Un-Metered Flow. If new Un-Metered Flow interconnections occur, or existing connections are removed, to or from the Municipality System which would alter the interconnection points listed on Exhibit C, Exhibit C shall be amended accordingly. If at some time in the future any of these interconnections become metered by a formal flow metering device, Exhibit B and Exhibit C shall be amended accordingly, and the flows at such points shall be considered actual and included in the regular Metered Flow calculations.

2.1.7. "Governmental Authority." Any federal, state or local government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

2.1.8. "Industrial Waste Survey." As defined in Section 12.

2.1.9. "Law." Any statute, law, ordinance, regulation, rule, code, order, constitution, common law, judgment, decree or other requirement or rule of law of any Governmental Authority.

2.1.10. "Losses." Losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys' fees and the cost of enforcing any right to indemnification under this Agreement.

2.1.11. "Notice Date." The date that Aqua provides written notice to the Municipality that Aqua intends to make a modification, upgrade or expansion to all or any portion of the Acquired System.

2.1.12. "Outside Users." The Contributing Users excluding the City.

2.1.13. "Permit." Any permit, license, franchise, approval, authorization, registration, certificate, variance or similar right obtained, or required to be obtained, from any Governmental Authority.

2.1.14. "Person." An individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

2.1.15. "Prohibited Discharge." Any waste, pollutant, or other substance which is prohibited to be discharged into the Acquired System as set forth in the Aqua Tariff.

2.1.16. "PUC." The Pennsylvania Public Utility Commission.

2.1.17. "Third-Party System." A system for the collection and transportation of wastewater that (a) is owned by a third party, and (b) directly or indirectly transports and conveys wastewater to the Acquired System.

2.2. Terms Defined in Aqua Tariff. Terms used in this Agreement which are defined in the Aqua Tariff and not otherwise defined herein shall have the respective meanings ascribed to such terms in the Aqua Tariff.

3. Effective Date; Term.

3.1. Effective Date. This Agreement shall become effective on the Closing Date (the "Effective Date"). If Aqua's purchase of the Acquired Systems pursuant to the APA does not close and the APA is terminated, this Agreement shall automatically terminate and be null and void and of no force or effect.

3.2. Term. The term of this Agreement shall be a period of three (3) years (the "Term") commencing on the Effective Date.

4. Treatment and Disposal of Wastewater. Subject to the terms of this Agreement, during the Term, Aqua shall accept, treat and dispose of the wastewater that emanates from the Municipality System from the Municipality. The wastewater that emanates from the Municipality System from the Municipality shall be delivered to the Acquired Treatment Plant from the Municipality System to the Acquired Collection System (either directly or indirectly through a Third-Party System). The Municipality covenants and agrees that all wastewater from the Municipality emanating from the Municipality System to the Acquired System shall be in accordance and compliance with all requirements of the Municipality's Ordinances, Aqua Tariff and applicable Laws, as they may be amended from time to time.

5. Prohibited Discharges; Hauled Waste.

5.1. No Prohibited Discharge shall be permitted to be discharged into the Acquired System from the Municipality System,

5.2. No hauled waste shall be permitted to be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, obtained a permit from the DEP permitting the discharge of such waste into the Municipality System (a "Hauled Waste Permit"), and (b) such user and waste and the discharge of such waste are in full compliance with all terms and conditions of the Aqua Tariff and the Hauled Waste Permit issued to the user.

6. Nondomestic Waste/Industrial Waste. No nondomestic waste or industrial waste shall be discharged into the Acquired System from the Municipality System unless (a) the user discharging such waste has, prior to the discharge of such waste, entered into a written agreement acceptable in form and substance to Aqua related to the pretreatment and discharge of such waste (an "Industrial Waste Agreement"), and (b) such user and waste and the discharge of such waste are

in full compliance with all terms and conditions of the Aqua Tariff and the Industrial Waste Agreement.

7. Operation and Enforcement.

7.1. Flow Calculations. As of the Closing Date and until Aqua installs flow meters to measure the Flow from each Contributing User, Flow for billing purposes shall be calculated based on the existing practice of using water meter read information supplied by the Contributing User or its water provider. After flow meters are installed to measure the Flow from each Contributing User, Flow from the Municipality System shall be determined by combining (i) the Metered Flow and (ii) all remaining Un-Metered Flow. Flow calculations for each quarter shall be communicated to the Municipality within thirty (30) days of the end of each quarter. Daily Flow calculations shall be based on a twenty-four (24) hour period utilizing 7:00 AM as the daily meter reading time.

7.2. Record Keeping/Flow Meter Maintenance. Aqua shall maintain accurate Flow records for Metered Flow based on the Flow meter readings. Aqua shall own, operate, maintain and replace, if necessary, the Flow meters and shall calibrate the Flow meters in accordance with this Section 7.2 and acceptable industry standards to ensure accurate readings.

7.3. Calibration and Testing.

7.3.1. Meter equipment and remote readouts shall be tested, calibrated, maintained, and repaired at least annually by Aqua at Aqua's cost. The results of such testing and calibration shall be provided to the Municipality upon request and no later than fourteen (14)) business days from such request. If the Municipality requests additional testing, calibration, maintenance and repair, such expenses associated shall be at the cost of the Municipality.

7.3.2. If the Municipality and Aqua cannot agree as to the inaccuracy of any meter, the Municipality may request that the meter be tested by an independent testing facility mutually agreed to by the Municipality and Aqua and such independent testing facility's determination of accuracy shall be conclusive. All costs related to the testing shall be borne fifty percent (50%) by the Municipality and fifty percent (50%) by Aqua.

7.3.3. If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of three percent (3%), the calibration thereof shall be corrected, and any billing shall be adjusted, for a period extending back to the time when such inaccuracy began, if such time is ascertainable. If such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the most recent date of calibration, but in no event further back than a period of six (6) months where such time is not ascertainable.

7.4. Estimated Meter Readings. Whenever it is necessary to estimate Flow meter readings due to equipment malfunction, failure, power outage, or similar events, Aqua shall notify the Municipality for any period of time such estimated readings were utilized within 72 hours of discovering such event. Any estimated reading shall be calculated using the average monthly Flow for the Flow meter in question, for the previous month, for each day the estimated reading is made. The amount of wastewater conveyed during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation,

or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

7.5. Storm-water / Groundwater Inflow & Infiltration ("I&I"). The Municipality shall enact, keep in force and enforce appropriate ordinances and/or regulations prohibiting the direct discharge of storm water, surface water runoff and groundwater into the Municipality System, and for the maintenance and repair of sewer lateral vent caps and cleanouts, so as to ensure that the waters or wastes discharged by any party into the Municipality System shall not contain, to the maximum extent possible, storm water, sump pump discharges, roof or surface drainage, or any discharges other than wastewater. Should sources of excessive I&I exist as determined by Aqua or any Governmental Authority having jurisdiction, the Municipality shall in a timely manner use its best efforts to locate and correct these conditions, in accordance with any Government Authority requirements. If the Municipality does not have an ordinance regarding the inspection and repair of sewer laterals in effect on the Effective Date, within one (1) year of the Effective Date, the Municipality shall enact an ordinance regarding the inspection and repair of sewer laterals and be responsible for the management and enforcement of such ordinance.

7.6. Violation of Permit or Law. In the event the Flow or wastewater characteristics from the Municipality System causes a violation of any Law or Permit related to the Acquired System, as may be established by specific, split sampling and independent laboratory and engineering analysis performed by Aqua and the Municipality or DEP, and whereby external fines or penalties may result, the Municipality shall be solely responsible for such fines and penalties, and all costs and expenses incurred by Aqua as a result thereof, including reasonable attorneys' and consultants' fees and expenses. If external fines and penalties are a result of shared violation of Aqua and the Municipality, Aqua and the Municipality shall share the burden of such fines and penalties based upon their proportionate share of the total Flow. If there are external fines and penalties resulting from a shared violation which is attributable to multiple Contributing Users, but the Contributing User or Users who caused the violation cannot be identified, then the obligation to pay the fines and penalties shall be shared by the Contributing Users in proportion to their share of the total Flow. The provision of this Section shall survive the expiration of this Agreement.

8. Metering Devices. Aqua shall pay for all costs and expenses that Aqua incurs related to the installation and maintenance of any metering device (a) at any Connection Point, or (b) used to calculate the Flow emanating from the Municipality System to the Acquired System located elsewhere in the Acquired System, anywhere in the Municipality System or anywhere else, which shall include, without limitation, the cost of the metering device and any other equipment related or ancillary to such metering device and labor incurred in installing and maintaining any metering device ("Metering Costs").

9. Compliance with Laws. Each Party shall comply with all applicable present and future Laws having jurisdiction over such Party or such Party's Facilities, all present and future Permits applicable to such Party's Facilities and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

10. Sampling and Monitoring Equipment. Aqua may install, in its sole and absolute discretion and at its sole cost and expense, sampling and monitoring equipment ("Sampling Equipment") at the Connection Points for the purpose of sampling and analyzing the wastewater delivered to the Acquired System and to ensure compliance with the Aqua Tariff. Aqua shall own and operate any Sampling Equipment that it elects to install and shall be responsible, at its sole cost and expense, for designing, installing, operating, maintaining, updating and replacing any Sampling Equipment that it elects to install. Aqua shall collect 24-hour flow proportional composite samples, if feasible, and shall split samples with the Municipality for concurrent independent analysis by the Municipality.

11. Easements and Licenses Regarding Flow Meters and Sampling and Monitoring Agreement. The Municipality hereby grants Aqua an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10. On the request of Aqua, the Municipality shall execute and deliver to Aqua any agreement or instrument in form and substance reasonably acceptable to Aqua in connection with or related to any such easement or license. Aqua may utilize the Sampling Equipment on a routine basis, in its sole and absolute discretion. The Municipality may request Aqua to conduct a sampling of the wastewater outside of Aqua's normal sampling and testing procedure, at the Municipality's sole expense and the Municipality shall share the results of the sampling with Aqua upon Aqua's request and expense.

12. Industrial Waste Survey. The Municipality shall maintain a current list of users of the Municipality System that generate nondomestic waste or industrial waste in accordance with the following (a "Industrial Waste Survey"):

12.1. The Industrial Waste Survey shall include the facility name and address of all users that generate nondomestic waste or industrial waste whose wastewater passes through the Municipality System to the Acquired System, the nature of each user's business and the name and contact information of a responsible individual to be contacted at each user.

12.2. An updated Industrial Survey shall be provided to Aqua within thirty (30) days of the Effective Date. The list shall include users that have been added as well as those that have been removed or where site operations have changed.

12.3. The Municipality shall provide to Aqua the results of its updated Industrial Waste Survey on or prior to March 31, June 30, September 30, and December 31 of each year during the Term.

13. Rates for Service. In connection with Aqua's collection, conveyance, treatment and disposal of wastewater from the Municipality emanating from the Municipality System, the Municipality shall pay to Aqua a rate based on thousands of gallons of Flow as determined pursuant this Agreement (the "Rate"). For the period commencing on the Effective Date through the first full year, the Rate shall be Three and 66/100 Dollars ($3.66) per thousand gallons. For each of the next two (2) years during the Term following the first full year, the then current Rate shall increase by three percent (3%). The PUC retains ultimate jurisdiction over setting the Rate,

and this Agreement shall be subject to PUC review and approval. To the extent the PUC determines the Rate set forth in this Agreement is unjust or unreasonable, this Agreement shall remain in effect and Aqua's shareholders shall be responsible for the difference between the rate the PUC determines is just and reasonable and the Rate in this Agreement.

14. Invoicing and Payment Terms. During each year during the Term, Aqua shall bill the Municipality quarterly for service through March 31, June 30, September 30 and December 31 in arrears. Any quarterly amount due for any partial quarter during the Term shall be prorated based on the number of days within such quarter that fall within the Term. The Municipality shall pay each quarterly bill to Aqua in full within forty-five (45) days after the date of the bill. Amounts not paid when due shall be subject to interest in the amount of six percent (6%) per annum of the amount due.

15. Peak Flow Limitations. The Municipality shall be limited to a peak daily flow of four (4) times its three-year annual average daily flow rate (the "Peak Flow Limitation Amount"). Aqua shall notify the Municipality within 30 days of any exceedance of the Peak Flow Limitation Amount and shall also notify the Municipality in a timely manner of any daily flows that exceed 90% of the Peak Flow Limitation Amount for a period of 3 consecutive days. Should the Municipality exceed the Peak Flow Limitation Amount, the Municipality shall be penalized $1,000.00 for each day in which the flow exceeds the Peak Flow Limitation Amount. The Municipality shall submit payment for each flow exceedance within 60 days of being notified by Aqua of the flow exceedance. In lieu of the Municipality paying the subject penalty payment to Aqua, the Municipality shall be permitted to use this money to address I&I within the Municipality System. If the Municipality elects to make improvements to the Municipality System to address I&I, the Municipality shall (a) notify Aqua in writing within 60 days of receiving notification of the flow exceedance that the Municipality intends to make improvements to the Municipality System, which notice shall include what improvements the Municipality intends to make to the Municipality System, (b) complete such improvements to the Municipality System within two (2) year of the date of its notice to Aqua of its intent to make such improvements (the "Improvement Completion Period"), and (c) within 30 days of the end of the Improvement Completion Period, submit documentation acceptable to Aqua certifying that such improvements have been made. If the Municipality elects to make improvements to the Municipality System, and such improvements are not fully completed within the Improvement Completion Period, within 60 days of the end of the Improvement Completion Period, the Municipality shall pay $5,000 to Aqua. The provisions of this Section 15 shall become effective on the third anniversary of the date on which Aqua commences billing the Municipality solely on flow metering. The intent of this peak daily flow limitation requirement is to encourage the Municipality to make I&I repairs to the Municipality System.

16. Municipality System. During the Term, the Municipality shall, at its sole cost and expense, maintain the Municipality System in good repair and operating condition, and continuously operate the same in accordance with prudent industry practices and standards. Aqua shall have no obligation or liability to repair, maintain, expand or modify any part of the Municipality System and any repair, maintenance, expansion or modification of all or any part of the Municipality System shall be at the sole cost and expense of the Municipality.

17. Indemnification

17.1. Indemnification by the Municipality. The Municipality shall indemnify and defend Aqua, and Aqua's directors, officers, employees, representatives and agents (collectively the "Aqua Indemnified Parties") against, and shall hold the Aqua Indemnified Parties harmless from and against, and shall pay and reimburse the Aqua Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Aqua Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.1.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of the Municipality in connection with the collection or conveyance of any wastewater emanating from the Municipality System except to the extent that any such injury, death or damage is caused by Aqua (including, without limitation, resulting from any breach of this agreement by Aqua);

17.1.2. any claim, litigation, proceeding or action of any kind whatsoever by any Governmental Authority or third party related to (i) any action or inaction of the Municipality with respect to the Municipality System, or (ii) the collection, conveyance, treatment or disposal of any wastewater emanating from the Municipality System except to the extent that any such claim or action is the result of any action or inaction of Aqua; or

17.1.3. any breach by the Municipality of any of its covenants or obligations under this Agreement.

17.2. Indemnification by Aqua. To the extent that the Municipality is not immune under applicable Law, Aqua shall indemnify and defend the Municipality, and the Municipality's elected officials, directors, officers, employees, representatives and agents (collectively the "Municipality Indemnified Parties") against, and shall hold the Municipality Indemnified Parties harmless from and against, and shall pay and reimburse the Municipality Indemnified Parties for, any and all Losses incurred or sustained by, or imposed upon, the Municipality Indemnified Parties related to, based upon, arising out of, with respect to or by reason of:

17.2.1. any injury (including death) to any Person or damage to any property related to, based upon, arising out of or by reason of any action or inaction of Aqua in connection with the treatment or disposal of any wastewater emanating from the Connection Points of the Municipality System except to the extent that any such injury, death or damage is caused by the Municipality (including, without limitation, resulting from any breach of this Agreement by the Municipality) and/or any third party (including, without limitation, any other Contributing User); or

17.2.2. any breach by Aqua of any of its covenants or obligations under this Agreement.

If any claim is made or action or proceeding filed against the Municipality for which the Municipality could potentially seek indemnification from Aqua pursuant to the provision of this

Section 17.2, the Municipality shall not waive or seek to waive any immunity afforded to it pursuant to applicable Law.

17.3. The provision of this Section 17 shall survive the expiration of this Agreement.

18. Enforcement Obligation. The Municipality shall, at Aqua's request, enforce, promptly and to the fullest extent of its authority and at its sole cost and expense, all standards, criteria, requirements, and thresholds established by any Law (including any ordinances or regulation of the Municipality), Governmental Authority or Permit or the Aqua Tariff (each, a "Wastewater Standard"), against any Person, which violates a Wastewater Standard and which Aqua in good faith has identified as having a wastewater flow which violates a Wastewater Standard.

19. Consent to City Updating of City's Act 537 Plan. The Municipality acknowledges that in connection with the City's sale of the Acquired System to Aqua, the City is required to update the City's Act 537 Plan. On the City completing its updating of its Act 537 Plan, at the request of Aqua or the City, the Municipality shall review the update to the City's Act 537 Plan and, if appropriate, shall pass a resolution in form and substance acceptable to DEP and the City approving the City's updated Act 537 Plan. Review and approval shall not be unreasonably delayed or withheld. The City is and shall be an intended third-party beneficiary of this Section 19 and shall have the right to enforce directly the terms and conditions of this Section 19. The terms of this Section 19 shall be effective as of the Execution Date.

20. Future Plant Expansion. In accordance with DEP Chapter 94 regulations, should the Acquired Treatment Plant be projected to exceed its design capacities within a five year term, Aqua shall send notice of such event to the Municipality; and, within six (6) months of the date of such notice, the City or Aqua and the Municipality shall initiate planning in accordance with Act 537 to evaluate the need for expansion of the treatment facilities.

21. Planning Modules. For any changes within the Municipality (for example, subdivision, land development, system expansion, among others) that requires DEP Sewage Facilities Planning approval, the Municipality will provide the complete and appropriate planning module components to Aqua for review. For any planning modules that do not cause an overload condition, Aqua will review the planning modules in a timely manner for Municipality's use in submission to DEP, and Aqua's approval will not be unreasonably withheld.

22. Miscellaneous.

22.1. Inspection and Audit. Aqua and the Municipality agree to maintain complete and accurate records and accounts concerning their responsibilities under this Agreement. All Parties shall, at all times, have the right to examine and inspect said records and accounts upon thirty (30) days' written notice. If required by law or regulation, Aqua and the Municipality shall make said records and accounts immediately available to federal and state authorities.

22.2. Waiver of Rights. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions hereof shall not be construed as a waiver of any of its rights hereunder.

22.3. Modification. This writing constitutes the entire Agreement between the parties and there are no representations or agreements, verbal or written, other than those contained herein. This Agreement may be modified, amended or supplemented by the written agreement of the Parties.

22.4. Necessity of Permits. In the event that a Governmental Authority refuses to issue any material Permit and the Parties have no recourse to appeal and obtain such denied Permit during the Term, and such Permit may be necessary to accomplish the intent and purpose of this Agreement, then the Parties hereto shall be relieved from further compliance with the terms of this Agreement, except for payments for services actually being rendered, until such time when such Permit or Permits shall be issued and then this Agreement shall become fully operative and the Parties hereunder shall be bound by all the terms hereof.

22.5. Severability. Should any one or more of the provisions of this Agreement for any reason be held illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect any other provision of this Agreement and the remainder of this Agreement shall, in such circumstances, be construed and enforced as if such illegal, invalid or unenforceable provision had not been contained herein.

22.6. Interpretation. For purposes of this Agreement, unless the context otherwise requires, references in this Agreement to (a) Sections are to Sections of this Agreement; (b) exhibits and schedules are to exhibits and schedules attached to this Agreement and (c) an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

22.7. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes and binding execution and delivery hereof.

22.8. Addresses. Whenever a notice is required to be given in writing by mail, the following addresses shall be used, unless a different address is specifically called for:

Municipality: [•]

_____

_____

_____

Aqua: Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Avenue

Bryn Mawr, PA 19010
Attn: President

with required copy to:
Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave
Bryn Mawr, PA 19010
Attn: General Counsel

22.9. Termination of Existing Agreements. On the Effective Date, all existing agreements, whether written, oral or implied, between or among the City and the Municipality with respect to the conveyance and/or treatment of wastewater **[, including, but not limited to the Existing Agreement,]**[2] shall terminate and be of no further force or effect.

22.10. Choice of Law. This Agreement shall be governed by and construed with the laws of the Commonwealth of Pennsylvania except for those requirements, terms, duties and conditions regulated by federal law, and jurisdiction shall be in the Court of Common Pleas of Beaver County.

22.11. Arbitration. Any controversy, claim or dispute arising out of, or relating to this Agreement, or the breach thereof, may, if agreed by the parties, be settled by arbitration, and judgment upon any award rendered by the arbitrator or arbitrators may be entered in the Court of Common Pleas of Beaver County. Notwithstanding the above, any controversies, claims and disputes that are within the jurisdiction of the PUC shall be resolved before the PUC.

22.12. Force Majeure. Notwithstanding any other provision of this Agreement, no Party hereto shall be responsible for damages to the other for any failure to comply with this Agreement resulting from an act of God or riot, sabotage, public calamity, flood, strike, unforeseeable breakdown of the Acquired Treatment Plant, or other event beyond its reasonable control. The Party having the responsibility for the Facilities so affected, however, shall proceed promptly to remedy the consequences of such event, with costs to be shared, if applicable, to the extent provided elsewhere herein.

22.13. Most Favored Nation. During the Term, Aqua shall not enter into any bulk treatment agreement with any municipality or authority related to the acceptance, treatment, and disposal of wastewater by the Acquired System (a "Bulk Treatment Agreement") which provides for, or modify any existing Bulk Treatment Agreement to provide for, a bulk treatment rate per thousand gallons that is less than the then current Rate being charged to the Municipality under this Agreement.

22.14. Entire Agreement. This Agreement, together with all schedules and exhibits attached hereto, constitutes the sole and entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such the matter hereof.

---

[2] **NTD:** Bracketed provision would be included for a municipality/authority that has a current written agreement with the City regarding the collection and treatment of wastewater.

IN WITNESS WHEREOF, the Parties hereto have caused these presents to be executed and their respective corporate seals affixed the day and year first above written.

| AQUA: | MUNICIPALITY: |
|---|---|
| AQUA PENNSYLVANIA WASTEWATER, INC. | [•] |
| By: _____ | By: _____ |
| Name: _____ | Name: _____ |
| Title: _____ | Title: _____ |

The City, intending to be legally bound, is executing this Agreement solely for the purpose of agreeing to the provisions of Section 22.9. No other terms or obligations within this Agreement apply to the City.

CITY OF BEAVER FALLS

By: _____

Name: _____

Title: _____

# EXHIBIT A
# CONNECTION POINTS

# EXHIBIT B
# CONNECTION POINTS HAVING FLOW METERS

# EXHIBIT C
# CONNECTION POINTS NOT HAVING FLOW METERS

# AMENDED
# EXHIBIT G

AQUA PENNSYLVANIA WASTEWATER, INC.
(hereinafter referred to as the "Company")

RATES, RULES, AND REGULATIONS

GOVERNING THE COLLECTIONS OF

WASTEWATER

IN PORTIONS OF

ADAMS, BEAVER, BERKS, BUCKS, CARBON, CHESTER, CLARION, CLEARFIELD, DELAWARE, LACKAWANNA, LUZERNE, MONROE, MONTGOMERY, PIKE, SCHUYLKILL, VENANGO, AND WYOMING COUNTIES

IN THE COMMONWEALTH OF PENNSYLVANIA

ISSUED: XX/XX/XXXX
By:
Marc Lucca, President
Aqua Pennsylvania, Inc.
762 Lancaster Avenue
Bryn Mawr, Pennsylvania 19010

EFFECTIVE: XX/XX/XXXX

# NOTICE

THIS TARIFF ESTABLISHES WASTEWATER RATES FOR CUSTOMERS OF THE CITY OF BEAVER FALLS SITUATED WITHIN BEAVER COUNTY, PENNSYLVANIA.

LIST OF CHANGES MADE BY THIS TARIFF

Changes: This tariff makes changes to the reflect the acquisition of the wastewater assets of the City of Beaver Falls located in Beaver County, Pennsylvania. Closing on the acquisition took place on XX/XX/XXXX, with the effective date of ownership occurring at 12:01AM on XX/XX/XXXX. (See page XXX)

This tariff is made pursuant to the Commission's Order adopted at Docket No. A-2022-3033138, which authorizes the issuance of the Certificate of Public Convenience.

TABLE OF CONTENTS


| | Page Number | | |
|---|---|---|---|
| Rates, Rules, and Regulations | 1 | XXXX Revised | (C) |
| List of Changes Made by This Tariff | 2 | XXXX Revised | (C) |
| Table of Contents | 3 | XXXX Revised | (C) |
| Table of Contents (Cont'd) | 4 | Fourth Revised | |
| Table of Contents (Cont'd) | 5 | | |
| Description of Territory Served | 6 | Original Page | |
| Description of Territory Served (Cont'd) | 7 | Original Page | |
| Description of Territory Served (Cont'd) | 8 | XXXX Revised | (C) |
| Held For Future Use | 9 | Original Page | |
| **SCHEDULE OF RATES:** | | | |
| Rate Zone 1 | 10.1.1 | Original Page | |
| Rate Zone 1 (cont'd) | 10.1.2 | Original Page | |
| Rate Zone 2 | 10.2.1 | Original Page | |
| Rate Zone 2 (cont'd) | 10.2.2 | Original Page | |
| Rate Zone 3 | 10.3.1 | Original Page | |
| Rate Zone 3 (cont'd) | 10.3.2 | Original Page | |
| Rate Zone 4 | 10.4.1 | Original Page | |
| Rate Zone 4 (cont'd) | 10.4.2 | Original Page | |
| Rate Zone 5 | 10.5.1 | Original Page | |
| Rate Zone 5 (cont'd) | 10.5.2 | Original Page | |
| Rate Zone 6 | 10.6 | Original Page | |
| Rate Zone 7 - Limerick Division | 10.7 | Original Page | |
| Rate Zone 8 - East Bradford Township Division | 10.8 | Original Page | |
| Rate Zone 9 - Cheltenham Township Division | 10.9.1 | Original Page | |
| Rate Zone 9 - Cheltenham Township Division (cont'd) | 10.9.2 | Original Page | |
| Rate Zone 10 - East Norriton Township Division | 10.10 | Original Page | |
| Rate Zone 11 - New Garden Township Division | 10.11 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division | 10.12.1 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division (cont'd) | 10.12.2 | Original Page | |
| Rate Zone 12 - Lower Makefield Township Division (cont'd) | 10.12.3 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division | 10.13.1 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division (cont'd) | 10.13.2 | Original Page | |
| Rate Zone 13 - East Whiteland Township Division (cont'd) | 10.13.3 | Original Page | |
| Rate Zone 14 - Beaver Falls Division | 10.14 | Original Page | (C) |
| Rate Zone 14 - Beaver Falls Division (cont'd) | 10.14.1 | Original Page | (C) |

DESCRIPTION OF TERRITORIES SERVED

| | Township | County |
|---|---|---|
| RATE ZONE 12 | | |
| Lower Makefield Township Division | Lower Makefield | Bucks |
| | | |
| RATE ZONE 13 | | |
| East Whiteland Township Division | East Whiteland | Chester |

Sewer District A: that part of East Whiteland Township not included within Districts B, C, D, and E
Sewer District B: properties served by the western extension of the Route 30 sewer main
Sewer District C: residential dwellings located in the Lockwood Chase subdivision
Sewer District D: all properties that flow into and whose effluent is treated at the sanitary sewage facility that serves the dwellings in the Malvern Hunt development
Sewer District E: all commercial and residential properties located in the Atwater development south of the quarry

A depiction of the Sewer Districts as noted above can be found in Revised Exhibit H to the Application filed at Docket No. A-2021-3026132

| | | |
|---|---|---|
| RATE ZONE 14 | | |
| Beaver Falls Division | City of Beaver Falls | Beaver |
| Beaver Falls Division | Eastvale Borough | Beaver |
| Beaver Falls Division | West Mayfield Township | Beaver |

*All Divisions and Subdivisions above are billed on a per EDU basis, with the exception of the Media Division, Plumsock Division, Treasure Lake Division, Village of Valley Forge Division and Beaver Falls Division

## SCHEDULE OF RATES

### RATE ZONE 14 – METERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 14 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

QUARTERLY SERVICE & CONSUMPTION CHARGES ($)

| | | Gallons per Quarter | Rate Zone 14 Quarterly | |
|---|---|---|---|---|
| RESIDENTIAL | Base | 0 to 3,000 Gallons | $43.64 | |
| | Block 1 | Over 3,000 Gallons | $8.71 | per 1,000 gallons |
| COMMERCIAL | Base | 0 to 3,000 Gallons | $43.64 | |
| | Block 1 | Over 3,000 Gallons | $8.71 | per 1,000 gallons |
| Bulk Rates [1] | | | $4.68 | per 1,000 gallons |
| Bulk Rate Other (Dalton) | | | $4.68 | per 1,000 gallons |

MONTHLY SERVICE & CONSUMPTION CHARGES ($)

| | | | | |
|---|---|---|---|---|
| COMMERCIAL & INDUSTRIAL | Base | 0 to 1,000 Gallons | $14.54 | |
| | Block 1 | Over 1,000 Gallons | $8.71 | per 1,000 gallons |

The DSIC surcharge shall not be applied to bills of wastewater customers in the Beaver Falls division; this will remain effective until an amended Long-Term Infrastructure Improvement Plan (LTIIP) is filed and approved which includes Beaver Falls. Following the approval of an amended LTIIP, the DSIC surcharge shall be applicable to wastewater customers in the Beaver Falls division.

[1] Bulk Rate service is available to municipalities and municipal authorities that provide their own wastewater collection system but obtain conveyance and treatment service from the Beaver Falls division and do not have a wastewater service agreement with Aqua.

RATE ZONE 14 – CONTINUED

Industrial Pretreatment Program-Beaver Falls (IPP-Beaver Falls)

A. Introduction

1. This Section applies to Industrial and Commercial customers served under Rate Zone 14 of this Tariff. All customers subject to this section ("Users") shall comply with the Wastewater Control Regulations and Industrial and Commercial Service Limitations as set forth in Section H and M, respectively, of the Company's Tariff, as amended from time to time, except as such rules and regulations are modified by this Section.

2. The Users shall be responsible for the charges and fees set forth below for the administration of the IPP-Beaver Falls. IPP fees are in addition to any other charges set forth in this Tariff.

3. Specific limitations and prohibitions applicable to Industrial and Commercial Users under this Section are set forth on Aqua's website regarding IPP-Beaver Falls.

4. Users shall be required to enter into a separate pretreatment agreement to govern specific limitations; prohibitions; conditions; duties and responsibilities; and sampling, monitoring and reporting requirements.

B. Charges

1. Industrial Wastewater Discharge Contract Application/Renewal Fee: $300.00

2. Specific Fees to be applied to quarterly flow, if the quarterly average results from samples collected from the discharge exceeds 300 ppm for $BOD_5$ or 275 ppm for TSS:

    a. $BOD_5$ Rate per 1,000 gallons = 0.00834 x $0.25 x ($BOD_5$ Sample – 300)

    b. TSS Rate per 1,000 gallons = 0.00834 x $0.15 x (TSS Sample – 275)

3. Industrial Surcharge Rate: $0.01 per gallon.

# AMENDED
# EXHIBIT I1

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear Customer:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

**Aqua Wastewater Customers**

| Rate Class | Average Usage | Estimated Monthly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 4,000 gal/month | $2.54 | 3.02% |
| Commercial/Public | 8,330 gal/month | $4.05 | 3.02% |
| Industrial | 1,500 gal/month | $1.38 | 3.02% |

**Aqua Water Customers**

| Rate Class | Average Usage | Estimated Monthly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 4,000 gal/month | $0.18 | 0.24% |
| Commercial/Public | 33,380 gal/month | $1.06 | 0.24% |
| Industrial | 200,150 gal/month | $5.14 | 0.24% |

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

# AMENDED
# EXHIBIT I2

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear Customer:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding estimated incremental rate effect of the proposed rate base addition on Beaver Falls' wastewater customers, which include estimates with and without cost sharing. Aqua has sought cost sharing in later rate filings for acquired systems and therefore we are providing both scenarios in this notice:

**Beaver Falls Customers rates assuming costs are shared with other Aqua customers**

| Rate Class | Average Usage | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 9,490 | $112.64 | 112.49% |
| Commercial | 39,870 | $410.35 | 112.49% |
| Industrial (Monthly) | 96,710 | $322.43 | 112.49% |
| Public | 69,260 | $689.35 | 112.49% |
| Bulk Other (Dalton) | 440,530 | $7,499.42 | 112.49% |

**Beaver Falls Customers rates assuming no costs are shared with other Aqua customers**

| Rate Class | Average Usage | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential | 9,490 | $165.83 | 165.61% |
| Commercial | 39,870 | $604.13 | 165.61% |
| Industrial | 96,710 | $474.70 | 165.61% |
| Public | 69,260 | $1,028.14 | 165.61% |
| Bulk Other (Dalton) | 440,530 | $11,040.94 | 165.61% |

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138

# AMENDED
# EXHIBIT I3

**NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION**
Docket No. A-2022-3033138

Dear [Contributing Municipality]:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers.

Aqua is required to provide a non-binding estimated incremental rate effect of the proposed rate base addition to customers. Aqua's estimates, based on average quarterly usage of 6,354,460 of the Contributing Municipalities[1] to the Beaver Falls system, quarterly rates could increase $49,251.81 per quarter (or 165.61%), assuming no cost sharing with other Aqua customers. If costs are shared with other Aqua customers, the projected rate impact could be $24,625.90 per quarter (or 112.49%).

The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

## PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

## ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

[1] Big Beaver Borough, Eastvale Borough, North Sewickley Township, Patterson Township, Patterson Heights Borough, West Mayfield Borough, and White Township.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138

# SUPPLEMENTAL EXHIBIT U

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 1 SUPP**

# SUPPLEMENTAL DIRECT TESTIMONY OF WILLIAM C. PACKER

**With Regard To**
**Updates to Appendix A**
**Reasonableness Review Ratio**
**Section 507 and 508**

**March 2024**

**TABLE OF CONTENTS**


I. INTRODUCTION ..... 1
II. UPDATED APPENDIX A ..... 2
III. REASONABLENESS REVIEW RATIO ..... 2
IV. SECTIONS 507 AND 508 ..... 4
V. CONCLUSION ..... 5

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. Are you the same William C. Packer that has provided direct testimony in this proceeding?**

A. Yes

**Q. What is the purpose of your supplemental direct testimony?**

A. The purpose of my supplemental direct testimony is to update Appendix A to my testimony and withdraw Aqua's request to the Commission to modify the existing agreements between the City of Beaver Falls ("City" or "Beaver Falls") and the Contributing Municipalities due to a settlement of the Civil Action filed by Patterson Township, Patterson Heights Borough, White Township and West Mayfield Borough ("Litigating Municipalities").

**Q. Are you sponsoring any Exhibits with your supplemental direct testimony?**

A. Yes. Attached to my testimony as Appendix A is an updated schedule showing the revenue deficiency and overall impact on customers.

**Q. Except for the below changes, do you agree with your previous direct testimony submitted in this proceeding?**

A. Yes.

## II. UPDATED APPENDIX A

**Q. You previously testified that in *McCloskey*, the Commonwealth Court concluded that the Commission must address rate impact "in a general fashion" when deciding whether there is substantial public benefit. Please address the rate impact of the Proposed Transaction.**

A. The current average bill of a residential customer in Beaver Falls, is approximately $100.13 per quarter. As my calculations in Appendix A show the average bill could increase to approximately $265.96 per quarter or a 165.61% increase, which assumes that one hundred percent of the revenue requirement deficiency is borne by the acquired customers of Beaver Falls. This is due to the intervening increases applied by Beaver Falls since the initial Application was filed with the Commission.

## III. REASONABLENESS REVIEW RATIO

**Q. Are you aware that the Commission has issued a Tentative Supplemental Implementation Order[1] ("TSIO") regarding the implementation of Section 1329 of the Public Utility Code?**

A. Yes.

[1] *Valuation of Acquired Municipal Water & Wastewater System – Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 (Feb. 7, 2024).

**Q. Do you believe the Reasonableness Review Ratio ("RRR") as set forth in the TSIO and what will be determined by the Commission in a final order should apply to this Proposed Transaction?**

A. No. The City issued its request for bids ("RFB") in July 2021. The Asset Purchase Agreement between Aqua and the City was signed n October 2021. Aqua, the City, and the Litigating Municipalities have worked diligently to arrive at a settlement that to allow this transaction to move through the Commission's approval process. The Commission itself has stated:

> The Commission would acknowledge that some transactions may be in the midst of negotiations, and as such, provide due consideration to the timing of the initial RRR release and any initial Section 1329 applications under this proposal. This would particularly be emphasized in the instance where an asset purchase agreement may be completed in close proximity to the issuance of the initial RRR.[2]

The City, Aqua, and the Litigating Municipalities have spent significant time and energy to move this Proposed Transaction forward, and therefore, this Proposed Transaction should be grandfathered.

[2] TISO at 8.

## IV. SECTIONS 507 AND 508

**Q. You previously testified that Aqua has developed a pro-forma agreement to negotiate with the Contributing Municipalities. Has Aqua entered into a new wastewater service agreement with the Contributing Municipalities?**

A. Yes. In Aqua's effort to settle the civil proceeding filed by the Litigating Municipalities, and to ensure that all the Contributing Municipalities have treatment agreements on substantially similar terms, Aqua has developed and negotiated new Wastewater Service Agreements with all of the Contributing Municipalities. I will note as I previously testified, several of the Contributing Municipalities did not have a written agreement prior to Aqua's involvement with the City and the Contributing Municipalities through the proposed transaction.

**Q. You previously testified that Aqua was requesting that to the extent necessary the Commission amend certain provisions of the prior agreements under Section 508 of the Public Utility Code and that those Contributing Municipalities that do not have an existing agreement be charged the Bulk Rate as set forth in Aqua's tariff. Is the Company still requesting this modification?**

A. No. Since new Wastewater Service Agreements have been negotiated and entered into between Aqua and the Contributing Municipalities, no amendment is needed under Section 508 of the Public Utility Code.

## V. CONCLUSION

**Q. Does this conclude your supplemental direct testimony?**

A. Yes it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

***Aqua Pennsylvania Wastewater, Inc.***
***City of Beaver Falls - Wastewater***

**1.)** **City of Beaver Falls - Wastewater**

| | | 2025 Year 1 | Notes |
|---|---|---|---|
| Revenue | $ | 2,534,808 | |
| O&M | | 1,462,000 | |
| Depreciation | | 1,307,096 | ****3.09% Composite Depreciation Rate* |
| Taxes Other | | 74,383 | |
| Income Taxes | $ | (294,741) | ******21% Federal & 8.99% State* |
| **Operating Income** | **$** | **(13,929)** | |
| Rate Base at Fair Market Value | $ | 41,250,000 | |
| Capital Investments *(Year 1)* | $ | 1,050,834 | |
| Rate Base *(Including Capital Investments less depreciation year 1)* | $ | 40,993,739 | |
| Interest Expense ^ | | 755,105 | |
| *^ Includes Interest Expense syncronized with rate base* | | | |
| **Required Operating Income *(Rate Base x Rate of Return)*** | **$** | **2,966,717** | |
| **Operating Income Deficiency** | **$** | **2,980,646** | |
| Gross Revenue Conversion Factor | | 1.408541 | |
| **Revenue Deficiency (Excess) $** | **$** | **4,198,000** | |
| **Revenue Deficiency (Excess) %** | | **165.61%** | |
| **Increase applied to Acquired (Authority) customers 80% Cost of Service** | **$** | **2,851,438** | |
| **Increase %** | | **112.49%** | |
| **Increase applied to Acquired (Authority) customers 100%** | **$** | **4,198,000** | |
| **Increase %** | | **165.61%** | |
| **Increase applied to Acquired (Authority) customers 50%** | **$** | **2,099,000** | |
| **Increase %** | | **82.81%** | |
| **Increase applied to Existing (Company Wastewater) customers 50%** | **$** | **2,099,000** | |
| **Increase %** | | **3.02%** | |
| **Increase applied to Existing (Company Water) customers 20% - Cost of S** | **$** | **1,346,562** | |
| **Increase %** | | **0.24%** | |

| | Avg. Usage / Kgal | Estimated Quarterly Increase | Estimated Percentage Increase |
|---|---|---|---|
| Residential (Domestic) - 80% Cost of Service | 9.49 | $ 112.64 | 112.49% |
| Commercial - 80% Cost of Service | 39.87 | $ 410.35 | 112.49% |
| Industrial - 80% Cost of Service | 96.71 | $ 322.43 | 112.49% |
| Public - 80% Cost of Service | 69.26 | $ 698.35 | 112.49% |
| Bulk - 80% Cost of Service | 6,354.46 | $ 33,453.67 | 112.49% |
| Bulk Other (Dalton) - 80% Cost of Service | 440.53 | $ 7,499.42 | 112.49% |
| Residential - 100% Revenue Deficiency | 9.49 | $ 165.83 | 165.61% |
| Commercial - 100% Revenue Deficiency | 39.87 | $ 604.13 | 165.61% |
| Industrial - 100% Revenue Deficiency | 96.71 | $ 474.70 | 165.61% |
| Public - 100% Revenue Deficiency | 69.26 | $ 1,028.14 | 165.61% |
| Bulk - 100% Revenue Deficiency | 6,354.46 | $ 49,251.81 | 165.61% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ 11,040.94 | 165.61% |
| Residential - 50% Revenue Deficiency | 9.49 | $ 82.92 | 82.81% |
| Commercial - 50% Revenue Deficiency | 39.87 | $ 302.07 | 82.81% |
| Industrial - 50% Revenue Deficiency | 96.71 | $ 237.35 | 82.81% |
| Public - 50% Revenue Deficiency | 69.26 | $ 514.07 | 82.81% |
| Bulk - 50% Revenue Deficiency | 6,354.46 | $ 33,453.67 | 165.61% |
| Bulk Other (Dalton) - 80% Revenue Deficiency | 440.53 | $ 5,520.47 | 82.81% |
| Impact Existing Customers (Company Wastewater) - Residential - 50% | 4.00 | $ 2.54 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Commercial - 50% | 8.33 | $ 4.05 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Industrial - 50% | 1.50 | $ 1.38 | 3.02% |
| Impact Existing Customers (Company Wastewater) - Public - 50% | 8.33 | $ 4.05 | 3.02% |
| Impact Existing Customers (Company Water) - Residential - 20% Cost of Ser | 4.00 | $ 0.18 | 0.24% |
| Impact Existing Customers (Company Water) - Commercial - 20% Cost of Se | 33.38 | $ 1.06 | 0.24% |
| Impact Existing Customers (Company Water) - Industrial - 20% Cost of Servi | 200.15 | $ 5.14 | 0.24% |
| Impact Existing Customers (Company Water) - Public - 20% Cost of Service | 33.38 | $ 1.06 | 0.24% |

**2.)** **Rate of Return**

| | Ratio | Cost Rate | WACC |
|---|---|---|---|
| Debt | 46.05% | 4.00% | 1.84% |
| Equity | 53.95% | 10.00% | 5.40% |
| | 100.00% | | 7.24% |

**3.)** **Gross Revenue Conversion Factor**

| | | |
|---|---|---|
| Dollar of Revenue | | 1.0000000 |
| Less: Gross Receipts (Revenue) Tax | 0.00% | 0.0000000 |
| Less: Reg Assesments | 0.62% | 0.0062419 |
| Less: Bad Debts | 1.17% | 0.0117050 |
| State Taxable Income | | 0.9820531 |
| State Income Tax | 8.4900% | 0.0833763 |
| Federal Taxable Icome | | 0.8986768 |
| Federal Tax Rate | 21.00% | |
| Federal Income Tax | | 0.1887221 |
| Net Revenue Dollar | | 0.7099547 |
| Gross Revenue Conversion Factor | | 1.4085406 |
| EFT | 27.7071% | |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Present Revenues***

| *Address Type* | *Service* | *Billed Dollars* | *Quarterly Minimum Fee Up to 3 Kgal* | *Rate per Kgal* | *Customers* | *EDUs* | *Total Usage* | *Average Usage* | *Average Quarterly Bill* | *Average Monthly Bill* |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic | Wastewater | $1,153,108 | $43.64 | $8.71 | 2,879 | 3,078 | 109,238,000 | | | |
| **Domestic/Residential Total** | | **$1,153,108** | | | **2,879** | **3,078** | **109,238,000** | **9,486** | **$ 100.13** | **$ 33.38** |
| Commercial | Wastewater | $402,719 | $43.64 | $8.71 | 276 | 376 | 44,017,000 | | | |
| **Commercial Total** | | **$402,719** | | | **276** | **376** | **44,017,000** | **39,870** | **$ 364.78** | **$ 121.59** |
| Industrial | Wastewater | $24,077 | $43.64 | $8.71 | 7 | 7 | 2,708,000 | | | |
| **Industrial Total** | | **$24,077** | | | **7** | **7** | **2,708,000** | **96,714** | **$ 859.89** | **$ 286.63** |
| Public | Wastewater | $42,215 | $43.64 | $8.71 | 17 | 17 | 4,710,000 | | | |
| **Public Total** | | **$42,215** | | | **17** | **17** | **4,710,000** | **69,265** | **$ 620.81** | **$ 206.94** |
| Bulk | Wastewater | $832,689 | | $4.68 | 7 | 3,767 | 177,925,000 | | | |
| **Bulk Total** | | **$832,689** | | | **7** | **3,767** | **177,925,000** | **6,354,464** | **$ 29,738.89** | **$ 9,912.96** |
| Bulk Other | Wastewater | $80,000 | | $4.68 | 1 | 1 | 1,762,115 | | | |
| **Bulk Total** | | **$80,000** | | | **1** | **1** | **1,762,115** | **440,529** | **$ 20,000.00** | **$ 6,666.67** |
| **Total Service Revenue** | | **$2,534,808** | | | **3,187** | **7,246** | **340,360,115** | | | |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Operating and Maintenance Expenses***

| | **2023** |
|---|---|
| *OPERATING AND MAINTENANCE EXPENSES:* | *Year 1* |
| O&M Labor Exp Reg | $ 435,000 |
| O&M Labor Exp OT | 20,000 |
| O&M Employee Benefits | 260,000 |
| O&M Sludge Removal | 62,000 |
| O&M Purchased Power | 125,000 |
| O&M Chemicals | 33,000 |
| O&M Mgmt Fees | 126,000 |
| O&M Cust Ops ACO (@ $10.00 per customer) | 70,000 |
| O&M OS Engineering | 25,000 |
| O&M OS Lab Testing | 15,000 |
| O&M OS Operations | - |
| O&M OS Maintenance | 215,000 |
| O&M Supplies | 16,000 |
| O&M Supplies | 60,000 |
| Total O&M Expenses => | $1,462,000 |

***Aqua Pennsylvania Wastewater, Inc.***
***Calculation of City of Beaver Falls - Wastewater - Taxes Other Than Income***

| *TAXES OTHER THAN INCOME (PRE-RATE CA* | *Rate* | | *Year 1* |
|---|---|---|---|
| Payroll Taxes (FICA, FUTA, SUTA) | 8.000% | $ | 34,800 |
| Property Taxes / (Purta) | 0.890% | $ | 22,560 |
| Regulatory Assessments | 0.672% | $ | 17,023 |
| Total | | $ | 74,383 |

**Assessment Rates**

| | |
|---|---|
| *Public Utility Commission* | *0.47%* |
| *Consumer Advocate* | *0.16%* |
| *Small Business Advocate* | *0.03%* |
| *Damage Prevention Committee* | *0.01%* |

Docket No. R-2021-3027385
Exhibit 1-A(a)

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Metered: | | | | | | | |
| 2 | Residential | 398,180 | 400,887 | 401,624 | 402,361 | 402,250 | - | 111 |
| 3 | Commercial | 22,385 | 22,521 | 22,492 | 22,463 | 22,463 | - | - |
| 4 | Industrial | 740 | 728 | 728 | 728 | 728 | - | - |
| 5 | Public | 1,184 | 1,184 | 1,184 | 1,184 | 1,184 | - | - |
| 6 | Bulk Water | - | - | - | - | - | - | - |
| 7 | Private Fire Protection | 5,449 | 5,550 | 5,550 | 5,550 | 5,550 | - | - |
| 8 | Sales to Water Utilities | 10 | 13 | 13 | 13 | 13 | - | - |
| 9 | Total Metered Customers | 427,948 | 430,883 | 431,591 | 432,299 | 432,188 | - | 111 |
| 10 | Other: | | | | | | | |
| 11 | Unmetered | 2,801 | 2,246 | 2,246 | 2,246 | 2,229 | - | 17 |
| 12 | Availability Charge | - | - | - | - | - | - | - |
| 13 | Public Fire Protection | 268 | 267 | 267 | 267 | 267 | - | - |
| 14 | Private Fire Protection | 863 | 868 | 868 | 868 | 868 | - | - |
| 15 | Total Customers | 431,880 | 434,264 | 434,972 | 435,680 | 435,552 | - | 128 |

Docket No. R-2021-3027386
Exhibit 1-B through 1-G

Schedule A-2
Witness: William C. Packer

**AQUA PENNSYLVANIA WASTEWATER, INC.**

NUMBER OF CUSTOMERS SERVED

AND WHOSE BILLS WILL BE CHANGED

| LINE NO. | CUSTOMER CLASS | SERVED AT 3/31/2020 | SERVED AT 3/31/2021 | TO BE SERVED AT 3/31/2022 | TO BE SERVED AT 3/31/2023 | INCREASED BILLS | DECREASED BILLS | UNCHANGED BILLS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Residential | 31,411 | 37,986 | 38,078 | 38,170 | 37,829 | 70 | 271 |
| 2 | Commercial | 1,715 | 2,227 | 2,227 | 2,227 | 2,226 | - | 1 |
| 3 | Industrial | 9 | 9 | 9 | 9 | 9 | - | - |
| 4 | Public | 60 | 62 | 62 | 62 | 62 | - | - |
| 5 | Miscellaneous | - | - | - | - | - | - | - |
| 6 | Availability Charge | - | - | - | - | - | - | - |
| 7 | Total Customers | 33,195 | 40,284 | 40,376 | 40,468 | 40,126 | 70 | 272 |

| | | | |
|---|---|---|---|
| ADD | Lower Makefield | Res | 10,916 |
| | | Com | 235 |
| | | Ind | - |
| | East Whiteland | Res/Com | 3,895 |
| | | **Total Existing WW Customers** | **55,514** |

| | |
|---|---|
| Wastewater Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-B through 1-G APWW Rate Case => | $ 55,789,513 |
| Add Lower Makefield WW - Appendix A | $ 10,038,836 |
| Add East Whiteland Revenue - Appendix A | $ 3,769,536 |
| Total Existing Revenues | **$ 69,597,885** |

Docket No. R-2021-3027385

| | |
|---|---|
| Water Revenues at Tariff Rates=> Proof of Revenue & Exhibit 1-A APW Rate Case => | $ 561,514,060 |
| Add Shenandoah Water Revenue Revenue - Appendix A => | $ 1,927,789 |
| Residential | $ 366,237,202 |
| Commercial | $ 140,860,462 |
| Industrial Revenues | $ 22,537,674 |
| Other Revenues | $ 33,806,511 |
| Total Existing Revenues (Res, Com, & Ind classes) | **$ 563,441,849** |

Docket No. R-2021-3027385

AQUA PENNSYLVANIA, INC.

1-A WATER AND 1-B WASTEWATER REVENUE REQUIREMENT - SUMMARY

| | | | Total Company | Water Operations | Wastewater Base Operations | Wastewater Limerick | Wastewater East Bradford | Wastewater Cheltenham | Wastewater East Norriton | Wastewater New Garden | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Present Rate Revenue | | | $ 548,225,086 | $ 511,148,592 | $ 19,011,761 | $ 3,978,573 | $ 1,014,569 | $ 7,258,740 | $ 2,923,770 | $ 2,889,080 | |
| Additional Revenue Requirement | | | 69,078,487 | 39,108,336 | 15,595,716 | 5,573,913 | 776,166 | 2,747,284 | 2,736,794 | 2,540,277 | $ 67,046,644 |
| Act 11 Allocatic | (1) | *16.79%* | (0) | 11,257,132 | (8,773,183) | (2,308,940) | (127,958) | 2,032,232 | (1,079,811) | (999,471) | |
| Proposed Revenues | | | $ 617,303,573 | $ 561,514,060 | $ 25,834,295 | $ 7,243,546 | $ 1,662,778 | $ 12,038,256 | $ 4,580,752 | $ 4,429,886 | |
| Rate Increase/(Decrease) - $ | | | $ 69,078,487 | $ 50,365,468 | $ 6,822,533 | $ 3,264,973 | $ 648,209 | $ 4,779,516 | $ 1,656,983 | $ 1,540,806 | |
| Rate Increase/(Decrease) - % | | | 12.60% | 9.85% | 35.89% | 82.06% | 63.89% | 65.84% | 56.67% | 53.33% | |
| | | | | | -25.35% | -24.17% | -7.15% | 20.31% | -19.08% | -18.41% | |

**Notes:**

(1) The allocation between wastewater operations and water operations is achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

**Aqua Pennsylvania Wastewater, Inc.**
**Residential Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bil | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | 4,000 | $ 64.47 | $ 95.47 | $ 31.00 | 48.08% | 16,347 | 16,359 |
| RZ 10 - East Norriton | 10 | 10 | 4,000 | $ 38.52 | $ 66.47 | $ 27.95 | 72.55% | 52,639 | 55,124 |
| RZ 10 - East Norriton - Whitpain | 10 | 10 | 4,000 | $ 31.66 | $ 66.47 | $ 34.81 | 109.95% | 66 | 66 |
| RZ 11 - New Garden | 11 | 11 | 4,000 | $ 73.03 | $ 138.50 | $ 65.47 | 89.65% | 6,080 | 6,080 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | 4,000 | $ 59.01 | $ 95.47 | $ 36.46 | 61.79% | 25,609 | 27,588 |
| RZ 1B - Penn Township | 1B | 1 | 4,000 | $ 64.05 | $ 95.47 | $ 31.42 | 49.06% | 9,953 | 9,953 |
| RZ 2 - Emlenton, Rivercrest, White Haven | 2 | 2 | 4,000 | $ 71.82 | $ 101.80 | $ 29.98 | 41.74% | 11,088 | 20,435 |
| RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | 4,000 | $ 84.00 | $ 115.03 | $ 31.03 | 36.94% | 26,224 | 26,224 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | 4,000 | $ 118.02 | $ 150.30 | $ 32.28 | 27.35% | 6,415 | 6,415 |
| RZ 5 - Newlin Green | 5 | 5 | 4,000 | $ 147.00 | $ 150.30 | $ 3.30 | 2.24% | 588 | 588 |
| RZ 5 - Sage Hill | 5 | 5 | 4,000 | $ 189.00 | $ 150.30 | $ (38.70) | -20.48% | 252 | 264 |
| RZ 6 - Masthope | 6 | 6 | 4,000 | $ 45.82 | $ 70.59 | $ 24.77 | 54.05% | 16,452 | 16,488 |
| RZ 7 - Limerick | 7 | 7 | 4,000 | $ 39.73 | $ 78.53 | $ 38.80 | 97.67% | 61,094 | 61,094 |
| RZ 8 - East Bradford - Single Family Home | 8 (Unmetered) | 8 (Metered) | 4,000 | $ 71.49 | $ 104.56 | $ 33.06 | 46.25% | 4,596 | 4,596 |
| RZ 8 - East Bradford - Townhome | 8 (Unmetered) | 8 (Metered) | 4,000 | $ 55.36 | $ 104.56 | $ 49.20 | 88.88% | 9,663 | 9,663 |
| RZ 9 - Cheltenham | 9 | 9 | 4,000 | $ 36.53 | $ 61.82 | $ 25.29 | 69.23% | 117,807 | 117,807 |
| RZ 3 - Links of Gettysburg, Thornhurst Div, Laurel Lakes, Woodloch Springs Unmetered | 3 | 3 | Unmetered | $ 71.50 | $ 115.03 | $ 43.53 | 60.88% | 11,496 | 11,496 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | Unmetered | $ 105.00 | $ 133.35 | $ 28.35 | 27.00% | 23,389 | 23,389 |
| RZ 7 - Limerick (Unmetered) | 7 (Unmetered) | 7 (Unmetered) | Unmetered | $ 29.75 | $ 61.08 | $ 31.33 | 105.34% | 6,078 | 6,078 |

**Weighted Average Residential Bill (Metered & Unmetered) => $ 84.33** **** @ 4,000 Average Consumption***

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania Wastewater, Inc.**
**Commercial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bill | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 9 - Cheltenham | 9 | 9 | 3,200 | $ 33.40 | $ 54.95 | $ 21.55 | 64.52% | 84,326 | 84,326 |
| RZ 7 - Limerick | 7 | 7 | 5,800 | $ 51.89 | $ 93.24 | $ 41.35 | 79.70% | 21,828 | 22,260 |
| RZ 10 - East Norriton | 10 | 10 | 24,500 | $ 220.00 | $ 220.90 | $ 0.89 | 0.41% | 2,938 | 3,202 |
| RZ 1 - Bridlewood, Eagle Rock, Media | 1 | 1 | 39,400 | $ 346.96 | $ 504.71 | $ 157.74 | 45.46% | 3,660 | 3,684 |
| RZ 11 - New Garden | 11 | 11 | 39,400 | $ 939.43 | $ 1,855.35 | $ 915.92 | 97.50% | 1,281 | 1,281 |
| RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill | 1A | 1A | 39,400 | $ 293.18 | $ 504.71 | $ 211.52 | 72.15% | 729 | 789 |
| RZ 1B - Penn Township | 1B | 1 | 39,400 | $ 484.58 | $ 504.71 | $ 20.13 | 4.15% | 480 | 504 |
| RZ 2 - Emlenton, Rivercrest, White Haven (Kidder) | 2 | 2 | 39,400 | $ 372.90 | $ 542.05 | $ 169.15 | 45.36% | 623 | 3,745 |
| RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stony Creek, Thornhurst, and Willistown Woods | 3 | 3 | 39,400 | $ 399.95 | $ 539.89 | $ 139.95 | 34.99% | 1,476 | 3,425 |
| RZ 5 - East Bradford (Brandywine), Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock | 5 | 5 | 39,400 | $ 785.65 | $ 982.83 | $ 197.18 | 25.10% | 42 | 42 |
| RZ 6 - Masthope | 6 | 6 | 39,400 | $ 82.99 | $ 165.27 | $ 82.28 | 99.14% | 96 | 108 |
| RZ 8 - East Bradford | 8 | 8 | 44,500 | $ 335.21 | $ 569.71 | $ 234.49 | 69.95% | 416 | 416 |
| RZ 5 - Avon Grove School District | 5 | 5 | Flat | $ 8,695.31 | $ 10,925.36 | $2,230.05 | 25.65% | 12 | 12 |
| RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Unmetered | 4 | 4 | Unmetered (Per EDU) | $ 105.00 | $ 133.35 | $ 28.35 | 27.00% | 1,559 | 7,427 |

| | |
|---|---|
| **Weighted Average COMMERCIAL Bill (Metered & Unmetered) =>** | **$ 134.14** |
| **Weighted Average COMMERCIAL Consumption (Metered ) =>** | **8,328.23** |

Where applicable, present rates includes DSIC at 5.00%.

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania Wastewater, Inc.**
**Industrial Average Monthly Bill Comparison - Wastewater**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Metered Number of Bil | Metered & Unmetered Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| RZ 1 - Media | 1 | 1 | 3,700 | $ 62.08 | $ 90.30 | $ 28.22 | 45.47% | 12 | 12 |
| RZ 9 - Cheltenham | 9 | 9 | 1,250 | $ 25.78 | $ 40.88 | $ 15.10 | 58.57% | 108 | 108 |

| | |
|---|---|
| **Weighted Average INDUSTRIAL Bill (Meterd & Unmetered) =>** | **$ 45.82** |
| **Weighted Average INDUSTRIAL Consumption (Meterd & Unmetered) =>** | **1,495.00** |

Where applicable, present rates includes DSIC at 5.00%

All Residential Customers are charged a customer charge on an EDU basis with the exception of the Media, Treasure Lake, Village at Valley Forge and Plumsock Divisions, which are customer charge based on the appropriate meter size of the applicable Rate Zone. The rates above represent a 5/8" meter or 1 EDU.

As per the Asset Purchase Agreement, the East Norriton Division rate increase will not become effective until June 20, 2022.

**Aqua Pennsylvania, Inc.**
**Residential Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills | Consumption | Average Gallons |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | 4,000 | $ 69.35 | $ 77.51 | $ 8.16 | 11.77% | 4,433,841 | 190,268,063 | 4,291 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | 4,000 | $ 56.16 | $ 77.51 | $ 21.35 | 38.02% | 11,125 | 437,656 | 3,934 |
| Beech Mountain | 1* | 1* | 5/8" | 4,000 | $ 33.82 | $ 45.14 | $ 11.32 | 33.48% | 11,304 | 385,051 | 3,406 |
| Bristol Township | 1* | 1* | 5/8" | 4,000 | $ 40.85 | $ 54.81 | $ 13.96 | 34.17% | 5,168 | 222,802 | 4,311 |
| Mifflin Township | 1* | 1 | 5/8" | 4,000 | $ 53.75 | $ 77.51 | $ 23.76 | 44.21% | 5,815 | 184,250 | 3,169 |
| Mt. Jewett | 1* | 1 | 5/8" | 4,000 | $ 65.14 | $ 77.51 | $ 12.37 | 18.99% | 4,796 | 143,987 | 3,002 |
| Robin Hood Lakes | 1* | 1 | 5/8" | 4,000 | $ 56.33 | $ 77.51 | $ 21.18 | 37.60% | 2,413 | 74,484 | 3,087 |
| Chalfont | 2 | 2 | 5/8" | 4,000 | $ 65.14 | $ 77.51 | $ 12.37 | 18.99% | 26,538 | 1,120,730 | 4,223 |
| Concord Park | 2 | 2* | 5/8" | 4,000 | $ 46.66 | $ 62.77 | $ 16.12 | 34.55% | 1,964 | 77,374 | 3,940 |
| Superior | 2 | 2 | 5/8" | 4,000 | $ 69.35 | $ 77.51 | $ 8.16 | 11.77% | 51,088 | 2,393,598 | 4,685 |
| Treasure Lake | 2 | 2* | 5/8" | 4,000 | $ 42.70 | $ 57.33 | $ 14.63 | 34.26% | 25,628 | 828,948 | 3,235 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | 4,000 | $ 69.35 | $ 79.43 | $ 10.08 | 14.54% | 65,052 | 1,424,213 | 2,189 |
| Bunker Hill | Bunker Hill | Bunker Hill | 5/8" | 4,000 | $ 27.95 | $ 38.44 | $ 10.49 | 37.53% | 829 | 40,581 | 4,895 |
| Sun Valley | Sun Valley | Sun Valley | 5/8" | 4,000 | $ 20.96 | $ 38.00 | $ 17.04 | 81.28% | 765 | 30,588 | 3,998 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 4,000 | $ 15.33 | $ 22.66 | $ 7.33 | 47.78% | 5,502 | 212,940 | 3,870 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 4,000 | $ 62.33 | $ 62.33 | | | 2,702 | 89,931 | 3,328 |
| | | **Weighted Average RESIDENTIAL Bill @ 4,000 Avg. Gallons =>** | | | | **$ 77.23** | | | | | |

Based on 5/8" meter and an average consumption of 4,000 per month.

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Commercial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 - Main Division | 1 | 1 | 5/8" | 33,900 | $ 414.74 | $ 453.75 | $ 39.01 | 9.41% | 273,458 |
| CC Gardens & Sand Springs | 1* | 1 | 5/8" | 32,100 | $ 340.27 | $ 470.46 | $ 130.19 | 38.26% | 32 |
| Beech Mountain | 1* | 1* | 5/8" | 45,200 | $ 182.86 | $ 298.85 | $ 116.00 | 63.44% | 60 |
| Bristol Township | 1* | 1* | 5/8" | 11,400 | $ 125.97 | $ 180.30 | $ 54.34 | 43.13% | 1,797 |
| Mifflin Township | 1* | 1 | 5/8" | 16,000 | $ 156.95 | $ 234.57 | $ 77.62 | 49.46% | 351 |
| Mt. Jewett | 1* | 1 | 5/8" | 33,900 | $ 414.74 | $ 453.75 | $ 39.01 | 9.41% | 4,796 |
| Chalfont | 2 | 1 | 5/8" | 6,000 | $ 96.11 | $ 104.61 | $ 8.51 | 8.85% | - |
| Concord Park | 2 | 1* | 4" | 434,800 | $ 3,277.12 | $ 5,130.10 | ######## | 56.54% | 24 |
| Superior | 2 | 1 | 5/8" | 6,000 | $ 96.11 | $ 104.61 | $ 8.51 | 8.85% | 2,810 |
| Treasure Lake | 2 | 1* | 5/8" | 33,500 | $ 214.90 | $ 328.84 | $ 113.95 | 53.02% | 386 |
| Oakland Beach, CS Water (Masthope), Eagle Rock | 3 | 3 | 5/8" | 14,100 | $ 240.89 | $ 261.45 | $ 20.57 | 8.54% | 1,044 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 19,100 | $ 60.63 | $ 89.70 | $ 29.07 | 47.95% | 829 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 13,794 | $ 100.49 | $ 100.49 | | | 2,652 |
| | | **WA Consumption =>** | | **33,382** | **WA Bill =>** | **$ 443.57** | | | |

Where applicable, present rates includes DSIC at 7.50%.

*Consumption Charge Exceptions

**Aqua Pennsylvania, Inc.**
**Industrial Average Monthly Bill Comparison - Water**
**Docket Nos. R-2021-3027386 and R-2021-3027386**

| Current Rate Zone / Division | Current Rate Zone | New Rate Zone | Meter Size | Avg. Consumption | Present Rates | Proposed Rates | $ Change | % Change | Number of Bills |
|---|---|---|---|---|---|---|---|---|---|
| Rate Zone 1 | 1 | 1 | 5/8" | 201,400 | $ 1,976.42 | $ 2,162.72 | $ 186.30 | 9.43% | 9,057 |
| Rate Zone 2 | 2 | 1 | 2" | 201,400 | $ 2,053.29 | $ 2,306.21 | $ 252.93 | 12.32% | 60 |
| Rate Zone 3 | 3 | 3 | 5/8" | 36,800 | $ 452.53 | $ 491.00 | $ 38.47 | 8.50% | 12 |
| Phoenixville | Phoenixville | Phoenixville | 5/8" | 3,600 | $ 14.13 | $ 20.88 | $ 6.75 | 47.76% | 48 |
| Shenandoah | Shenandoah | Shenandoah | 5/8" | 55,701 | $ 221.18 | $ 221.18 | | | 5 |
| | | **WA Consumption =>** | | **200,150** | **WA Bill =>** | **$ 2,149.22** | | | |

Where applicable, present rates includes DSIC at 7.50%.

# SUPPLEMENTAL EXHIBIT W (Public Version)

**PUBLIC VERSION – CONFIDENTIAL INFORMATION REDACTED**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 3 SUPP**

# SUPPLEMENTAL DIRECT TESTIMONY OF ZACH MARTIN

**With Regard To**
**Operations**
**Customer Service**
**Public Benefits**

**March 2024**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS ..... 4
III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM ..... 10
A. GENERAL SYSTEM ASSESSMENT ..... 10
B. HAZARDOUS GAS ..... 20
C. ADDITIONAL SAFETY AND SECURITY ISSUES ..... 27
D. ASSET MANAGEMENT ..... 36
IV. CONCLUSION ..... 39

**PUBLIC VERSION – CONFIDENTIAL INFORMATION REDACTED**

AQUA PENNSYLVANIA WASTEWATER, INC.
SUPPLEMENTAL DIRECT TESTIMONY OF ZACH MARTIN

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Please provide a brief description of your education and work experience.**

A. I graduated from the Kent State University with an Associate of Science degree in 2009 and then a Bachelor of Business Administration in 2021. I have worked in the water and wastewater industry for nineteen years. I began my career in the utility industry in the spring of 2004 with the City of North Canton, Ohio as a water plant operator where I secured my Class III Water Supply Certification from the Ohio EPA. I moved into a leadership role in early 2009 as the Regional Water Superintendent for Portage County Water Resources where I was responsible for managing plant and distribution employees in the county operations of three water systems. I also served as backup to the wastewater superintendent there for the 13 wastewater treatment plants and 113 lift stations. In 2010, I moved to Aqua Ohio, Inc. as the Production Manager for the Struthers Division. There I was responsible for the operations and maintenance of the large surface water system including the 5 million gallon per day ("MGD") surface water treatment plant and the five

source water lakes and their six dams. In 2013, I was promoted in Aqua PA as the Assistant Division / Production Manager and later a Plant Manager II in 2017, and I held that position through 2021. During those eight years I was responsible for all aspects of production, treatment, and distribution facilities of the eight drinking water systems in Western PA. In 2021, I was promoted to the position of Area Manager II. In total I have worked for the Aqua subsidiaries of Essential Utilities, Inc. ("Essential") (*f/k/a* Aqua America, Inc.) for 13 years. I am responsible for leading a team of employees delivering drinking water to customers and returning treated wastewater back to the environment in nine counties of Western Pennsylvania. I am involved in all aspects of operations including budgeting, planning, employee relations, and process control. I am also involved in the business development functions in my area of operations. I am also a veteran of Operation Iraqi Freedom III and served in the U.S. Army and Ohio Army National Guard.

**Q. Do you hold any professional licenses or certifications?**

A. Yes. I hold three environmental operator certifications in two states. I am a Class-A certified water and Class-A certified wastewater operator in Pennsylvania with 18 subclasses in total. I am also a Class 3 water supply licensed operator in the state of Ohio. I have maintained operational laboratory certifications in both states as well.

**Q. Have you previously testified before the Pennsylvania Public Utility Commission ("PUC" or the "Commission")?**

A. Yes. I previously submitted Direct Testimony in this proceeding, and I have submitted testimony in Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") acquisition of Greenville Sanitary Authority.

**Q. You stated you filed Direct Testimony in this proceeding, what is the purpose of your Supplemental Direct Testimony?**

A. The purpose of my Supplemental Direct Testimony is to supplement my Direct Testimony and provide additional discussion regarding operations of the City of Beaver Falls ("City" or "Beaver Falls") wastewater system ("the System") and to discuss the public benefits of this transaction.

**Q. Are you sponsoring any Exhibits associated with the Company's filing as a part of your Supplemental Direct Testimony?**

A. Yes. I am sponsoring ZM-SUPP Appendix A, which contains CONFIDENTIAL and HIGHLY CONFIDENTIAL portions that have been marked as such.

## II. AQUA OPERATIONS, INTEGRATION OF THE SYSTEM, AND TECHNICAL FITNESS

**Q. In your direct testimony, do you describe the location of Aqua's operations in relation to the System and how Aqua will integrate the System into its operations?**

A. Yes.

**Q. Is there further information that you can provide at this time about how Aqua will integrate the System into its operations?**

A. Yes. As discussed in my Direct Testimony, the operation of the System will be managed from Aqua PA's Western Area office in Sharon, PA. Management, customer service, regulatory compliance, engineering, financial, and ancillary services will be provided seamlessly from there with support from our Southeastern Headquarters office. Aqua plans to offer employment to seven current employees of the City to address the day-to-day operations of the System. The existing employees coupled with the over 30 front line employees and management staff located within 40 miles of Beaver Falls provide significant resiliency and improves operational support for the System. Combining System and Aqua PA employees in conjunction with Aqua PA's "One PA" program creates purposeful knowledge sharing opportunities for employees across all sectors of the Company. In concert with the One PA program, Aqua has for more than a decade, a corporate -wide "One Company Initiative" which solicits knowledge sharing from all areas of Aqua which benefits all employees. By extension, Aqua PA's One PA philosophy and the One Company Initiative benefits customers of both the System, Aqua PA and Aqua by

creating a platform for sharing of best practices, table-top exercises, sharing of standard operating procedures ("SOPs"), sharing of existing or new equipment such as generators, lessons learned that may include new operating techniques or technologies, safety practices and more.

Further, Aqua has significant equipment that can be shared with the System, including for operation (vehicles, excavation, heavy haul), portable generators, common supplies and material storage, and mobile safety systems that can be moved between locations. While physical connection of the collection systems is not anticipated, connection of security and computer systems will occur. Aqua has an integrated Supervisory Control and Data Acquisition ("SCADA") system used to operate and monitor operating systems such as pumps, treatment units and status alarms, such as chlorine gas alarms. Aqua's SCADA system allows our operators to have better insights into the operations of the system at all hours of the day and to be proactively alerted of any issues. Currently, Beaver Falls does not have a full scale SCADA system. Aqua also maintains an integrated security system that allows physical security to be observed in different locations around the state. In the case of the Beaver Falls System, once systems are installed and integrated with Aqua's security system, the physical security alarms will notify operations staff at the Company's water treatment plant in Sharon, PA which is staffed 24/7/365. In addition, security alarms from Aqua PA's Sharon, PA water treatment plant will be shared at Beaver Falls which will alert those operators of possible problems in Sharon, thus providing mutual assistance to both system's customers. This will ensure safety of operations and personnel, as well as nearby residents and the environment.

**Q. In addition to what you have explained in your Direct Testimony, how else will other Aqua PA employees assist in the operation of the System, if needed?**

A. In addition to the information provided in my Direct Testimony, the support of Aqua PA employees, electricians, mechanics, laboratory staff, and instrument technicians, will benefit both the Beaver Fall's employees and customers. Aqua has 12 wastewater operators in the Western PA Area, many holding dual water and wastewater certifications, who may be called upon to assist in the operations of the system. There are also 20 certified water operators in the Western PA Area who are familiar with treatment systems and can follow SOP if needed. These operators are also supported by Aqua PA employees, which will benefit customers through engineering and field service functions as well as electricians, mechanics, laboratory staff, and instrument technicians, which will benefit both the Beaver Fall's employees and customers.

A few examples of operational support that will be provided by Aqua to the Beaver Falls System (which support does not exist today for the System) include:

(1) Environmental Compliance Audits conducted by staff that do not report to the operation management group;

(2) Safety teams that conduct "housekeeping" and safety audits that seek to find and eliminate potential dangers;

(3) A "Near-Miss" program that allows any employee to report an observed safety concern and a process that ensures the issue is resolved timely;

(4) A full-time Aqua PA One-Call management team (Damage Prevention) that ensures the requirements of Act 50 of 2017 are met, and that staff receive regular training;

(5) Mapping updates by an in-house Geographic Information System (GIS) team;

(6) Wastewater process experts that will review the processes for targeted parameters and if needed, assist in resolving any process upset situations;

(7) Emergency response support in the form of "national contracted vendors", fleet operations, and access to the approximately 600 Aqua PA employees who can deploy to the location in support of Western PA operations, all orchestrated through Aqua PA's Emergency Response and Communications process.

It is equally beneficial and important to note that eventually Beaver Falls employees will be called upon to assist in others areas of Western PA operations. In so doing, continued cross-training benefits the Systems as well customers of Beaver Falls and Aqua. This sharing of employees from new acquisitions and existing systems is a mainstay of our southeastern Pennsylvania wastewater operations where we have integrated wastewater employees for Cheltenham, East Norriton and Lower Makefield. This integration ensures operator familiarity with these systems and ensures continuity of operations during normal and emergency operations. This type of planning and integration also ensures that Beaver Falls will not be in the situation it is now – no supervisory personnel or adequate backup personnel.

**Q. Please describe how the Beaver Falls employees will be integrated into and develop their careers at Aqua.**

A. Following acquisition of the Beaver Falls System, Aqua will implement site-specific training, as well as off-site cross training in other Aqua facilities to promote continuous improvement and optimization, and to introduce compliance metrics to shift the plant into high performance operations.

**Q. In your Direct Testimony, you indicated that the System is similar to other systems owned and operated by Aqua. Is that the case?**

A. Yes, it remains the case. However, after further investigation and review of the System, as described below, the System is troubled, distressed and in need of significant investment and operations review.

**Q. Do you believe that Aqua is technically fit to own and operate the system?**

A. Yes.

**Q. Are there any further reasons why Aqua has demonstrated itself to be fit to operate this system after conducting additional investigation and review?**

A. As noted in my direct testimony, Aqua has experience replacing wastewater infrastructure while also navigating strict Pennsylvania Department of Environmental Protection ("DEP") regulations to install chemical treatment systems and optimize the plant for copper removal to benefit an impaired receiving stream as defined by Section 303(d) of the Clean Water Act. The improvements to this watershed were recently recognized by the DEP following stream assessments in 2022 and 2023 which identified material improvements to the stream eco-systems downstream of its outfall. This experience will assist Aqua in addressing the additional issues identified with respect to this system.

**Q. How does Aqua maintain and enforce safety, compliance, and security programs throughout its operations?**

A. Aqua requires a high level of employee training and monitors completion of training requirements. Most safety programs are trained initially and reinforced through annual refresher trainings. Aqua employs internal safety experts, internal compliance experts, and routinely conducts internal audits of operations. Aqua also contracts with external experts to perform random inspections and audits of employee and contractor operations. These cover operations throughout the system, including maintenance and construction activities in immediate contact with the community.

**Q. Can Aqua provide adequate wastewater treatment capacity to meet present and future customer demands?**

A. Yes. Through the existing facilities, coupled with the planned upgrades to the WWTP, which are discussed in the Direct Testimony of Mark Bubel, Sr. (Aqua Statement No. 2), Aqua can provide adequate treatment capacity for present and future customers. Aqua will continue to make improvements to the System, as may be required, to ensure any future customer demands are met.

**Q. Please summarize why you believe Aqua is technically fit to own and operate the System.**

A. My explanation of Aqua's current operations, the System's similarity to other systems operated by Aqua, and operational support that will be provided by Aqua, an experienced

wastewater utility, all support a finding that Aqua is technically fit to own and operate the System, and that ownership of the System by Aqua is in the public interest. In addition to this, I detail below the current areas for improvement needed in the System, as well as the additional process improvements identified that will be remedied by Aqua, and capital improvement needs of the System. Aqua's planned improvements in this regard establish substantial affirmative public benefits. Moreover, these capital and operational improvements have not been addressed by Beaver Falls, nor is Beaver Falls in a position to do so as explained by Mr. Jones (Aqua Statement No. 4-Supp.) in his Supplemental Direct Testimony.

## III. SYSTEM ASSESSMENT & CURRENT OPERATION OF THE BEAVER FALLS SYSTEM

### A. GENERAL SYSTEM ASSESSMENT

**Q. Since Aqua submitted its Direct Testimony, has it further analyzed the System and its current operations?**

A. Yes, it has. Below, I will provide supplemental detail on Aqua's assessment of the system generally and Aqua's identification of specific issues that evidence the System is currently troubled. These issues include hazardous gas problems, safety and security problems, and the lack of an asset management plan or computerized maintenance management system. I also identify how Aqua would address these issues as the owner and operator of the System, and how such ownership and operation will result in significant public benefits.

**Q. Did you visit the facilities?**

A. Yes, multiple times. Specifically, the Company conducted initial due diligence and post-agreement in-depth review to assess the operations, facilities, personnel, standard operating procedures, compliance, safety, and security of the System.

**Q. How old is the original WWTP?**

A. The wastewater treatment plant was built in 1938. While some work has been done over the years, the original WWTP is over 80 years old. The system is troubled, distressed and in significant need of attention.

**Q. Based on your experience in visiting the plant, did you feel safe and would you feel safe allowing Aqua employees to work at the WWTP under the current conditions?**

A. No. I did not feel safe and we would not allow Aqua employees to work at the WWTP under the current conditions. I note that these observations were made over the course of approximately ten visits during various seasons, and most recently in October 2023. I will further expand on this, highlighting the issues I saw while visiting the WWTP.

**Q. Please describe your findings and areas that can be improved by Aqua's ownership of the System.**

A. The System is currently under a Corrective Action Plan ("CAP") under the DEP. Under the City's ownership, significant quantities of raw sewage and/or partially treated wastewater have entered into the receiving Beaver River where fishing and recreation

occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley.

**Q. Can you please further describe why you believe this system is troubled, distressed and in need of attention?**

A. Based on my site visits, discussions with operations personnel, and observation of plant activities, I note the following areas of concern for future safe, adequate, and reliable wastewater utility service for the Beaver Falls System:

- Lack of Licensed Operators, Access to Training, and Redundancy of Operators;
- Limited or Lacking Process Control Testing;
- Laboratory Sample System Management;
- Permit Compliance Issues;
- Lack of Emergency Preparedness Planning;
- Lacking Safety & Security Equipment & Training;
- Hazardous Chemical Storage, Labeling, and Safety;
- Compliance with Federal EPA Risk Management Program regulations for extremely hazardous chemicals;
- WWTP Ventilation Issues creating health and safety risk for employees;
- WWTP physical safety measures;
- WWTP Security deficiencies;

- Inadequate SCADA and operator alarm systems;
- Use of homemade patchwork of physical assets;
- Insufficient emergency/standby power generation; and
- Non-use of Asset Management or Compliance Management Software Systems.

**Q. Can you explain the current staffing of the Beaver Falls WWTP, and any related challenges experienced?**

A. Based on my experience, the team operating the WWTP lacks experience, training, struggles to operate the System and are in danger based on the safety issues that I observed. The System should be operated with a team consisting of 3 maintenance mechanics, 2 licensed operators, a WWTP manager, and an administrative employee. When the Company visited the facility in October 2023 there were a total of four (4) employees. The WWTP superintendent was on medical leave for the past several months and had recently taken a disability retirement and was not expected to return. There was one experienced maintenance foreman, however, the foreman is unfamiliar with wastewater treatment process control, an unlicensed operator with less than one year experience, one mechanic with less than two years' experience, and an administrative employee. The three operator/maintenance staff cover the WWTP seven (7) days a week and are continuously on-call. These employees cover for each other when one may not be available to respond.

City officials shared their difficulty securing labor to work at the WWTP. There are no internal wastewater experts to assist at the City and any assistance would have to come from consultants, which had not been planned for or implemented as of our visit.

Assistance from consultants regarding operations is not budgeted for by the City. The loss of the WWTP manager shows that there is no redundancy, succession or contingency plan should such a vacancy occur. The Company compliments the skeleton staff on the work they are doing with limited experienced labor and resources. However, this clearly indicates that additional expertise is needed to ensure reliable and compliant operations for the long term which is a benefit specific to Aqua's acquisition of this system. The City has been unable to obtain experienced workers to fill the open positions.

**Q. What wastewater treatment process control and treatment operations did you observe at the WWTP?**

A. Process control and SOPs were significantly lacking. Many of the processes were well beyond normal acceptable operating conditions, possibly leading to future violations. For example, the primary clarifiers had floating trash in/on them, and the skimmers were not operating at all. The primary clarifiers were black in color indicating septic conditions. See Appendix A, Section 1.[1] This creates odor issues and more significantly prevents the naturally occurring processes from happening in an efficient manner. While all the tanks were on-line, flow coming out of the tanks was only at 50% of design capacity which suggests something very wrong and a clear operational inefficiency. The extra on-line tankage creates long hydraulic retention times coupled with lower than ideal sludge

[1] Portions of Appendix A to Statement No. 3-Supp contain confidential, non-public information and have been designated as such.

wasting and black, odorous septic conditions. It also creates additional costs because the WWTP is powering more equipment than necessary.

**Q. Please expand on further concerns of process control and treatment operations.**

A. Also of significant concern is that there were no air blowers online to supply aeration and/or mixing to any process tanks. These tanks can contain hydrogen sulfide and other gases that displace oxygen that are very hazardous. Proper aeration and mixing is vital for safety reasons. The trickling filter facility at a wastewater treatment plant consistently moves wastewater and pushes it to the bottom of the facility. Upon review the trickling filter facility had excessive biomass growth reducing its effectiveness. See Appendix A, Section 2.

**Q. Please further expand upon your concerns when visiting the WWTP.**

A. There are floating solids atop the secondary clarification tanks. This accumulation was also on the surface of the chlorine contact tank where disinfection of the process stream should have been occurring. See Appendix A, Section 3. This is not where floating solids should appear. All tanks were extremely turbid (dense, murky) and it was difficult to see more than a couple inches into the water column. This is not a good sign for a tank, especially near final treatment. Most protrusions from the tanks, channels, launderers, and flumes were coated with excessive solids accumulation. Again, not a good sign. Sludge wasting, which is an important tool in the normal operational process, seemed to be limited to periodic and nonspecific volume instances. All of this is an indication of the need to have

a fully staffed system along with a knowledgeable and engaged lead operator, supervision, and qualified backups to the same.

**Q. How would Aqua address the staffing challenges and the concerns regarding the condition of the System identified above?**

A. Aqua maintains a staff of compliance and operations experts that will implement changes upon closing of the transaction to ensure SOPs are in place and followed. We also have robust preventative and corrective maintenance programs with asset and process based minimum standards of service that will be discussed in detail later in this testimony for mechanical and maintenance personnel to adopt. We incentivize operators to secure DEP operating licenses, and support that with continuing education assistance. In addition, our corporate resources and local operations management are skilled at operating wastewater facilities. Also, Aqua has been successful in attracting talent across Pennsylvania for all our systems. We have robust onboarding and training programs for supervisors and operators that encompass all facets of operations from safety to process control. Since Aqua filed its initial application, the City has had vacancies at the WWTP that have not been filled as of the date of this Supplemental Direct Testimony.

**Q. What else would Aqua do to correct the troubled and distressed nature of the Beaver Falls system?**

A. The Beaver Falls system would receive an intensive review by our engineers, process control specialists, and infusion of experienced operators and leadership to establish the

operating protocols and bring the plant back to normal operating conditions quickly. This should occur within 30 days of the start of operations. Process control testing criteria, including adequate laboratory equipment will be provided on-site and operators trained to perform tests and interpret the results, from which process control adjustments can be made with confidence. The Aqua-owned state certified laboratory in Bryn Mawr will support this facility from the start with certified analytical results and a quick turnaround time. Continued observation of the process by both on site personnel and broader Aqua resources would be a constant through operations, allowing independent evaluation of the process to ensure nothing is being missed.

Maintenance activities would immediately improve under our defined asset management program with proactive work orders issued for the plant, equipment, and collections system. Maintenance staff would be supported by outside services and vendors to ensure the specialty elements of maintenance program undertaken correctly. Aqua's workforce development program from recruitment through continued education, supported by management and technology, is a significant benefit to Beaver Falls ensuring plant reliability, environmental compliance, protection of receiving waterways, and elimination of the odors for the plant experienced by the public.

**Q. Please expand upon why treatment and process controls are so important for the community in Beaver Falls and the surrounding communities downstream.**

A. Adequate treatment and timely process control decisions are necessary to ensure adequately treated wastewater safely reaches the discharge of the WWTP, which ultimately

reaches the Beaver River where recreation occurs. The river serves many purposes, including that it discharges into the Ohio River, the largest volume tributary of the Mississippi River, only a few miles South of the outfall. Downstream of the WWTP are several public water systems that serve an estimated 5 million people in the Ohio Valley. The Company has proven its expertise in optimizing treatment in wastewater systems like the Beaver Falls system to protect drinking water sources from diseases such as hepatitis A and cholera, scum discharge, and the Company excels at maintaining optimum oxygen levels and minimized regulated compounds in treated water outfalls which helps protect the environment and our watersheds. The Beaver and Ohio Rivers are home to 159 species of fish alone. Effluent water quality from this system is paramount. While the WWTP is currently compliant with DEP requirements, Aqua has significant concerns that proper process controls and treatment are not in place which can further degrade the WWTP and lead to future violations.

**Q. Does the Beaver Falls staff perform adequate process control testing?**

A. No. The City only performs the bare minimum for sampling and analysis for the WWTP. Aqua will require the additional routine process control testing analysis above the regulatory requirements of the DEP to the discharge permit parameters to include alkalinity, suspended solids, biological oxygen demand ("BOD"), settleable solids, pH, nutrients like ammonia and phosphorus, and dissolved oxygen analysis of the trickling filter effluent. Aqua will also monitor (i) total suspended solids, dissolved oxygen, and sludge age in the process; (ii) total suspended solids in the mixed liquor, and (iii)

microscope analysis of the process bacteria. Aqua will increase the frequency of analysis in the effluent to include chlorine, ammonia, and phosphorus.

The addition and/or increased frequencies of the testing of the above parameters will facilitate optimization of the facility and processes, which will allow operators to make educated decisions and meet the permit effluent requirements. These process enhancements will also drive towards the optimization and cost control of the WWTP, which will directly benefit the environment and the community meeting the principal objectives of the Clean Water Act – fishable, swimmable, and drinkable waterways.

**Q. Does the City employ a laboratory information management system ("LIMS") to track analytical results and compliance with critical standards in its laboratory space?**

A. No, it does not. Physical bench sheets are used with common spreadsheet applications (*e.g.*, excel) for reporting of testing results. These bench sheets are not capable of being audited and lack critical access controls and compliance adherence. This means that any changes to the data are not automatically logged to a unique user, and justification may not be required to submit a change in testing results.

**Q. Please explain how Aqua will address this issue of data tracking and confidence.**

Aqua will implement its LIMS program to ensure that analytical data follows processes and procedures, including quality assurance and quality control standards. Data that is entered into LIMS includes the regulatory and process control data which includes sample

results and plant process key performance indicators. The data will be tracked and is fully auditable as each employee will have individual credentials so that any entries are tied to that specific user with process checks in place so that any changes to results must be authorized and notes provided to explain the change. Internal and external laboratory analysis will be cataloged in the LIMS system.

**B. HAZARDOUS GAS**

**[BEGIN HIGHLY CONFIDENTIAL]**

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[**END HIGHLY CONFIDENTIAL**]

**Q. Are there other examples of general safety issues in the System?**

A. Yes. Throughout the Beaver Falls facility there are multiple safety deficiencies of low to moderate risk. By way of example, most pumping systems are missing guards on the rotating equipment creating unsafe conditions that could cause workers to be pulled into the rotating equipment or hands crushed. There are missing railings or railing components like toe or kick plates to prevent a slip/trip and fall from becoming an immersion into the process tanks. There are numerous locations where employees use temporary ladders to access equipment that circumvent fall protection.

Chemicals were not stored properly at the WWTP. There are no containment devices for the chemical drums. Drums in service were propped up on blocks to permit emptying, but this leaves the heavy drums unstable and teetering in common areas of the

WWTP near floor drains. There is a general lack of labeling throughout the facility and no evidence of the exit signage nor emergency lighting. Multiple fire extinguisher hooks were empty.

There are several roofed structures that are accessible by stairway that do not have any fall protection devices, railings, lighting, or signage to ensure occupant awareness. There are also confined spaces without any signage and no evidence of a program, nor regulatory compliance for the documentation of training and entry. See Appendix A, Section 6.

**Q. How will Aqua address these general safety issues?**

A. These issues will be cataloged and will become a part of Aqua's already robust capital and operational plan to be addressed within Year 1 of Aqua ownership. Our safety teams and operational management will make these items a priority in Year 1 by educating our new employees in the safety requirements of Aqua, investing to correct deficiencies, and provide on-going safety housekeeping, near miss reporting, and safety audits on a regular basis. Safety of our employees, most who are members of the community, is priority so they return safely home. The public benefits of this cannot be measured.

**Q. Is there a system in place at Beaver Falls to document near-misses?**

A. No. Aqua, however, implements a Near Miss program (a.k.a. "Safety Learning Opportunities") where all employees are encouraged to look for and report potential and real unsafe conditions so they can be addressed in a timely manner. This program is key

to both creating a safe working environment and a culture of safety. The employees have little support in the way of safety programing currently, and this program will be beneficial both to them, their families, and the community at large.

[**BEGIN HIGHLY CONFIDENTIAL**]

[redacted]

[redacted]

[**END HIGHLY CONFIDENTIAL**]

**Q. Does the facility have emergency/standby power generation on site?**

A. Yes, however, it is not clear what equipment in the WWTP is supplied with emergency power from backup generators. Only critical pumping systems are supported by the back-up generator and even those systems are not completely supported. There is limited operation of secondary treatment and pumping operations. There is no emergency power supplied to the aeration processes meaning these systems will not operate during a power failure and it is unclear as to the capabilities of that emergency power for supplying the

chemical feed systems and limited process monitoring equipment. These shortfalls mean that while wastewater will continue to enter the WWTP, it will not be fully treated and enter the receiving stream. This will be fully assessed as part of Aqua's ongoing capital improvement processes and addressed through capital projects identified.

## D. ASSET MANAGEMENT

**Q. Does Beaver Falls have an asset management plan or computerized maintenance management system ("CMMS") in place and what is Aqua's plan for post-Closing asset management?**

A. The team at Beaver Falls maintains a basic calendar and spreadsheet to track preventative maintenance needs. Some written records are maintained to track assets over time. Aqua will implement several layered approaches to asset management through financial modules. Aqua will also implement a CMMS system to schedule and automate preventative maintenance schedules for the employees. This system will also capture reactive and corrective maintenance tasks for all aspects of the System. Aqua will work with the Beaver Falls team to fully document existing SOPs and to employ Aqua SOPs where none exist through these work order systems to record tacit knowledge and improve succession planning and operational consistency.

**Q. Are there specific examples of assets and processes that are not operating correctly due to lack of maintenance or expertise? If so, does Aqua have a plan to remedy the situation?**

A. Yes. Aqua personnel witnessed a complete absence of aeration in the WWTP. There is also evidence of incomplete or insufficient maintenance of the trickling filters. The distribution spray arms rotate continuously. The employees noted that it is common practice for them to create their own parts to maintain and patch operations of these large assets for this critical and continuously operating equipment. To avoid this patchwork approach, Aqua would engage manufacturers and experts to ensure that the correct parts are installed, and specialists are utilized to ensure this large rotating equipment is correctly balanced.

**[BEGIN CONFIDENTIAL]**

[redacted]

[redacted]

**[END CONFIDENTIAL]**

**Q. Does Beaver Falls utilize any compliance assurance software?**

A. No. To address this, Aqua will implement its current compliance assurance software. This software system generates compliance-focused work orders for regulated wastewater system processes and functions. Employees will be assigned a combination of daily, weekly, monthly, quarterly, annual, and less frequent work orders to ensure that critical compliance requirements are completed on time and in a manner that is well documented. The system will generate monthly, quarterly, and annual regulatory reports for consistency

of calculations and to Aqua's standards. These systems will support the staff of Beaver Falls in the rapid adaptation to the operational excellence for which Aqua is known.

## IV. CONCLUSION

**Q. Does this conclude your Supplemental Direct Testimony?**

A. Yes, it does. However, I reserve the right to supplement my Supplemental Direct Testimony as additional issues and facts arise during the course of this proceeding.

# APPENDIX A
# (Public Version)

# City of Beaver Falls WWTP

## SECTION 1

**March 3, 2021 – Primary Clarifier**



**September 19, 2023 – Primary Clarifier**



# SECTION 2

**March 3, 2021 – West Trickling Filter**



**September 19, 2023 – West Trickling Filter**



# SECTION 3

**March 3, 2021 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



**September 19, 2023 – Chlorine Contact Tank**



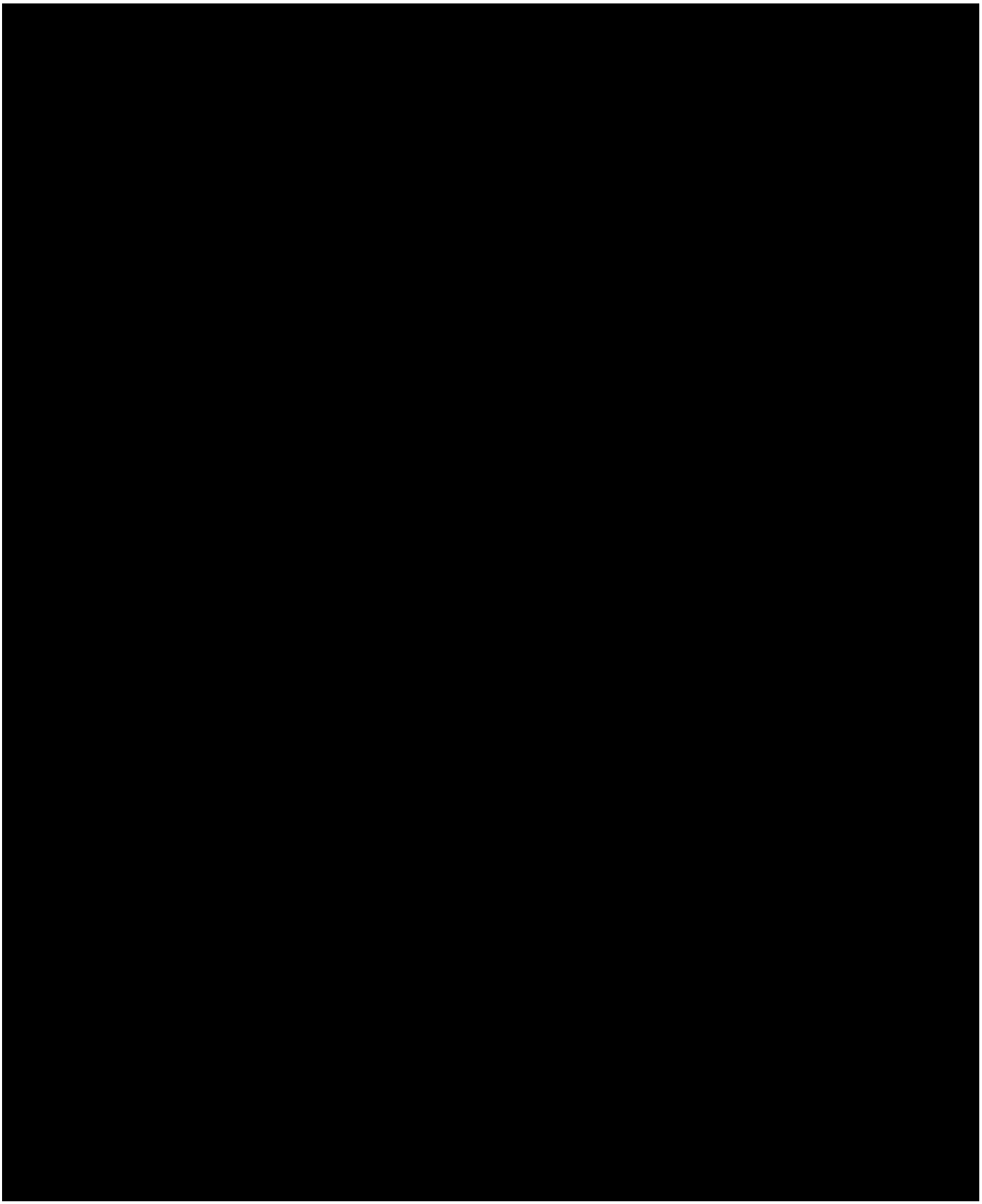
**September 19, 2023 – Chlorine Contact Tank**



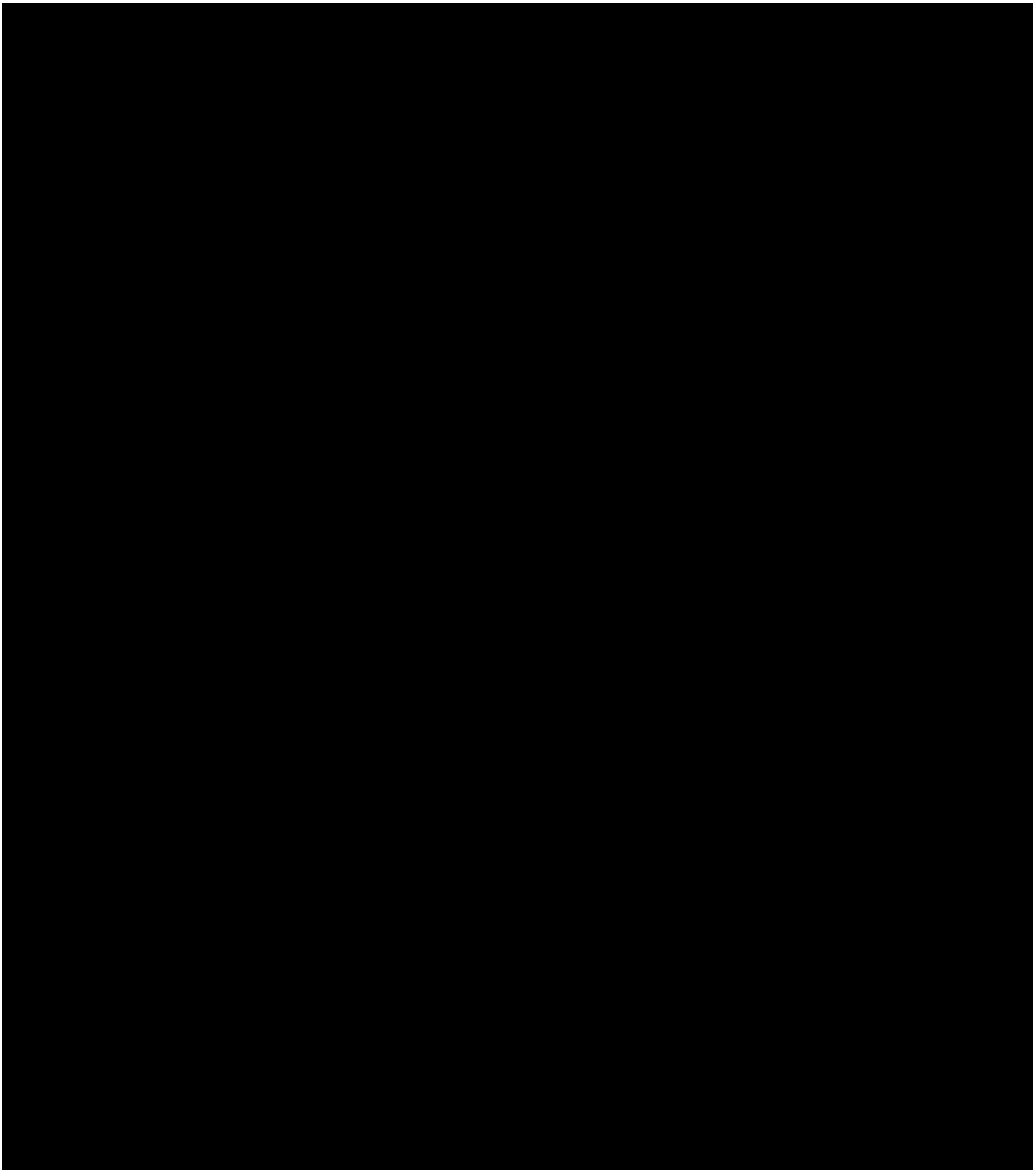
# SECTION 4

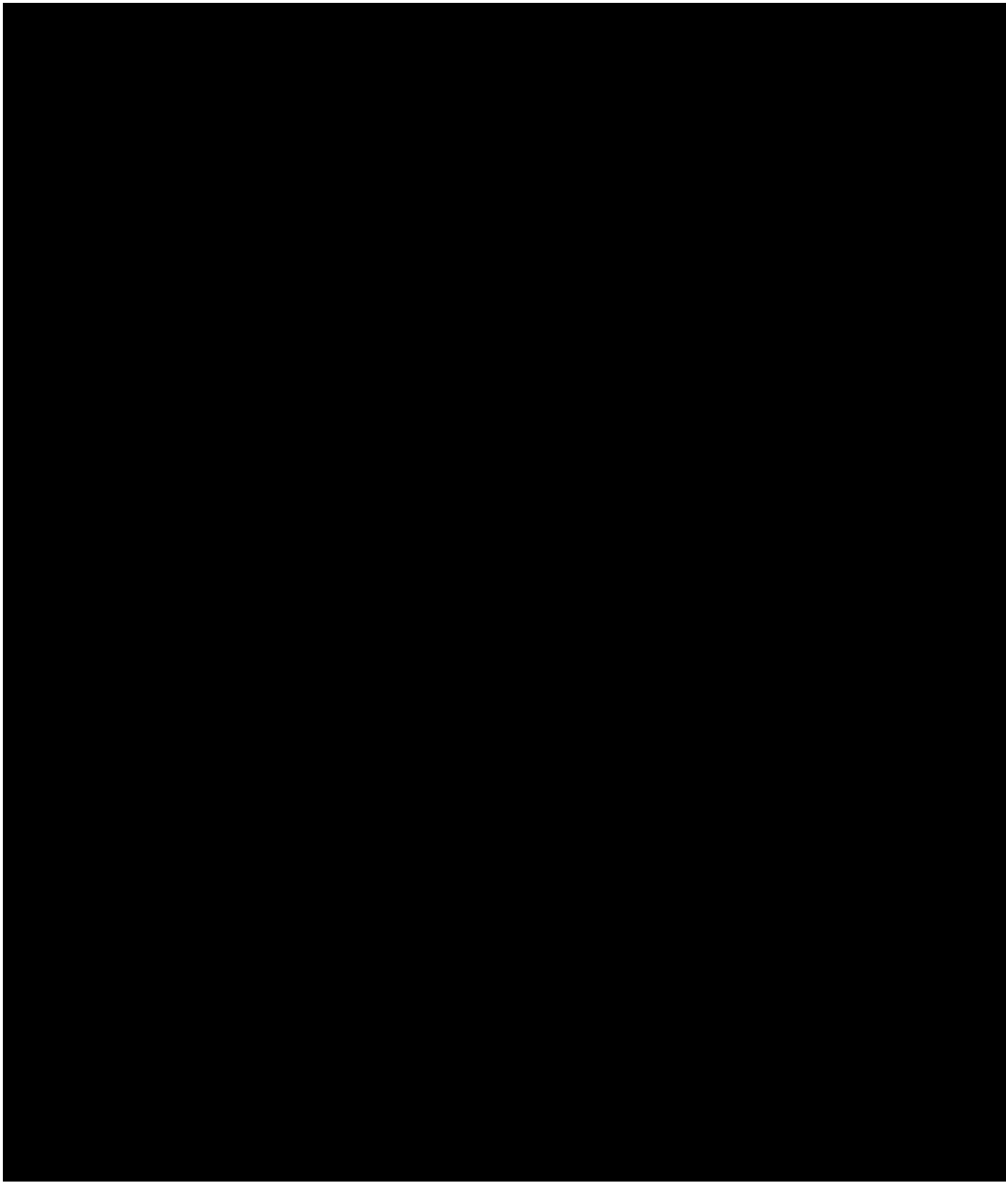
**[BEGIN CONFIDENTIAL]**

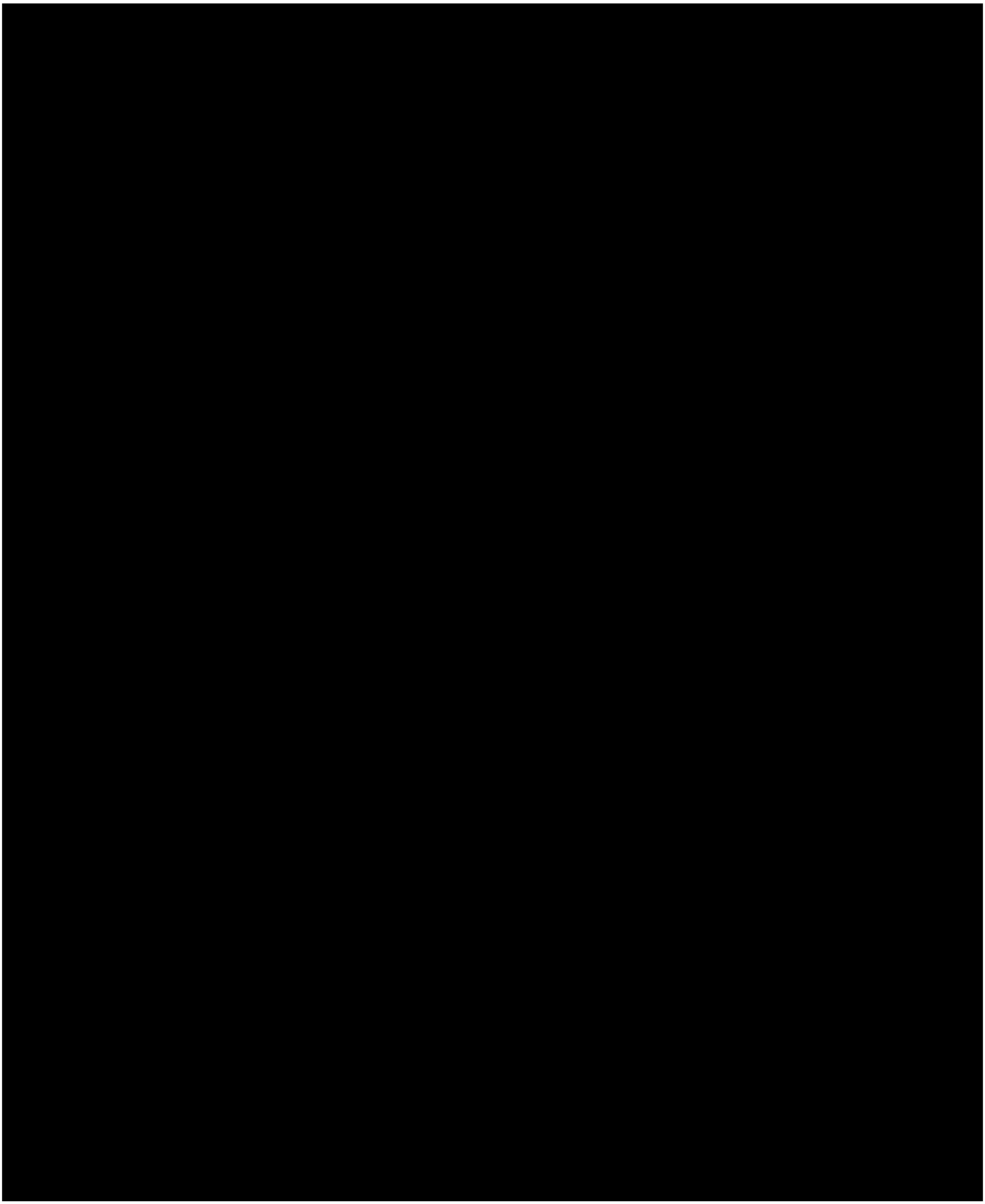














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# SECTION 5

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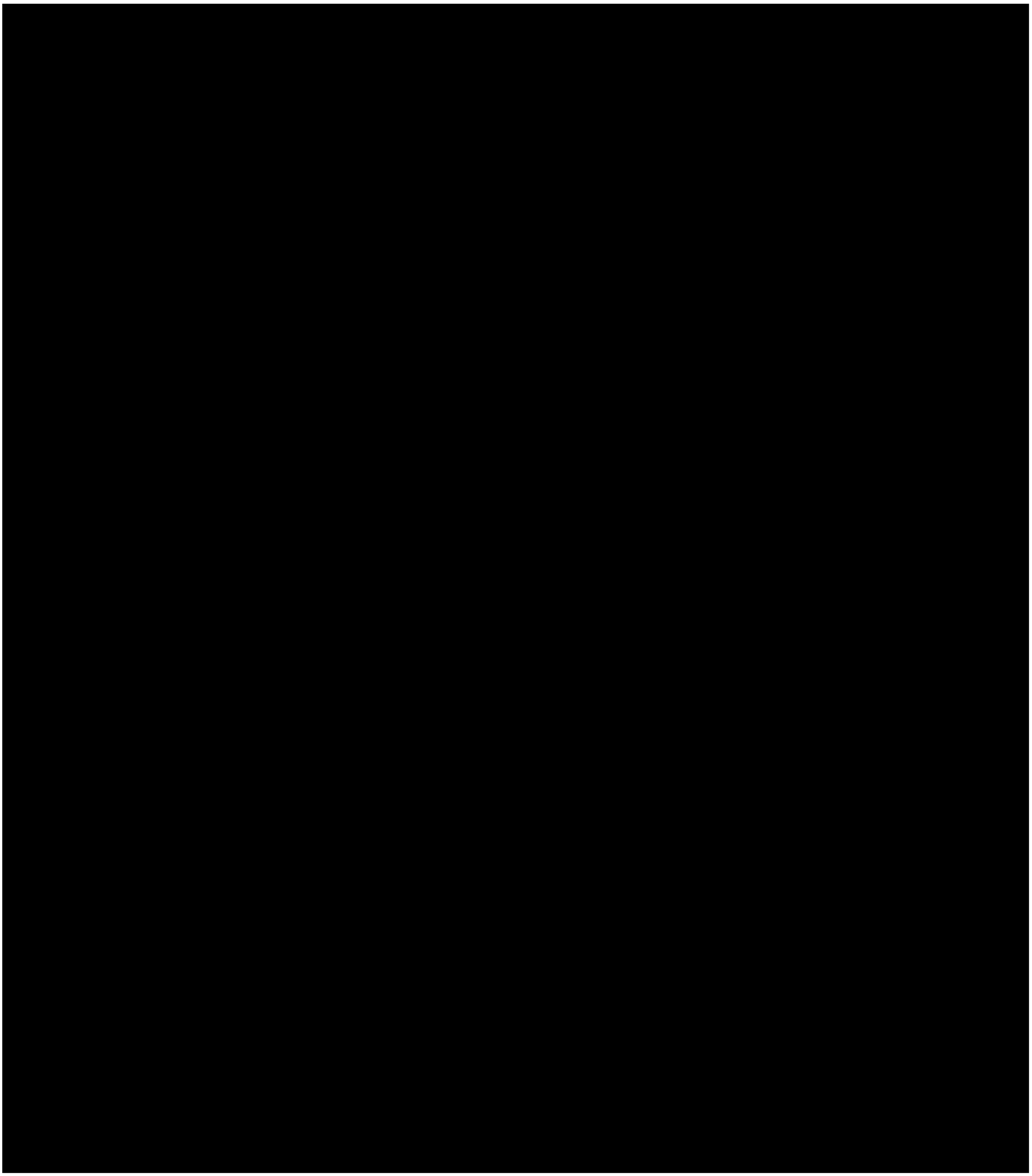
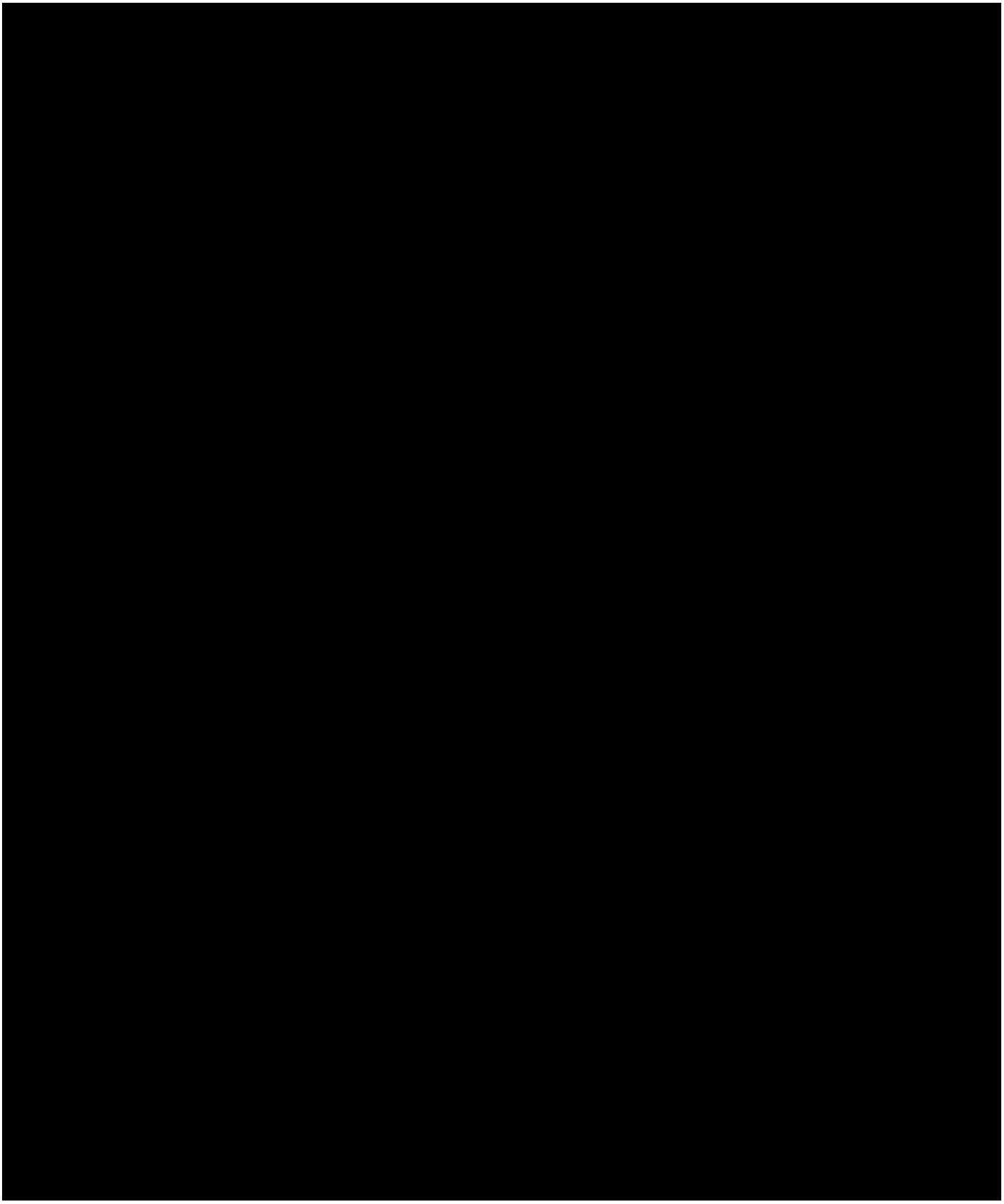
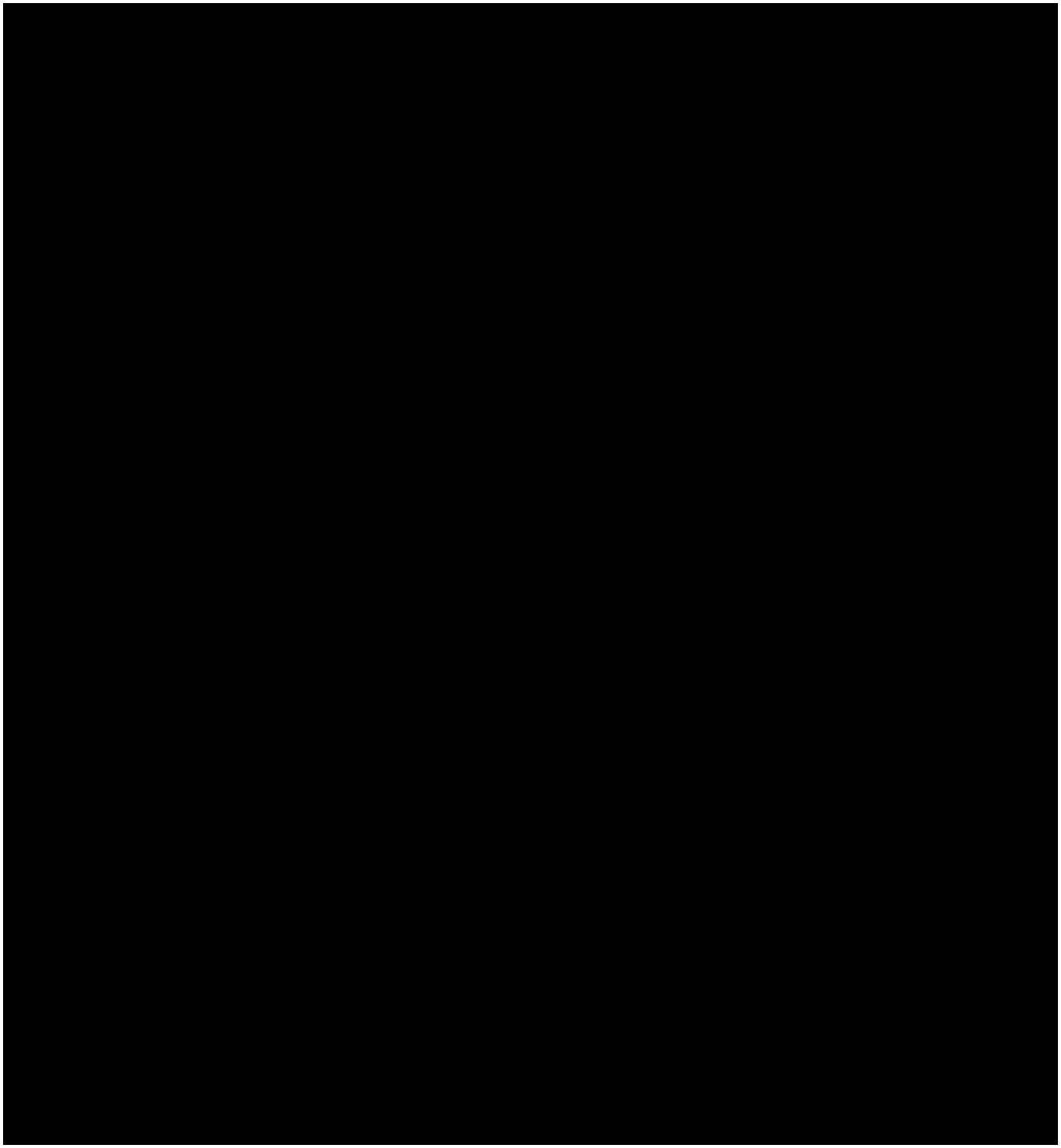
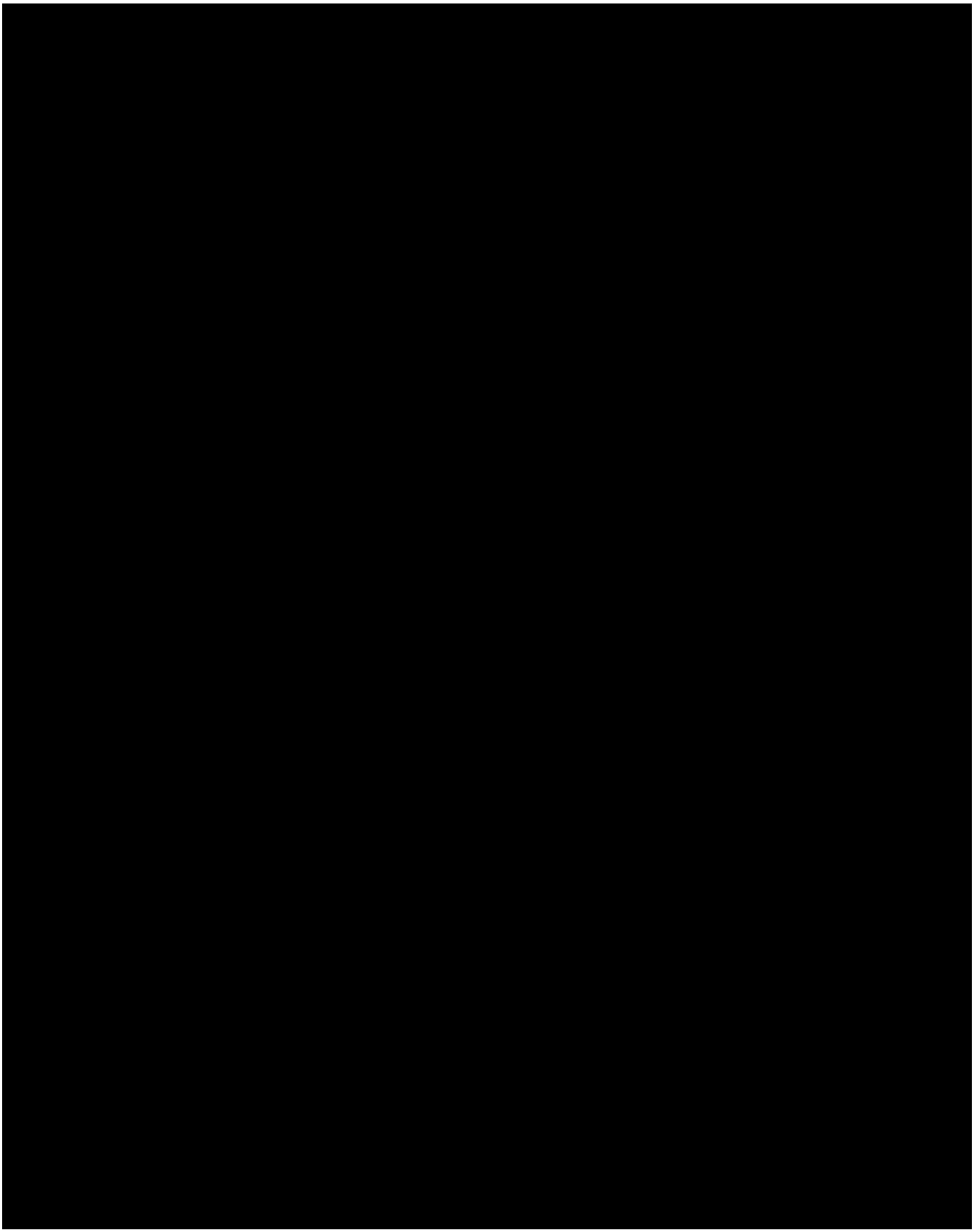
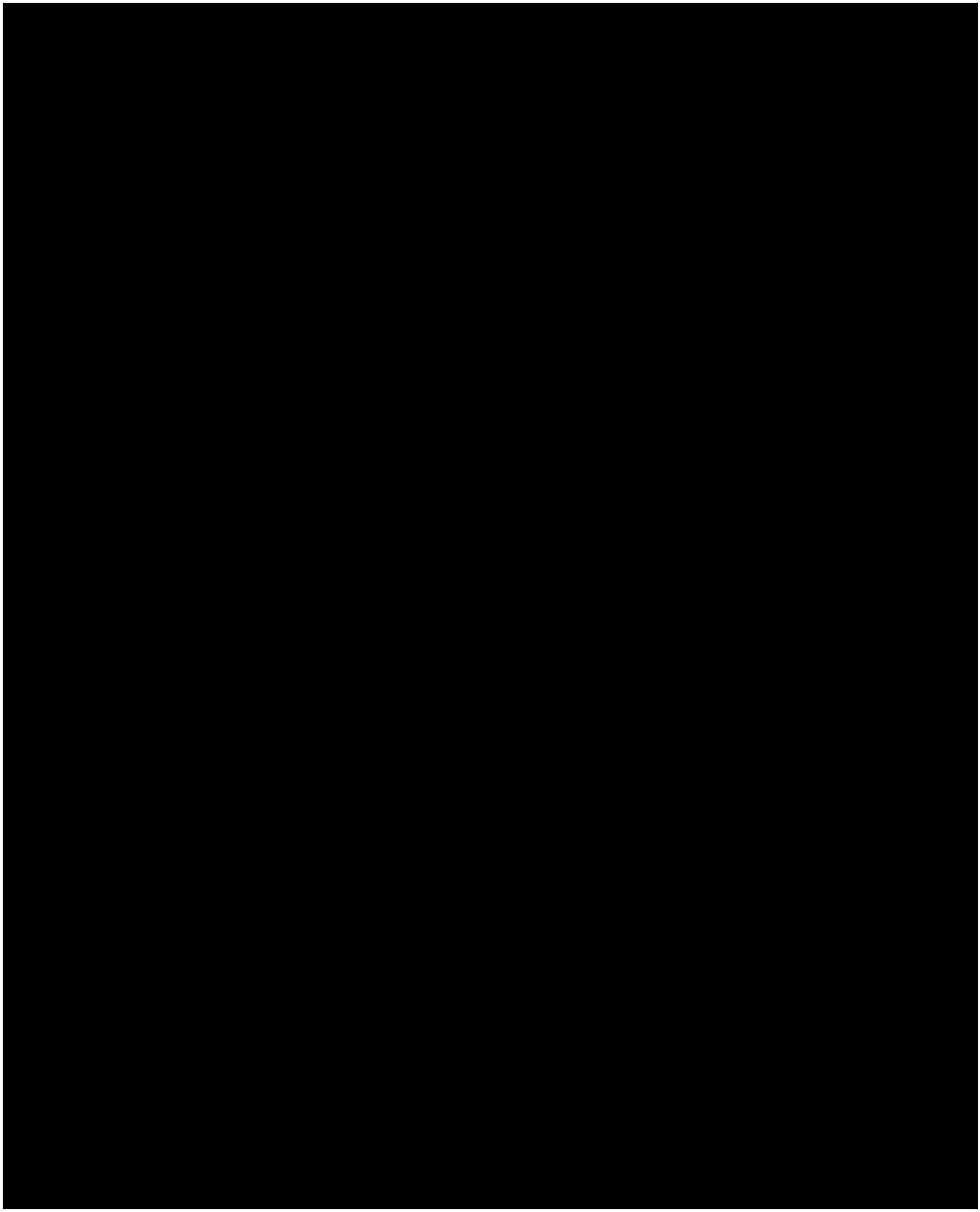
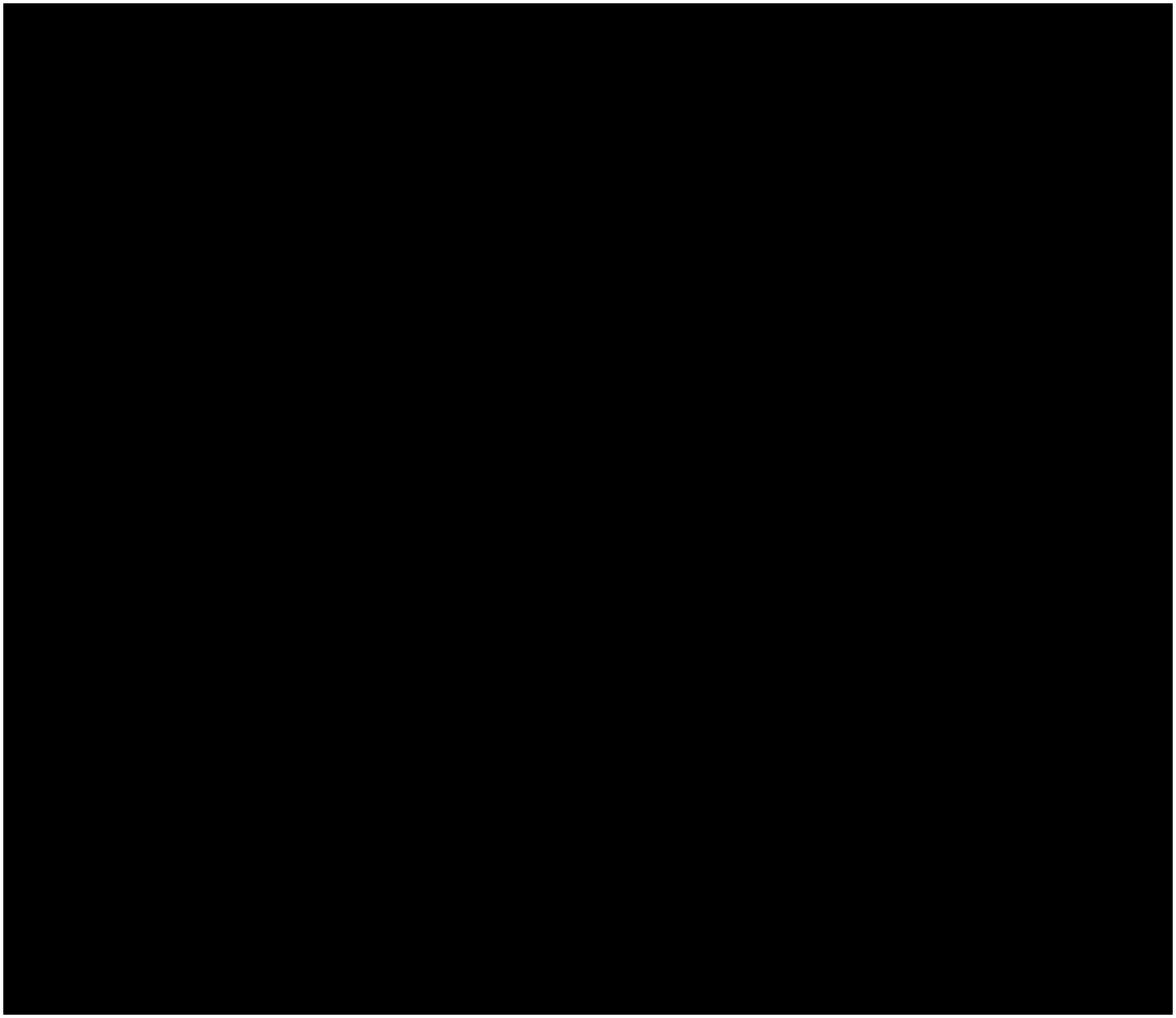










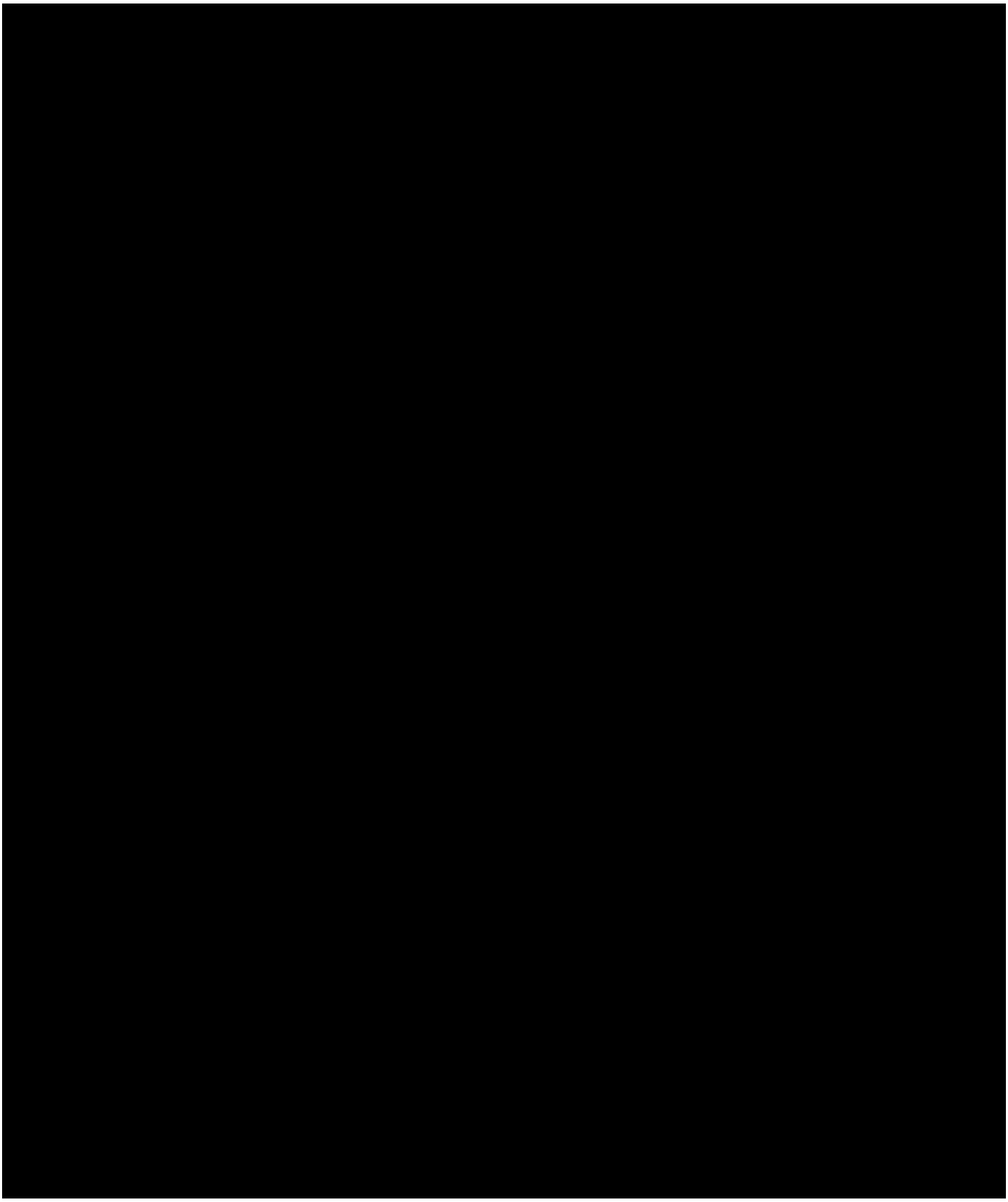


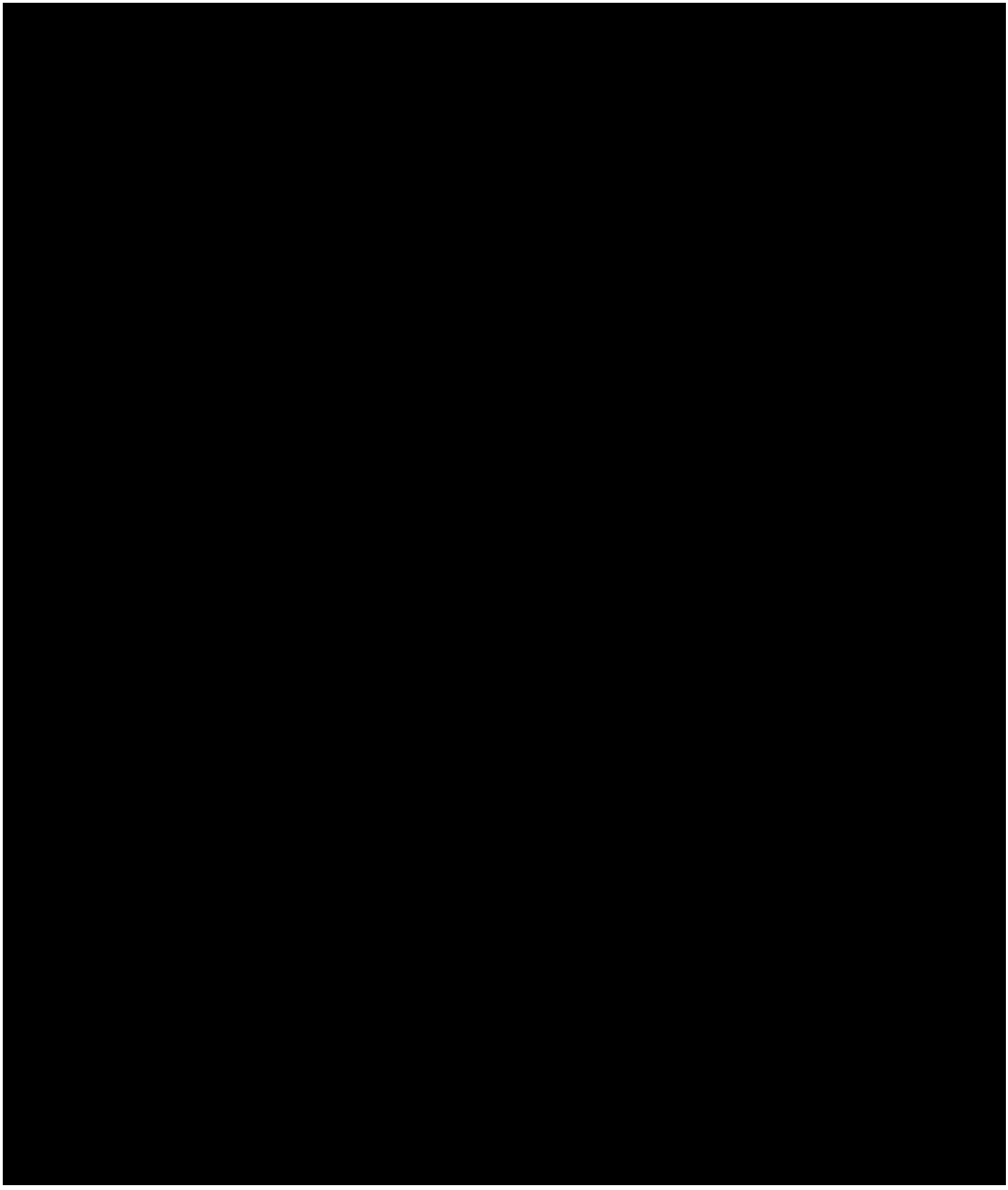
**[END CONFIDENTIAL]**

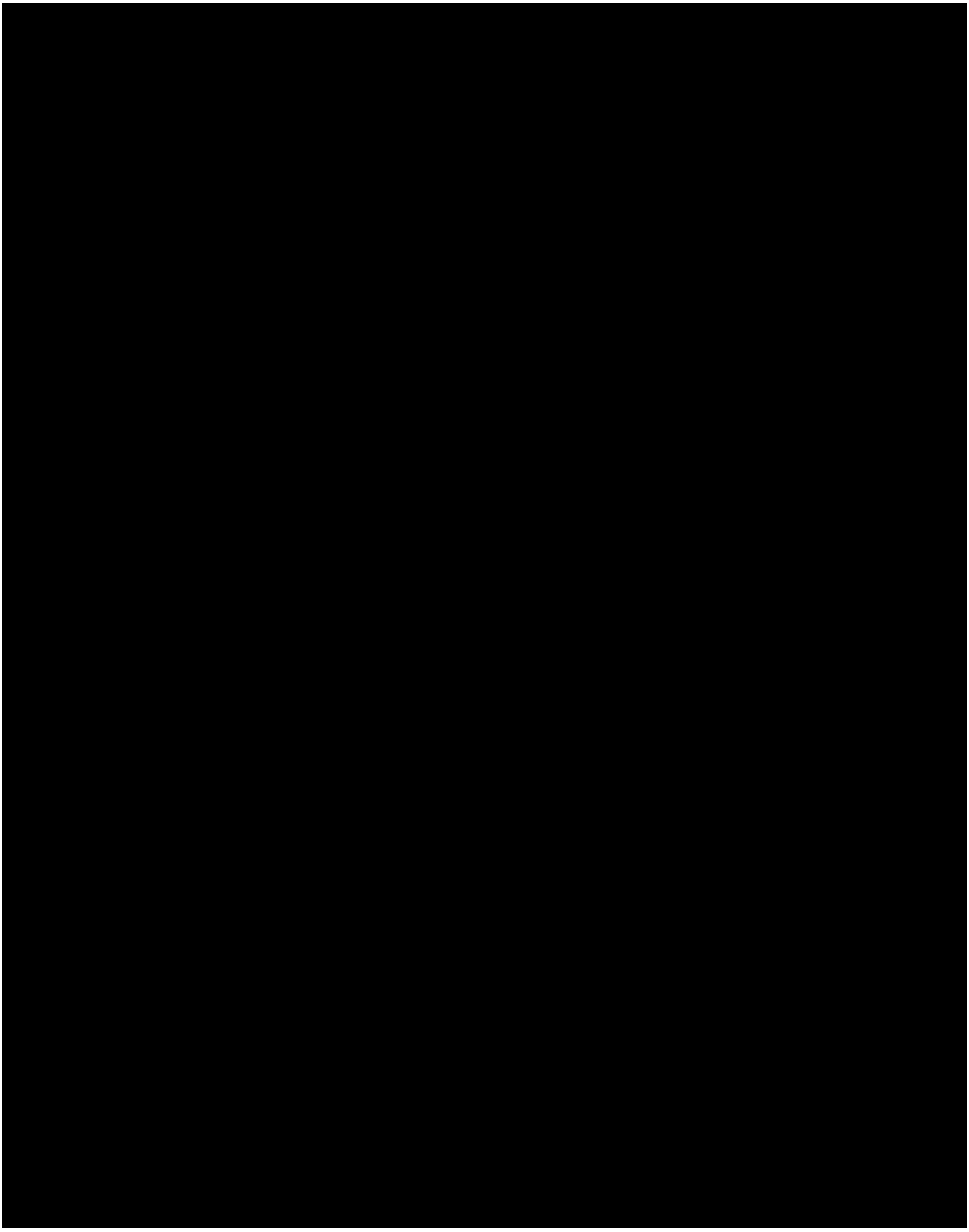
# SECTION 6

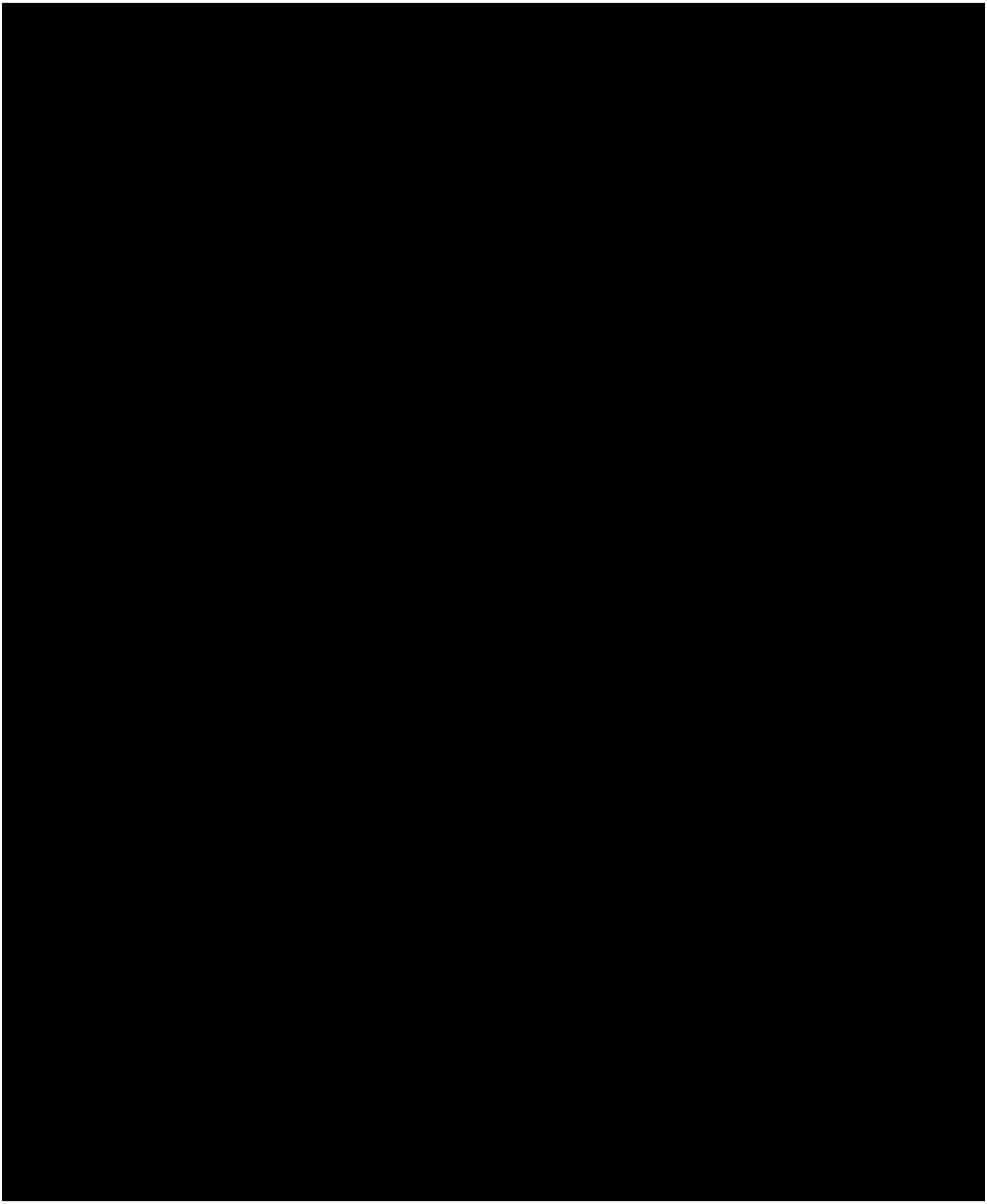
**[BEGIN CONFIDENTIAL]**

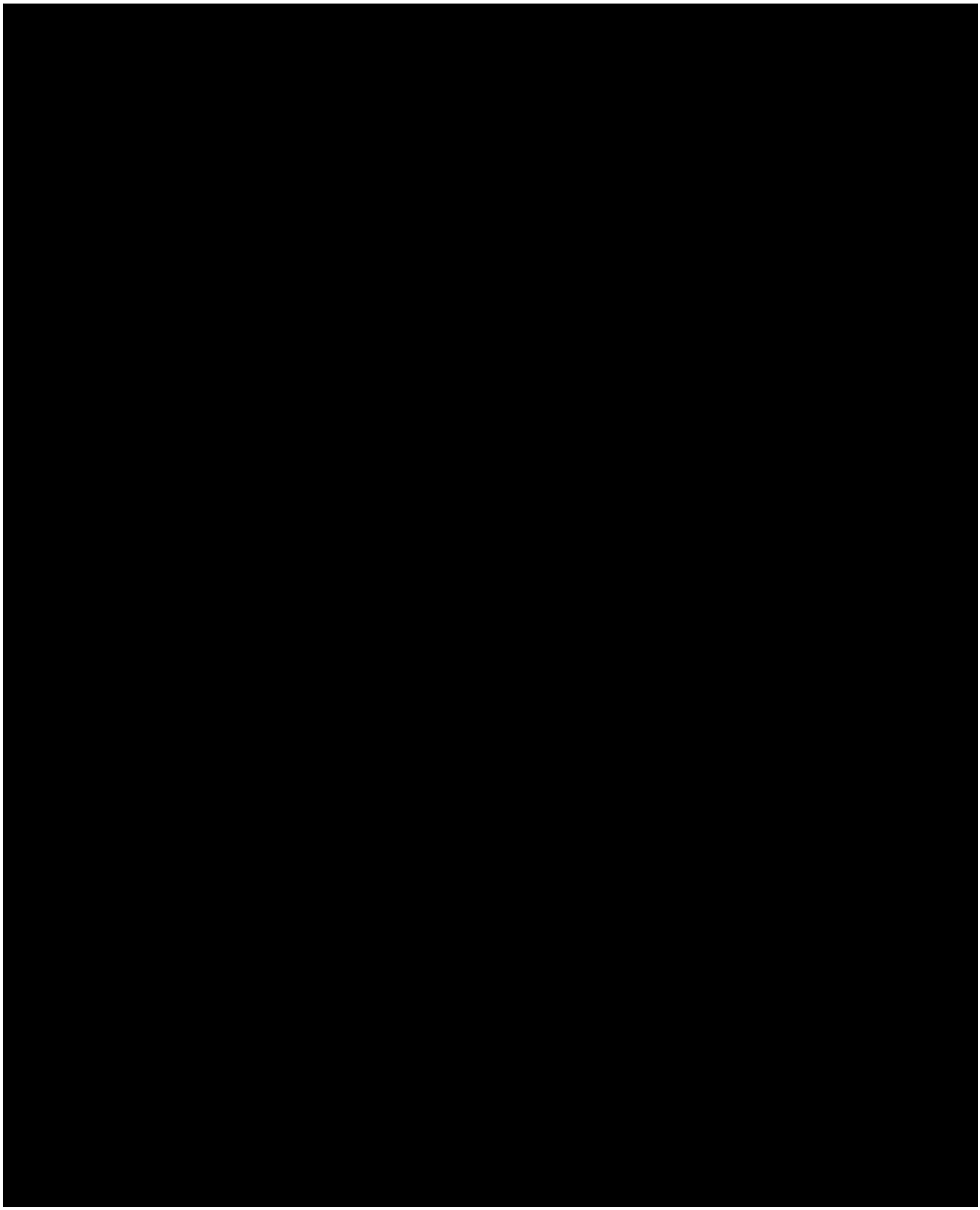














**[END CONFIDENTIAL]**

**March 3, 2021 – Grease Skimmer**




**Grease skimmer from North side on concrete floor.**




**Grease skimmer from platform.**

Grease skimmer comments:

- No railing to prevent employee from falling into the process vessel.
    - Step added to platform to reduce the height of the side wall making a fall into the vessel easier
- No E-Stop within reach of exposed moving equipment
    - Exposed chain drive
    - Exposed auger
    - Multiple pinch points unguarded

**March 3, 2021 – Belt Filter Press**



**Belt filter press from North side of room.**




**Belt filter press from North side close.**



**Belt filter press from West side of room.**




**Belt filter press room West wall.**

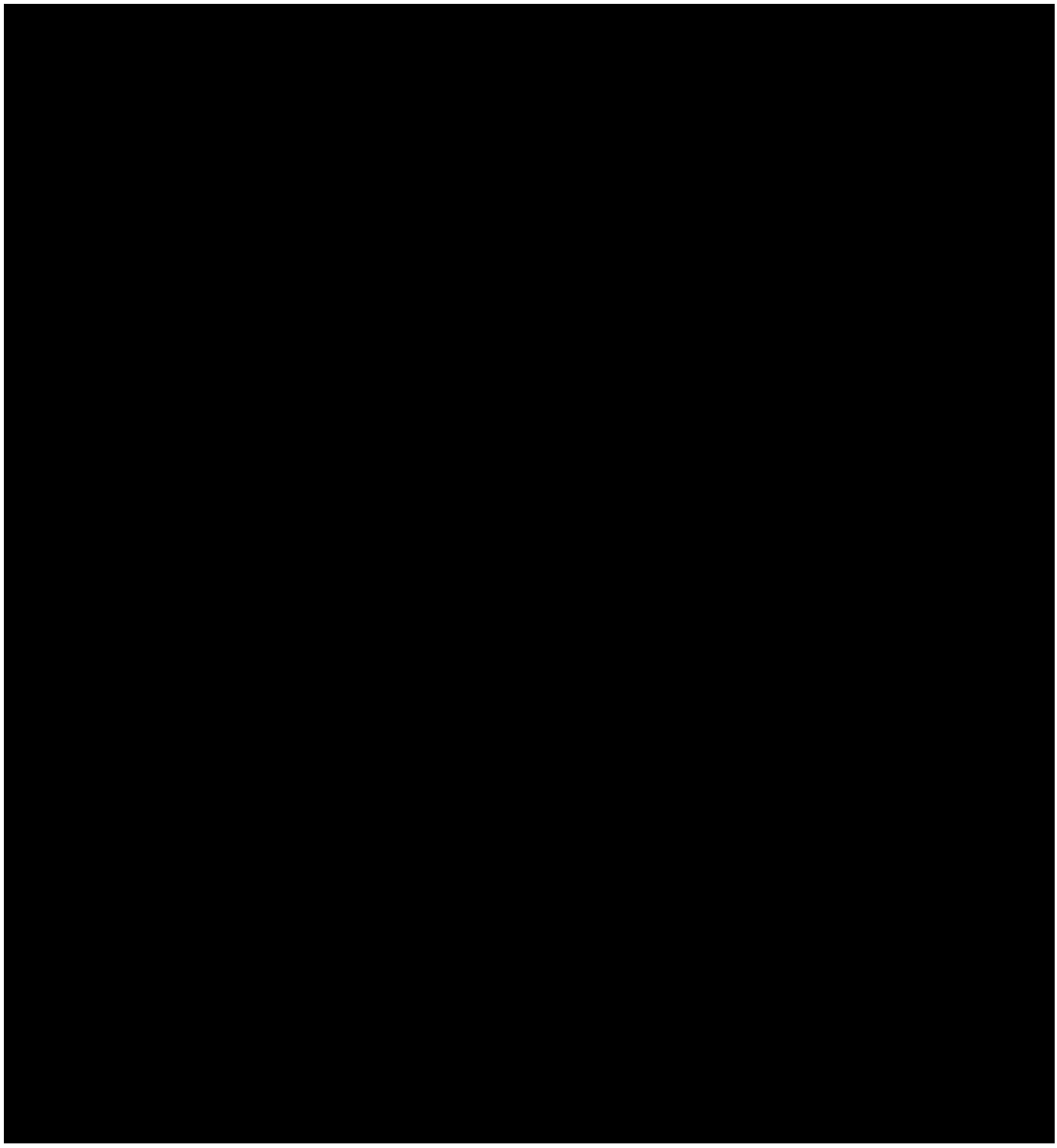
Belt filter press comments:

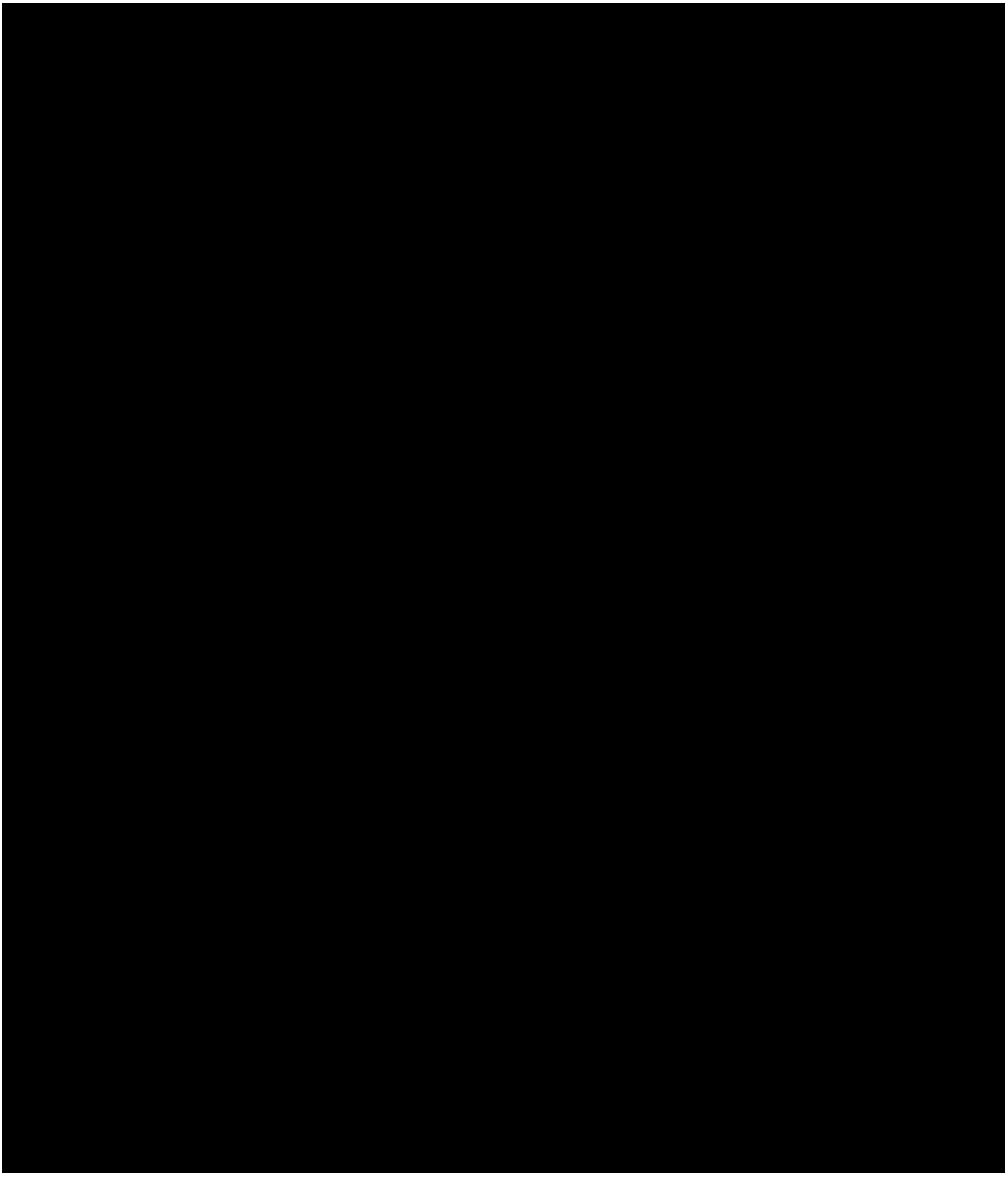
- Chemical Storage.
    - Note various chemical drum storage areas without labeling, spill containment, or measuring equipment.
    - Chemical drums not labeled with globally harmonized system (GHS) as required by OSHA.
    - Drum in service is tipped up on end by a stone and left balancing that could easily topple, spill, and cause injury.
    - It was unclear if the chemical drums were compatible with each other should a spill occur without separate containment.
- Platform / working surfaces.
    - Note the pooling/ponding water around the process equipment and electrical cabinets.
    - The platform around the press has a ladder on it that would make it easy to overtop the railing and fall to the concrete floor.
    - The platform is also installed elevating the worker higher than the yellow safety E-stop cable. This cable should be at waist level and easily accessible. If an employee was to get entangled in this moving equipment, the safety cable for the E-stop is at their ankles and out of reach.
    - Notice that the railing only exists on the outside perimeter of the work platform, permitting unobstructed fall potential into the moving equipment.
    - There are no guards on the pinch points of the equipment.
- Building
    - No exit signs
    - No emergency exit lighting
    - No fire extinguishers
    - Inadequate chemical storage signage
    - No signs for personal protective equipment requirements

# SECTION 7

**[BEGIN CONFIDENTIAL]**







**[END CONFIDENTIAL]**

# SUPPLEMENTAL EXHIBIT X

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 4 SUPP**

**SUPPLEMENTAL DIRECT TESTIMONY OF**

**CHARLES R. JONES, JR.**

**CITY MANAGER**

**CITY OF BEAVER FALLS**

**With Regard To:**
**Operations and**
**Public Benefits of the Proposed Transaction**

**March 2024**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1

II. CURRENT OPERATIONS AND CONDITION OF THE SYSTEM ..... 2

III. BENEFITS OF THE PROPOSED TRANSACTION ..... 3

IV. CONCLUSION ..... 6

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Charles R. Jones, Jr. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the appointed City Manager for the City of Beaver Falls (the "City"). My duties as defined by the City's Home Rule Charter are to manage day-to-day operations and oversee administrative functions of all City departments. I report directly to the Mayor of the City and City Council.

**Q. Please provide a brief description of your education and work experience.**

A. I am a United States Air Force Veteran, with extensive training and experience with law enforcement management and operations. I am a graduate of the F.B.I. National Academy and currently serve on several local and regional boards, including my role as an executive board member of our local Chamber of Commerce. I have an Associate's Degree in Criminal Justice and Police Technology. I have an undergraduate degree and graduate degree in leadership and organizational management, and I am a recent recipient of an honorary doctorate degree in leadership from Geneva College.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("Commission") before?**

A. Yes. I previously submitted Direct Testimony in this proceeding.

**Q. Do you hold any professional licenses or certifications related to wastewater?**

A. No. I have no expertise in operating a wastewater system.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purposes of your supplemental direct testimony and summarize the key points it will address.**

A. The purpose of my testimony is to supplement my Direct Testimony by providing additional discussion regarding current operations of the City's System and discussion of additional public benefits of this transaction.

**Q. Are you sponsoring any Exhibits with your testimony?**

A. No.

## II. CURRENT OPERATIONS AND CONDITION OF THE SYSTEM

**Q. Have you reviewed the Supplemental Direct Testimony of Zach Martin regarding the current operations of the System?**

A. Yes. I was not aware of the serious operational deficiencies and unsafe conditions at the WWTP until I reviewed the Supplemental Direct Testimony of Zach Martin. I am concerned about the current operations of the System and the deterioration of the City's 80

year-old wastewater treatment plant ("WWTP") since Aqua's initial review of the System in 2021. The Plant Manager has been out on medical leave for nearly two years and is unable to work for the City. He is on permanent disability. We have also lost other skilled operators since 2021. We have tried to hire people to fill these open positions for many months but have been unsuccessful.

**Q. Does the City have a plan to address the issues raised in Mr. Martin's Supplemental Direct Testimony?**

A. No, it does not at this time. The City will do its best to alleviate any serious and dangerous conditions but does not have the expertise or the financial resources to support the adequate operations of the System long-term.

**Q. Does the City have a capital plan for the System?**

A. The City does not have a long-term capital plan for the System as a result of the City's financial condition. The City attempts to fix problems with the System as they arise but does not have the ability to do more than that.

## III. BENEFITS OF THE PROPOSED TRANSACTION

**Q. Please describe the benefits of the Proposed Transaction for the City in addition to those provided in your Direct Testimony.**

A. Given the deterioration of the System and the serious deficiencies in the operation of the System since the City has been unable to employ the necessary experts, the City feels the urgent need to sell the System to Aqua to ensure that the System will be operated safely

and its customers will be provided with the excellent service they deserve. In addition the City believes Aqua will provide critical environmental compliance, and protection of the System's receiving waterways which I am very concerned about given the raw sewage seepage into the Beaver River from the System as described in Zach Martin's Supplemental Direct Testimony.

The City has historically experienced significant financial difficulties. Because of the financial condition of the City, the City likely will not be able to keep up with the growing capital needs of the aging System. If the City sells the System to Aqua, the capital needs will be met and the proceeds from the sale of the System will help prevent the City from being named by the Commonwealth Department of Community and Economic Development a distressed community or Act 47 status, which indicates severe financial difficulties and could lead to the City being placed in receivership.

Another benefit of the sale is Aqua's extensive financial assistance to lower income customers struggling to pay their wastewater bills. I understand that rates will increase for the City's customers if Aqua owns and operates the System, however, Aqua took great care explaining their commitment to assist the low income residents which could be a significant portion of the City's residents. As I stated in my Direct Testimony, the median household income based on 2020 data was $35,951. In 2022 the median household income was $39,194.[1] For a household of 4 persons at $39,194 they would be at the 130.65% of the federal poverty income guidelines ("FPIG"), and thus could qualify for Aqua'a low income

[1] See https://data.census.gov/table/ACSST5Y2022.S1903?q=Beaver%20Falls%20city,%20Pennsylvania&t=Income%20and%20Poverty

program.[2] Similarly, households of 2 and 3 persons at the median household income would be at 198.75% and 157.66% of FPIG, respectively, and could qualify for Aqua's low income program.[3] There are approximately 292 4-person families, 433 3-person families, and 696 2-person families in Beaver Falls which represents the vast majority of the population of Beaver Falls.[4]

**Q. Do you believe the System is a troubled system?**

A. Yes. For the reasons set forth in Mr. Martin's Supplemental Direct Testimony and as I explained above regarding the City unable to fill positions at the WWTP, the lack of capital planning, and the deficiencies in the System operations, Beaver Falls does not have the financial, managerial or technical ability to operate the System.

**Q. Do you believe that the Proposed Transaction is in the public interest?**

A. Yes. For the reasons I set forth in my Direct Testimony and above, I believe that the Proposed Transaction provides substantial affirmative public benefits and is in the public interest. I urge the Commission to promptly approve the Proposed Transaction.

[2] See https://www.hardshiptools.org/IncomeCalculator.aspx
[3] Id.
[4] See https://data.census.gov/table/ACSST5Y2022.S1903?q=Beaver%20Falls%20city,%20Pennsylvania&t=Income%20and%20Poverty

## IV. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to file additional testimony at a later date as may be necessary or appropriate.

## VERIFICATION

I, William C. Packer, Vice President, Regulatory Accounting and Regional Controller of Aqua Pennsylvania, Inc., hereby state that the facts set forth in the foregoing Updates to the Application of Aqua Pennsylvania Wastewater, Inc., pursuant to Sections 1102, 1329, 507 and 508 of the Public Utility Code, for approvals and an order relating to the acquisition of the wastewater system assets of the City of Beaver Falls are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

William C. Packer
Vice President, Regulatory
Accounting and Regional Controller
Aqua Pennsylvania, Inc.

Dated: March 28, 2024

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File #: 196374

December 23, 2024

***VIA ELECTRONIC FILING***

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

**Re: Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 507, 508, 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls**
**Docket No. A-2022-3033138**

Dear Secretary Chiavetta:

Enclosed for filing with the Pennsylvania Public Utility Commission ("Commission") in the above-referenced proceeding are the following pieces of additional Direct Testimony in support of the Amended Application of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") acquisition of all of the assets, properties and rights related to the wastewater collection and treatment system owned by the City of Beaver Falls ("Beaver Falls" or "the City").

- **Exhibit DD** – Aqua Statement No. 7, the Direct Testimony of Dr. Kenya Johns; and
- **Exhibit EE** – Aqua Statement No. 8, the Direct Testimony of Sandra Wilkins (including Appendix A, in PDF and Microsoft Excel format).

The above-captioned Application was initially submitted on February 18, 2023, pursuant to Sections 507, 508, 1102, and 1329 of the Pennsylvania Public Utility Code (the "Code"), 66 Pa.C.S. §§ 507, 508, 1102, 1329. Aqua's Amended Application dated March 28, 2024, was made pursuant to same provisions of the Code.

Copies of this testimony have been served as indicated on the Certificate of Service and in accordance with the Commission's *Final Supplemental Implementation Order* entered February 28, 2019 at Docket No. M-2016-2543193.

Thank you for your attention to this matter. Please do not hesitate to contact the undersigned if you have any questions.

Respectfully submitted,



Michael W. Hassell

MWH/kls
Attachments

cc: Certificate of Service

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

**VIA E-MAIL**

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Date: December 23, 2024

Garrett P. Lent

Commonwealth of Pennsylvania
**Pennsylvania Public Utility Commission**
Harrisburg, PA 17105-3265
**EFILING - FILING DETAIL**

| Date Created | Filing Number |
|---|---|
| 12/23/2024 | 2707319 |

Your filing has been electronically received. Upon review of the filing for conformity with the Commission's filing requirements, a notice will be issued acknowledging acceptance or rejection (with reason) of the filing. The matter will receive the attention of the Commission and you will be advised if any further action is required on your part.

The date filed on will be the current day if the filing occurs on a business day before or at 4:30 p.m. (EST). It will be the next business day if the filing occurs after 4:30 p.m. (EST) or on weekends or holidays.

**Docket Number:** A-2022-3033138
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# EXHIBIT DD

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 7**

# DIRECT TESTIMONY OF

# MAYOR OF BEAVER FALLS

# CITY OF BEAVER FALLS

**With Regard To:**
**Sale of the System**
**Rate Impact**
**Length of Process**
**Running the System**

**December 23, 2024**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. SUPPORT OF SALE OF THE SYSTEM ..... 3

III. UNDERSTANDING THE RATE IMPACT ..... 5

IV. LENGTH OF THE PROCESS ..... 6

V. RUNNING THE SYSTEM ..... 7

VI. CONCLUSION ..... 9

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Dr. Kenya Johns. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the Mayor of Beaver Falls (the "City"). I was elected Mayor in November 2021. I report directly to my constituents and work with City Council as a presiding officer to run the City and serve the residents of Beaver Falls. I am the official representative of the City under its Home Rule Charter approved by referendum of the voters on November 2, 2021.

**Q. Please provide a brief description of your education and work experience.**

A. I am a 33-year-old wife and a mother of two, who earned a B.A. in Psychology and Spanish from Slippery Rock University in 2014, a M.A. in Clinical Mental Health Counseling from Geneva College, and a Ph.D. in Clinical Supervision and Education from Duquesne University. In January 2022, I was sworn into the office of Mayor of Beaver Falls, becoming the first Black woman elected as Mayor in the City's 153-year history after unseating incumbent Mayor George Quay, who had held the position since being appointed by City Council in 2012. I often wear many hats in addition to being Mayor, including but not limited to a counselor, professor, author, researcher, advocate, international presenter, and a consultant.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("Commission") before?**

A. No.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and with Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purposes of your direct testimony and summarize the key points it will address.**

A. The purpose of my testimony is to supplement the testimony provided by the City Manager, Mr. Charles Jones. I will focus my testimony on why the City of Beaver Falls desperately needs the Commission to approve this transaction, while recognizing the potential rate increases our residents may have to incur, which I am not happy about. I will also discuss the length of the process after the execution of the APA and the impact that it has had on our City and why I believe it is in the best interest of the City for the sale to be approved and Aqua to run the System.

## II. SUPPORT OF SALE OF THE SYSTEM

**Q. Do you support the sale of the System?**

A. Although I was not the Mayor of the City when the Asset Purchase Agreement was negotiated and signed by the City, I believe that it is in the City's best financial interest to sell the System to Aqua.

Beaver Falls is a predominantly low income, minority community. The annual incomes of our residents are significantly lower than the U.S. average and our average unemployment rate has been higher than the state and national rates. Like its residents, the City has been struggling financially.

Before I was elected Mayor, my predecessor and City Council negotiated and approved the sale of the City's System to Aqua to ensure the City was able to cover its ongoing operational expenses and generate sufficient revenue for the future.

The City, which has generally had reasonable and conservative revenue projections and budgets, has relied upon the deposit from Aqua and the likely sale proceeds in our budgets and decision making since 2021. Based upon the assumption that this sale would be approved by the PUC, which was completely reasonable until very recently, we used the $2 million deposit money from Aqua to fill budgetary gaps. We relied upon the anticipated sale proceeds when we negotiated increases in benefits and salaries for the firefighters and police. And we relied upon the anticipated sale proceeds when we made decisions about tax increases and fee increases for our residents during a time when inflation made it difficult if not impossible for our residents to put food on their tables.

At this point, after years of waiting and being drained of money to cover expenses related to the sale of the System, it is simple, if the City does not have the proceeds from

the sale, we will experience severe financial difficulties and likely be unable to provide fundamental services to our citizens even if we raise taxes.

**Q. Please provide why you personally do not believe the City of Beaver Falls should be either managing consultants to operate the wastewater system or directly employing wastewater operators to operate the wastewater system?**

A. First of all, the City does not have the money to hire top notch experienced consultants to come to Beaver Falls and run the System. Secondly, the focus of my administration is on helping people in my community with the fundamentals like safety, jobs, helping keep our small businesses open, healthcare, and staying out of bankruptcy. We do not have the time or money to focus on managing an independent contractor or group of employees in a highly technical and complex area of expertise.

As Mr. Jones already stated in his testimony, the City has struggled to run the System itself. It has very limited resources and we have not had success in recruiting the experienced operators we need to run this highly complex system, especially with the changing and increasing regulatory environment.

**Q. Please provide your objectives for 2025 and beyond and what your administration is focused on.**

A. Our main objective is to stabilize the City's finances so we can provide much needed services to our marginalized community. Paying off our debt of nearly $5.5 million is crucial, but so is investing in vital community resources. This includes youth engagement programs, supporting business development to stop the bleeding of jobs and money from

our City, and providing necessary public safety by acquiring new fire and police vehicles, as well as an ambulance. Additionally, we need to address our aging infrastructure, including roads and streetscapes. Finally, a portion of the proceeds will also be invested to ensure future sustainability of our City.

## III. UNDERSTANDING THE RATE IMPACT

**Q. Can you please provide some context of your understanding about rate impacts in these proceedings?**

A. I understand that rate impacts to customers are a very important issue and I do not take it lightly. Frankly, I don't like the idea of these rate increases at all. But the current wastewater rates in Beaver Falls are extremely low. So, any increase to bring them more in line with other wastewater rates will look like a very high percentage increase. I respectfully request that the Statutory Advocates and Commission focus on more than one data point – the one data point of a percentage increase – to announce their objection to this application. I know this is an important data point. But there is very much more that needs to be reviewed and considered.

**Q. What would you like the Statutory Advocates and Commission to consider other than the rate increase?**

A. While I am aware of the rate increases that will result if the sale is approved and I share the deep concerns many have about the financial burden of our citizens, the Commission and the Statutory Advocates should balance that concern, as I have, with the reality that, without the sale proceeds, the City will likely not be able to provide essential services to

our citizens. Furthermore, we have not been able to run the System as I would have liked. We have not been able to retain the kind of experienced operators that we would need in this highly regulated area. And we do not have the time to run the System when our day is filled with trying to run our ailing City. In addition, I am committed to using the proceeds to help support the needs of our community by having additional funds to help support our families in need.

## IV. LENGTH OF THE PROCESS

**Q. Can you provide your experience in the process of selling the City's wastewater assets?**

A. Although the APA was executed before my tenure, my understanding is the sale was a result of extensive considerations and discussions with City leadership, staff and with the public.

Since the execution of the APA, this has been a long and arduous process taking several years. It has been very difficult and time consuming. Not including the time before my tenure (including the many months of evaluating whether to sell, public meetings, and negotiating the sale), we have had to endure litigation and contentious negotiations with neighboring communities and we have worked hard to stabilize the City's finances but we are at the end of the road on that. While this may be the first time the Commission has heard our story, we have been at this for a very, very long time.

**Q. What has changed since starting the process in terms of the Commission's past decisions?**

A. I understand that the Commission has adopted a Reasonableness Review Ratio ("RRR") regarding the purchase price of a wastewater system as a factor in evaluating these sale transactions. I recognize that the purchase price of $41,250,000.00 that the City agreed upon to sell our System is not within the RRR, however we negotiated that price in good faith and based our decision making for the last several years as I described above on that agreed upon amount. In addition, and very importantly, the amount we agreed to pay the neighboring municipalities to settle the litigation is based upon that purchase price. Fortunately, the Commission included a grandfather clause in its order setting the RRR. I believe the Commission should grandfather Beaver Falls from the RRR based on the circumstances set forth in the testimony and in Aqua's application. It is important for me to state that the City receiving the fair market value for the System of $41.2M was a catalyst for the City to sell the System.

## V. <u>RUNNING THE SYSTEM</u>

**Q. How do you think the service will be better under Aqua?**

A. As Mayor of Beaver Falls, I am acutely aware of the difficult circumstances our City is facing. Our residents are hardworking, but we are a community that has long been under-resourced, and now we find ourselves on the brink of bankruptcy. I have been focused on the immediate and pressing needs of our people – whether it's affordable housing, jobs, safety or healthcare – because these are the issues that impact our daily lives. Because of the above, our System cannot receive the financial investment and the time and attention it

desperately needs for its long-term sustainability. Furthermore, our search to hire staff with the expertise needed to run the System in an efficient and appropriate manner has come up short.

As a well-established public utility, Aqua brings industry-leading expertise and extensive experience in upgrading, operating, and maintaining sewer systems. It also has the financial capacity to fund operational and capital improvements that will directly benefit our customers.

Aqua has a strong track record of environmental stewardship in wastewater system operations. With access to a much broader and deeper range of engineering and operational expertise than the City, Aqua is equipped to address the operational challenges facing our System. Aqua will also enhance customer service for our residents, with extended customer service center hours, additional payment options (including phone and online), and improved customer information and education programs. Importantly, low-income residents will benefit from Aqua's well-established assistance programs to help pay their bills.

Finally, due to Aqua's broader expertise, economies of scale, and financial resources, the proposed transaction will result in (i) upgrades to the plant's facilities, ensuring that wastewater processed by the System meets all environmental requirements and the facility meets all safety requirements; and (ii) strong protections against cyberattacks targeting municipal utilities like ours with less sophisticated technology infrastructure.

**Q. Do you acknowledge that the City could run the System?**

A. I have been advised that we may get pushback that we as a City can simply run and manage the wastewater treatment plant and the collection system ourselves. I suppose we could – if that is all we did in this administration or even if that was our focus. However, as I discussed above, it is our reasoned assessment that we can no longer spend the time and resources on running this System given the dire circumstances of our City. Many do not understand what it is like trying to run a City on the edge of a fiscal cliff with residents who have been marginalized and lack the basics. It is not a matter of just not wanting to run the System …we cannot run the System in an appropriate way and still provide the services to our residents that they need and deserve.

**Q. In summary, do you believe it is in the public interest for the City of Beaver Falls to continue to manage and operate the System?**

A. No. Again, I am not happy about the rate increases our residents will need to sustain if Aqua owns the System, however, I have balanced this with the dire financial situation our City is in and the ability of Aqua to be better operators of the System than the City.

## VI. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

# EXHIBIT EE

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 8**

**DIRECT TESTIMONY OF**

**SANDRA WILKINS**

**CHIEF FINANCIAL OFFICER OF BEAVER FALLS**

**CITY OF BEAVER FALLS**

**With Regard To:**
**Financial Status of the City**

**December 23, 2024**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. FINANCIAL STATUS OF THE CITY ..... 3

III. CONCLUSION ..... 8

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Sandra Wilkins. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the Chief Financial Officer of the City of Beaver Falls. I also serve as the certified tax collector in my role as CFO.

**Q. Please provide a brief description of your education and work experience.**

A. Prior to joining the City staff in 2021, I served as the Finance Director for Scott Township for nearly 20 years. My experience before Scott Township included nearly 26 years working in various managerial and financial roles in different size municipal governments. Prior to my work in government, I worked in different accounting positions in the private sector.

I graduated from the Bradford School's accounting program with a 4.0 in all accounting courses. I have continued my education with numerous continuing education courses and training from the Community College of Allegheny County, the Department of Community and Economic Development, the Government Finance Officers Association ("GFOA"), Local Government Academy, Pennsylvania State Association of Township Supervisors ("PSATS") and Federal Emergency Management Agency.

I am an active member of GFOA and the Pennsylvania State Tax Collectors' Association. In the past I was a member of PSATS, the Pennsylvania Boroughs Association and the Society of Human Resource Management.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("PUC or the "Commission") before?**

A. No.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purposes of your direct testimony and summarize the key points it will address.**

A. The purpose of my testimony is to supplement the testimony provided by the City Manager, Mr. Charles Jones and the testimony provided by the Mayor, Dr. Kenya Johns. I will concentrate my testimony on the City's financial situation and the financial consequences of not approving the sale. Additionally, I will provide a financial analysis demonstrating how the sale is in the best interest of the public.

## II. FINANCIAL STATUS OF THE CITY

**Q. Please discuss how the City is on the verge of bankruptcy, Act 47 status.**

A. I started working for the City after the Asset Purchase Agreement with Aqua (the "APA") was approved by the City. My understanding from the start of my job is that the City is in financial distress and chose to sell the System for a number of reasons but primarily to vastly improve the City's finances on a long-term basis. We were working with the Department of Community and Economic Development as part of the Strategic Management Planning Program.

My job includes preparing our City's budgets. When I started my position, the 2022 annual City budget had already been prepared by the prior Director of Finance and prior accountant and it included the full purchase price of the System. We have continued in this practice to avoid deficits which also included the deposits paid by Aqua as required under the APA. Not only did the City rely on the sale being approved regarding the use of the deposits to balance budgets, prior to my tenure and the Mayor's tenure, the City relied upon the anticipated sale proceeds when it negotiated increases in benefits and salaries for the firefighters and police, as well as when the City made decisions about a tax decrease for our residents.

The 2025 budget which was approved on December 17, 2024 by the City assumes the sale proceeds from Aqua will be received by the City during this fiscal year. The City is facing a very tight budget with only enough money in the bank currently to make payroll through January. The City is counting on incoming tax revenues and other fees, expected in February, to bridge the gap until the Aqua sale proceeds are realized this year.

If the sale of the System is not approved by the PUC the consequences will be severe. The City is projecting a $1.4M deficit in 2025 without the sale proceeds. The City will be unable to make payroll obligations and cover other essential expenses. This shortfall will prevent us from investing in our City's programs, or addressing our aging infrastructure. Additionally, the City would have to raise rates dramatically just to keep the wastewater treatment plant operating at the current level, which I understand to be significantly lacking. Borrowing money will also likely be problematic as we are concerned about the City's ability to make debt payments to bondholders on our outstanding debt, and recognize that the cost to the City of a loan would likely increase because of the negative impact on our bond rating if the sale is not approved.

**Q. Please describe the status of the City's bond rating and the potential impact if the sale is not approved.**

A. S&P Global Ratings had previously given the City a BB+ Bond rating with a positive outlook. See Appendix B attached hereto. It revised its outlook of the City from positive to stable in September, 2023 based upon expected fund deficits due to the delay of the sale of the System. S&P stated that the "stable outlook is based upon the likelihood the sale of the city's wastewater treatment plant, which should occur in the next year, vastly improving the city's finances and liquidity position. The stable outlook is also based upon the recent one-time upfront payment from Aqua, which stabilized the city's liquidity position over the outlook period."

S&P Global suggested in its report that it would likely take negative rating action if the sale of the wastewater treatment plant is not approved. If the City's bond rating is

downgraded it will make it more difficult and costly for the City to obtain the funding it will need to provide essential services to its residents.

**Q. Do you think the City can run the wastewater treatment plant viably based on its current resources?**

A. No. I do not think the City should manage this complex System considering our financial situation, the challenges and risks of running the System, and our inability to retain employees with the expertise to run a System effectively and safely. Our responsibilities are already overwhelming running a City with significant and urgent needs. Additionally, I do not support transferring this service function to a third party contractor where the City is still responsible for the cost, the management, the hiring and firing of the firm, the risk, and the compliance deadlines while still being saddled with the structural deficits we will face if the City does not have the use of the sale proceeds from Aqua.

**Q. Please refer to Appendix A to your testimony. Please provide a high-level overview of this schedule.**

A. This schedule is attempting to show the net financial public benefit to the City and its citizens each year if the sale proceeds are realized. This is an important schedule. We understand that there will likely be wastewater rate increases associated with the sale. However, this schedule shows there are real financial public benefits that need to be considered and weighed, in addition to potential wastewater rate increases. The schedule compared the difference between the annual monetary benefit the public would receive

versus the annual amount the public would have to pay in wastewater rate increases if the sale is approved.

The gross proceeds of $41,250,000 represent the purchase price, from which various costs, such as transaction fees, litigation settlement with municipal customers, debt repayment, and external payments, are deducted to leave net proceeds of $35,300,937 available for public use. Additionally, these proceeds generate interest income and result in savings by eliminating prior debt obligations. In addition to interest income and savings in eliminating debt, other anticipated public benefits include:

* property tax reductions
* new tax revenue from Aqua
* avoided wastewater rate increases that the City otherwise would have to make, and
* employee pay increases.

These financial benefits collectively amount to $4,560,037. While the sale creates a revenue deficiency of $4,198,000 due to increased requirements post-sale, the net public benefit of $362,037 demonstrates that the transaction ultimately provides positive financial value to the public. This needs to be recognized and considered.

**Q. Please walk through this Appendix A in more detail explaining each line and number.**

A. The total gross proceeds from the transaction amount to $41,250,000, representing the revenue paid by Aqua to purchase the System before any deductions. Estimated transaction fees of $1,000,000 cover costs like legal and advisory expenses. Of the total proceeds,

$5,449,063 is allocated to repay general obligation bond debt, while $1,500,000 is designated for outside payments to external entities. Additionally, $2,000,000 in cash will be available for immediate use at closing, leaving net proceeds of $35,300,937 for deposit after deductions.

Annual interest income from the net proceeds is projected at $1,588,542 (4.50% assumed rate), and interest savings of $680,901 are achieved by eliminating general fund debt service obligations. Residents benefited approximately $720,000 further from a property tax reduction that has already been made 3 years prior in anticipation of the sale, equivalent to a 5-mill decrease. About $50,000 in tax revenue is anticipated from Aqua once they take ownership. Avoided rate increases, calculated on a net present value basis over ten years, yield savings of approximately $1,270,593. Lastly, employees were given rate increases in anticipation of the sale that exceed the normal range of increases which is approximated at $250,000. The total of these amounts are $4,560,037 and are referred to as "Proceeds for Public Benefit."

Current annual revenue generated by sewer rates stands at $2,534,808, whereas the revenue requirement once Aqua takes over is $6,732,808, resulting in a revenue deficiency of $4,198,000 or 165.61%. Despite this shortfall, the "Proceeds for Public Benefit" outweigh the impact of the revenue deficiency amount by $362,037, illustrating that the transaction provides a "Net Public Benefit".

**Q. Can you provide any other closing thoughts?**

A. There is a clear, measurable, and substantial public benefit as a result of the sale of the sewer utility assets to Aqua. As I have already explained, the City has significant financial

and managerial pressures that can be ameliorated by the sale. The implications of which, both on the City's financials and the constituents have been carefully considered by the City and its financial advisors. For all of these reasons, I and the City strongly support the sale to Aqua.

## III. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

# APPENDIX A

# *City of Beaver Falls*
# *Public Benefits Analysis - Acquired Customers*

**BF Public Benefits Calc**

| | | Amount | Source: |
|---|---|---|---|
| | Gross Proceeds | $41,250,000 | -Appendix A |
| | Estimated Transaction Fees | ($1,000,000) | |
| | GO Debt Repayment | ($5,449,063) | As of 12/31/2024 |
| | Outside Payments | ($1,500,000) | - Per settlement with Bulk Users |
| | Cash on hand Available for use @ Closing | $2,000,000 | |
| | **Net Proceeds - for Deposit (Public)** | **$35,300,937** | |
| | Interest Income | $1,588,542 | - 4.50% APR |
| | Interest Savings (Remove Debt Service Gen Fund) | $680,901 | -As of 12/31/2024 |
| | Property Tax Redution to residents (5 mills) | $720,000 | -Appromimate per actual financial results. |
| | Property Tax - Received from Aqua | $50,000 | -Appendix A - TOTI Tab |
| | Avoided Rate Increases for Apples to Apples (NPV 10 yr) | $1,270,593 | -Net Present Value |
| | Pay Increases to Employees | $250,000 | |
| ***A.)*** | **Proceeds for Public Benefit ==========>** | **$4,560,037** | |

***Rate Impact***

| | | | |
|---|---|---|---|
| | Present Revenue | $2,534,808 | - Appendix A |
| | Revenue Requirement | 6,732,808 | - Appendix A |
| ***B.)*** | **Revenue Deficiency $ ==========>** | **$4,198,000** | **- Appendix A - 100% Cost of Service** |
| | **Revenue Deficiency %** | **165.61%** | |
| ***C.)*** | **Net Public Benefit / (Impact) ==========>** | **$362,037** | ***- A.) minus B.) = C.)*** |

| | Current | | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Net Operating Surplus (Deficit) After Capital & Debt** | | | **158,243** | **27,902** | **1,098,834** | **867,689** | **1,014,453** | **513,649** | **527,822** | **343,787** | **150,533** | **295,502** |
| *As % of Total Expenses* | | | *5.19%* | *0.88%* | *33.63%* | *25.65%* | *28.96%* | *14.16%* | *14.05%* | *8.84%* | *3.74%* | *7.08%* |
| **Fund Balance Buildup** | | | **-** | **-** | **-** | **867,689** | **1,882,142** | **2,395,791** | **2,923,613** | **3,267,400** | **3,417,933** | **3,713,435** |
| **Average Monthly Bill** | | | | | | | | | | | | |
| **In City - Keep System (Estimated - 4,000 Gal Month)** | **$41** | | **$55** | **$60** | **$60** | **$60** | **$60** | **$60** | **$60** | **$60** | **$63** | **$63** |
| **% Change** | | | **35%** | **10%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **5%** | **0%** |
| | | | **158,243** | **27,902** | **1,098,834** | **867,689** | **1,014,453** | **513,649** | **527,822** | **343,787** | **150,533** | **295,502** |
| | **2022 Audit** | | **2025** | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2033** |
| **Operating Revenues** | | | | | | | | | | | | |
| Sewage Charges | 3,148,123 | | 4,249,966 | 4,674,963 | 4,674,963 | 4,674,963 | 4,674,963 | 4,674,963 | 4,674,963 | 4,674,963 | 4,908,711 | 4,908,711 |
| *% Increase* | | | **35.00%** | **10.00%** | **0.00%** | **0.00%** | **0.00%** | **0.00%** | **0.00%** | **0.00%** | **5.00%** | **0.00%** |
| Tap-In Fees | 4,500 | **2.50%** | 4,613 | 4,728 | 4,846 | 4,967 | 5,091 | 5,219 | 5,349 | 5,483 | 5,620 | 5,760 |
| Misc. Revenues | 2,449 | **2.50%** | 2,510 | 2,573 | 2,637 | 2,703 | 2,771 | 2,840 | 2,911 | 2,984 | 3,058 | 3,135 |
| Subtotal - Operating Revenues | 3,155,072 | | 4,257,089 | 4,682,263 | 4,682,446 | 4,682,633 | 4,682,825 | 4,683,021 | 4,683,223 | 4,683,429 | 4,917,389 | 4,917,606 |
| **Operating Expenses** | | | | | | | | | | | | |
| Contractual Services | 712,562 | **3.00%** | 733,939 | 755,957 | 778,636 | 801,995 | 826,055 | 850,836 | 876,361 | 902,652 | 929,732 | 957,624 |
| Wages & Benefits | 813,193 | **4.00%** | 845,721 | 879,550 | 914,732 | 951,321 | 989,374 | 1,028,949 | 1,070,107 | 1,112,911 | 1,157,427 | 1,203,724 |
| Administrative | 330,000 | **4.00%** | 343,200 | 356,928 | 371,205 | 386,053 | 401,495 | 417,555 | 434,257 | 451,628 | 469,693 | 488,481 |
| Office | 5,573 | **3.00%** | 5,740 | 5,912 | 6,090 | 6,272 | 6,461 | 6,654 | 6,854 | 7,060 | 7,272 | 7,490 |
| Repair & Maintenance | 287,892 | **3.00%** | 296,529 | 305,425 | 314,587 | 324,025 | 333,746 | 343,758 | 354,071 | 364,693 | 375,634 | 386,903 |
| Billing Expense | 20,226 | **3.00%** | 20,833 | 21,458 | 22,101 | 22,765 | 23,447 | 24,151 | 24,875 | 25,622 | 26,390 | 27,182 |
| Depreciation | 248,097 | | | - | - | - | - | - | - | - | - | - |
| Engineering | 59,844 | **3.00%** | 61,639 | 63,488 | 65,393 | 67,355 | 69,376 | 71,457 | 73,601 | 75,809 | 78,083 | 80,425 |
| Utilities | 166,412 | **5.00%** | 174,733 | 183,469 | 192,643 | 202,275 | 212,389 | 223,008 | 234,158 | 245,866 | 258,160 | 271,068 |
| Chemicals/Chlorine | 42,934 | **5.00%** | 45,081 | 47,335 | 49,701 | 52,187 | 54,796 | 57,536 | 60,412 | 63,433 | 66,605 | 69,935 |
| Sludge/Grit removal | 108,355 | **3.00%** | 111,606 | 114,954 | 118,402 | 121,955 | 125,613 | 129,382 | 133,263 | 137,261 | 141,379 | 145,620 |
| Janitorial Services | 1,394 | **3.00%** | 1,436 | 1,479 | 1,523 | 1,569 | 1,616 | 1,665 | 1,714 | 1,766 | 1,819 | 1,873 |
| Gas & Oil | 4,278 | **5.00%** | 4,492 | 4,716 | 4,952 | 5,200 | 5,460 | 5,733 | 6,020 | 6,321 | 6,637 | 6,968 |
| Equipment | 3,766 | **3.00%** | 3,879 | 3,995 | 4,115 | 4,239 | 4,366 | 4,497 | 4,632 | 4,771 | 4,914 | 5,061 |
| Operating Supplies | 344 | **3.00%** | 354 | 365 | 376 | 387 | 399 | 411 | 423 | 436 | 449 | 462 |
| Uniforms | 2,995 | **3.00%** | 3,085 | 3,177 | 3,273 | 3,371 | 3,472 | 3,576 | 3,683 | 3,794 | 3,908 | 4,025 |
| Permits & Testing | 21,823 | **3.00%** | 22,478 | 23,152 | 23,847 | 24,562 | 25,299 | 26,058 | 26,840 | 27,645 | 28,474 | 29,328 |
| Certification & Training | 858 | **3.00%** | 884 | 910 | 938 | 966 | 995 | 1,024 | 1,055 | 1,087 | 1,119 | 1,153 |
| Small Tools | 3,821 | **3.00%** | 3,936 | 4,054 | 4,175 | 4,301 | 4,430 | 4,562 | 4,699 | 4,840 | 4,986 | 5,135 |
| Insurance | 30,273 | **3.00%** | 31,181 | 32,117 | 33,080 | 34,073 | 35,095 | 36,148 | 37,232 | 38,349 | 39,499 | 40,684 |
| Misc. Expenses | 1,213 | **3.00%** | 1,249 | 1,287 | 1,325 | 1,365 | 1,406 | 1,448 | 1,492 | 1,537 | 1,583 | 1,630 |
| Property Damage | 26,232 | **3.00%** | 27,019 | 27,830 | 28,664 | 29,524 | 30,410 | 31,322 | 32,262 | 33,230 | 34,227 | 35,254 |
| Line Rental Expense | 100,000 | **3.00%** | 103,000 | 106,090 | 109,273 | 112,551 | 115,927 | 119,405 | 122,987 | 126,677 | 130,477 | 134,392 |
| Sewer-Line Reimbursement | 200,000 | **3.00%** | 206,000 | 212,180 | 218,545 | 225,102 | 231,855 | 238,810 | 245,975 | 253,354 | 260,955 | 268,783 |
| Subtotal - Operating Expenses | 3,192,085 | | 3,048,012 | 3,155,828 | 3,267,578 | 3,383,410 | 3,503,480 | 3,627,946 | 3,756,975 | 3,890,739 | 4,029,419 | 4,173,201 |
| **Net Operating Surplus (Deficit)** | **(37,013)** | | **1,209,077** | **1,526,436** | **1,414,868** | **1,299,223** | **1,179,345** | **1,055,076** | **926,248** | **792,690** | **887,970** | **744,405** |
| **Capital** | | | | | | | | | | | | |
| Pay-Go Capital Expenses | | | 1,050,834 | 1,498,534 | 316,034 | 431,534 | - | 376,534 | 233,534 | - | 288,534 | - |
| Debt Serivce | | | - | - | - | - | 164,892 | 164,892 | 164,892 | 448,903 | 448,903 | 448,903 |
| Subtotal - Capital | - | | 1,050,834 | 1,498,534 | 316,034 | 431,534 | 164,892 | 541,426 | 398,426 | 448,903 | 737,437 | 448,903 |
| **Net Operating Surplus (Deficit) After Capital & Debt** | **(37,013)** | | **158,243** | **27,902** | **1,098,834** | **867,689** | **1,014,453** | **513,649** | **527,822** | **343,787** | **150,533** | **295,502** |

# APPENDIX B

20-Sep-2023 | 18:16 EDT

# Beaver Falls, PA Series 2017AB GO Bond Rating Outlook Revised To Stable From Positive On Expected Fund Deficits

TORONTO (S&P Global Ratings) Sept. 20, 2023--S&P Global Ratings revised its outlook to stable from positive and affirmed its 'BB+' rating on Beaver Falls, Pa.'s series 2017A general obligation (GO) notes and 2017B GO bonds.

"The outlook revision reflects the delay of the sale of the bonds to 2024, which resulted in expected general fund deficits in fiscal years 2022 and 2023," said S&P Global Ratings credit analyst Bobby Otter.

The 2017A notes and 2017B bonds are general obligations of the city, secured by its full faith, credit, and taxing power, which benefits from an unlimited ad valorem property tax.

Beaver Falls expected to sell its wastewater treatment plant in 2022 to Aqua (Essential Utilities Inc. is the parent company) for $41.25 million. However, the sale was, and remains, delayed due to surrounding municipalities making a claim on the sale. Officials expect the claims will be resolved shortly, a mediator is reviewing these claims, after which

the Pennsylvania Public Utility Commission will review the sale once again. As a result, the sale is not expected to be finalized until early 2024. Due to the delay in the sale, the city expects to report a $1.5 million deficit in fiscal 2022 and continues to work to reduce expenditures in fiscal 2023. While the fiscal 2022 audit is not yet available, the city's fund balance will likely be negative, and we expect its liquidity position will decline as well. The city received two $1 million non-refundable upfront payments from Aqua in 2021 and 2023, providing sufficient liquidity to ensure the city meets all its debt obligations.

We continue to view the city's finances as structurally imbalanced, as expenditures continue to outpace revenue. While federal funds boosted the city's finances, the decision to reduce property taxes prior to the sale of the plant has created a new budgetary pressure. If the sale is delayed beyond the second half of 2024 or is not approved, we believe the city's finances and liquidity will be pressured further.

Voter approval to change to a home-rule charter city from a third-class city, which went into effect Jan. 1, 2022, provided the city's legal flexibility to raise revenue and reduce expenditures it previously did not have. However, we believe Beaver Falls still has long-term challenges because its practical ability to raise revenue is hampered by a weak tax base and limited capacity to reduce spending. Favorably, the city's pension plans are not a pressure, and it has made strong plan funding progress in recent years. It has a dedicated 0.5% earned income tax for pensions, which has been generating amounts above its annual required contributions.

The one-year stable outlook is based upon the likelihood the sale of the city's wastewater treatment plant, which should occur in the next year, vastly improving the city's finances and liquidity position. The stable outlook is also based upon the recent one-time upfront payment from Aqua, which stabilized the city's liquidity position over the outlook period.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.spglobal.com/ratings for further information. Complete ratings information is available to RatingsDirect subscribers at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.spglobal.com/ratings.

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## Table Of Contents

Rating Action

Stable Outlook

Credit Opinion

Related Research

## Summary:

# Beaver Falls, Pennsylvania; General Obligation

| Credit Profile | | |
|---|---|---|
| Beaver Falls GO (BAM) | | |
| *Unenhanced Rating* | BB+(SPUR)/Positive | Outlook Revised |
| Beaver Falls GO (BAM) | | |
| *Unenhanced Rating* | BB+(SPUR)/Positive | Outlook Revised |

Many issues are enhanced by bond insurance.

## Rating Action

S&P Global Ratings revised its outlook to positive from stable on Beaver Falls, Pa.'s series 2017A general obligation (GO) notes and 2017B GO bonds. At the same time, we affirmed our 'BB+' rating on the city's bonds.

The positive outlook reflects the continued improvement in Beaver Falls' liquidity position due to one-time federal stimulus revenue and the potential for a significant increase in the city's reserves and liquidity following the sale of its wastewater treatment plant that is pending approval by the Pennsylvania Public Utility Commission (PUC). We still view the city's general operating performance as structurally imbalanced, which caps the rating.

The 2017A notes and 2017B bonds are GOs of the city, secured by its full faith, credit, and taxing power, which benefits from an unlimited ad valorem property tax.

### Credit overview

Beaver Falls' general fund operations have been structurally imbalanced for several years. We view its 2022 budget as structurally imbalanced as well because it relies on at least $500,000 (6% of the budget) of one-time revenue from the sale of its wastewater treatment plant. The asset purchase agreement with Aqua (an Essential Utilities Co. rated 'A/Stable') has been approved by the city council for $41.25 million and would be financially transformative for the city. Officials report that the sale is expected to close in the fall of 2022, though on a recent earnings call, the chairman and CEO of Essential Utilities estimated approval may happen just after Jan. 1, 2023. If the sale does not take place until after the end of the fiscal year, we expect Beaver Falls will close with another deficit, but the city's cash position is expected to remain healthy due to federal stimulus funding and a $1 million non-refundable upfront payment from Aqua that was received in 2021. Management reports that 2022 will be the first year that it does not have to cash-flow borrow in more than a decade. If the sale is delayed beyond 2023 or is not approved, we believe the city's finances will be pressured.

Another significant change for the city is recent voter approval to change to a home-rule charter city from a third-class city, effective Jan. 1, 2022. The change increased the city's legal flexibility to raise revenue and reduce expenditures; however, we believe it still has long-term challenges because its practical ability to raise revenue is hampered by a weak tax base and limited capacity to reduce spending. Favorably, the city's pension plans are not a pressure, and it has made strong plan funding progress in recent years. It has a dedicated 0.5% earned income tax (EIT) for pensions,

which has been generating amounts above its annual required contributions (ARCs).

The 'BB+' rating reflects our assessment of the city's:

- Weak economy with very low wealth and income metrics, but some access to the Pittsburgh metropolitan statistical area (MSA);
- Vulnerable Financial Management Assessment (FMA), but a very strong institutional framework as a home-rule charter city;
- History of structural imbalance and very weak reserve and liquidity levels, coupled with a limited capacity to reduce expenditures or raise revenues; and
- Very weak debt and contingent liability position relative to its tax base.

### Environmental, social, and governance

We view Beaver Falls' low wealth and income levels as a social risk that could inhibit the city's ability to raise or collect revenue. Its approval by voters to change to a home-rule charter city is a governance opportunity that will increase its legal ability to raise revenue; however, its demographic profile limits its practical ability to do so. We view environmental factors as neutral in our credit analysis.

## Stable Outlook

### Upside scenario

We could raise the rating, potentially by multiple notches, if the city's cash position substantially improves due to the sale of its wastewater treatment plant.

### Return to stable scenario

If the city's liquidity does not improve as expected because the sale of the wastewater treatment plant is not approved and the city does not make the necessary revenue or expenditure adjustments to maintain a stronger cash position, we would likely take negative rating action.

## Credit Opinion

### Very low wealth and income metrics limit practical revenue-raising capabilities

Beaver Falls is in Beaver County about 30 miles northeast of Pittsburgh. Resident incomes are significantly lower than the U.S. average. The Beaver County economy was once dominated by the steel industry, but as the steel mills closed in 1980s and 1990s, the local economy became more reliant on smaller manufacturing and service-oriented industries. As a result, unemployment spiked at 18.2% in April 2020 at the height of the COVID-19 shutdown, and its average annual rate was above 10% in 2020. It has come down to 5.5% as of March 2022 but was still somewhat higher than the state and national rates for the same period. If the U.S. were to enter a recession, we believe it's likely that the Beaver Falls economy will contract at a greater rate than the U.S. (For more information on S&P Global Ratings' view of the U.S. economy, see "U.S. Business Cycle Barometer: Testing The Economy's Resilience," published May 20, 2022, on RatingsDirect.)

The county's property values are also significantly lower than average. Beaver County has not completed a reassessment since the 1980s, but a reassessment is underway and expected to be completed by 2023. The city believes that there may be significant changes for individual resident assessed values (AVs), but it is not anticipating a substantial change in total AV.

The city may see some residual benefits from a $6 billion Shell ethane cracker plant that is under construction about 10 miles to the south. The plant will provide an estimated 600 permanent jobs and numerous business opportunities for local companies. Officials report that they are seeing some growth in the city's downtown, where redevelopment is incentivized through a local economic revitalization tax assistance (LERTA) designation. However, our view of the city's economy is likely to remain weak, given its lower wealth and incomes as well as its greater share of jobs susceptible to economic cycles.

### Vulnerable FMA due to lack of financial policies and a history of structural imbalance

Our overall assessment of management is weak because the city lacks policies in many of the areas we believe are most critical to supporting credit quality and it has a history of structural imbalance without an adequate plan to correct it at this time. Following the city's change to a home-rule charter city, it hired a CFO, a position that had not previously existed. The new CFO is in the process of setting up new financial policies, procedures, and software. The city also continues to work with the state's Strategic Management Planning Program (STMP) to address its fiscal difficulties, and it has received a distressed communities technical assistance grant through the federal government and is working to create a plan to address its structural imbalance.

Currently, the management team's key practices include:

- Reviewing five years of historical trends to project revenue and expenditure for its budget and using outside sources of information;
- Monthly revenue and expenditures reports provided to council;
- Monthly reports on investment holdings and earnings to council;
- Planning to mitigate risks posed by cyber-attacks;
- No formal or informal long-term financial or capital plans; and
- No investment, debt, or reserve policies.

### History of structural imbalance and deficit financing

The city's general fund has been structurally imbalanced for several years. In some years, these deficits have been masked by transfers from its sewer fund or by deficit financings. Its general fund balance increased in 2019 due to a deficit financing, so we have adjusted the city's available fund balance to show what it would have been without that financing.

Beaver Falls' 2022 budget assumes that the sale of its wastewater treatment plant will be approved this fiscal year and the city will net $39.8 million from the sale. It plans to transfer $39.3 million out of the general fund to be divided between a trust fund to generate interest income for the city ($25 million) and various debt and capital expenditures ($14.3 million). The city will use $500,000 (6% of recurring budgeted expenditures) from the sale during fiscal 2022 to

offset increased general fund expenses and lower revenue; therefore, we believe that the 2022 budget is structurally imbalanced. In anticipation of the windfall revenue and as property tax relief for residents, the city lowered its property tax rate by 5 mills, or roughly $300,000. Officials report they plan to keep property taxes at this lower level. Despite the structural imbalance in 2022, we believe the rating could improve due to the windfall revenue given the significant improvement in reserves and liquidity. Over the long term, further upward rating potential would depend on the creation of a plan to eliminate its structural imbalance.

The city's 2021 budget was break-even, but preliminary estimates from management show just over a $1 million surplus due to one-time revenue. Its revenues were $1.6 million better than budget, mostly due to $495,000 of federal American Rescue Plan Act (ARPA) and other state grants as well as a $1 million upfront payment from Aqua related to the asset sale. Expenditures were $585,000 higher than budget due to the spending of grant funds, as well as various higher costs for items like fuel, building repairs, and overtime. As a result, we expect the city's general fund balance to increase considerably for 2021.

We believe the city's 2020 general fund results improved somewhat from prior years. After adjusting out roughly $500,000 of one-time additional contributions to its pension plans above its minimum municipal obligation (MMO), we believe it would have posted a slight surplus. Still, we note that the operating results were likely affected somewhat by $233,000 of federal aid received during 2020. The city's total general fund balance decreased by $430,000, and its unassigned balance fell by $140,000 due to some increases in its non-spendable balances. Overall, if it had not completed its deficit financing in 2019, we believe its general fund balance would still be negative.

The city's largest revenues come from charges for services (36% of 2022 budgeted recurring general fund revenue), property taxes (23%), and other Act 511 taxes (15%). Its ability to raise these revenues was very limited as a third-class city, but as a home-rule charter city, it is no longer subject to state property tax caps. However, practically, it may be difficult to raise property taxes given its lower wealth and incomes.

### Improved liquidity projected due to federal stimulus

In assessing the city's cash position, we removed $600,000 of bond proceeds from its cash figures as we expect them to be spent down, and we also removed $1.7 million in its Joint Sewer Users Fund as these funds are restricted and cannot be used for cash flow. In our view, the city has had strong access to external liquidity. In addition to long-term bonds, it issues tax anticipation notes (TANs) to help with cash flow during the year and reports no difficulty accessing bank loans. Notably, officials tell us that 2022 will be the first year in a long time that it does not need to borrow for cash-flow purposes because the federal stimulus funds have improved its cash position.

We view Beaver Falls' 2019 GO note ($495,898 par outstanding), issued with First National Bank of Pennsylvania, as a contingent liquidity risk because it contains events of default that we consider permissive as well as cross-default provisions. In the event of default, the city is required to pay all unpaid principal and accrued interest on demand by the bank. The amount subject to acceleration is 39% of the city's total governmental cash and 6% of general fund revenue.

### Very high debt burden relative to tax base but moderate relative to budget

In our view, Beaver Falls' debt and contingent liability profile is adequate, because annual debt service costs are moderate and the city benefits from a rapid amortization schedule. However, its overall debt metrics relative to market

value are very high, indicating that overall affordability is weak.

The city historically issued TANs for cash-flow purposes, which it repays during the same fiscal year. It issued $600,000 in TANs in 2021 but will not need to issue them in 2022 due to the liquidity provided by ARPA funds. Management reports that it does not have any additional debt plans, and is working to eliminate one-time revenues from its budgets.

### Pension and other postemployment benefit liability profile

We consider Beaver Falls' pension liabilities large relative to the city's budget, but do not view them as a budgetary pressure given our understanding of recent strong funding progress and the city's dedicated EIT for pension costs. Beaver Falls has not yet adopted Governmental Accounting Standards Board Statement No. 68 reporting requirements; however, we reviewed the plans' Jan. 1, 2021 actuarial reports to inform our understanding of the plans' funding progress. The city does not offer other postemployment benefits.

Beaver Falls participated in the following plans (as of Jan. 1, 2021):

- Police Pension Plan: 92.4% funded, with an unfunded actuarial accrued liability (UAAL) of $958,257;
- Firemen's Pension Plan: 94.0% funded, with an UAAL of $325,628; and
- General Employees' Pension Plan: 111.8% funded, with assets over its actuarial accrued liability of $874,552.

Beaver Falls' pension contributions were $1.66 million (18.7% of total governmental fund expenditures) in 2020, which we consider very high; however, contributions were well above the ARC that would have been a more moderate 8.7% of total governmental fund expenditures. The city has dedicated EIT revenue that has been more than sufficient to cover its required contributions, and that cannot be used for another purpose. As a result, management reports the city contributed an additional $498,000 to the plans above its required amount in 2020, which improved funded levels.

There is an actuarial plan in place to reach full funding for all three plans, and consistent contributions are expected due to the level-dollar amortization basis. As of the Jan. 1, 2021 actuarial valuation, the plans were scheduled to be fully funded within eight and 11 years for the Police and Firemen plans, which is stronger than S&P Global Ratings' guideline of 20 to effectively pay down unfunded liabilities. The General Employees Plan is fully funded. The funds recently lower their interest rate assumption to 6.75% from 7.0%, but this is still higher than our guideline of 6.0%; therefore, we believe there is some risk of cost escalation due to market volatility.

**Beaver Falls, PA -- Key Credit Metrics**

| | Most recent | Historical information | | |
|---|---|---|---|---|
| | | 2020 | 2019 | 2018 |
| **Very weak economy** | | | | |
| Projected per capita EBI % of U.S. | 61 | | | |
| Market value per capita ($) | | 19,463 | | |
| Population | | 8,376 | 8,508 | 8,566 |
| County unemployment rate(%) | | 10.3 | | |
| Market value ($000) | | 163,025 | 159,151 | 159,498 |
| Ten largest taxpayers % of taxable value | 17.6 | | | |

**Beaver Falls, PA -- Key Credit Metrics (cont.)**

| | Most recent | Historical information | | |
|---|---|---|---|---|
| | | 2020 | 2019 | 2018 |
| **Weak budgetary performance** | | | | |
| Operating fund result % of expenditures | | 4.9 | (2.8) | (13.5) |
| Total governmental fund result % of expenditures | | 2.6 | (4.0) | (11.7) |
| **Very weak budgetary flexibility** | | | | |
| Adjusted available reserves % of operating expenditures | | (1.3) | (0.3) | (4.5) |
| Adjusted total available reserves ($000) | | (109) | (23) | (377) |
| **Strong liquidity** | | | | |
| Total government cash % of governmental fund expenditures | | 9 | 18 | 5 |
| Total government cash % of governmental fund debt service | | 111 | 164 | 58 |
| **Weak management** | | | | |
| Financial Management Assessment | Vulnerable | | | |
| **Weak debt & long-term liabilities** | | | | |
| Debt service % of governmental fund expenditures | | 8.4 | 11.1 | 9.2 |
| Net direct debt % of governmental fund revenue | 83 | | | |
| Overall net debt % of market value | 10.5 | | | |
| Direct debt 10-year amortization (%) | 75 | | | |
| Required pension contribution % of governmental fund expenditures | | 9.2 | | |
| OPEB actual contribution % of governmental fund expenditures | | N/A | | |
| **Very strong institutional framework** | | | | |

EBI--Effective buying income. OPEB--Other postemployment benefits.

## Related Research

- Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

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**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 1-R

# REBUTTAL TESTIMONY OF WILLIAM C. PACKER

**With Regard To:**
**Revenue Deficiency and Rate Impact**
**Notices**
**Affirmative Public Benefits**
**Easement and Property Rights**
**Cost of Service Study**

**February 24, 2025**

**TABLE OF CONTENTS**


I. INTRODUCTION ..... 1
II. RESPONSE TO OCA WITNESS DEMARCO ..... 3
III. RESPONSE TO I&E WITNESS KELLER ..... 16
IV. RESPONSE TO I&E WITNESS CLINE ..... 19
V. RESPONSE TO OSBA WITNESS FORBES ..... 20
VI. CONCLUSION ..... 24

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Essential Utilities, Inc. ("Essential"), as Vice President, Regulatory Accounting and Regional Controller. In this position, I am Controller of Aqua Pennsylvania, Inc. ("Aqua PA") and oversee the financial operations of Aqua New Jersey, Inc. ("Aqua NJ"). Additionally, I oversee rate issues for all subsidiaries of Essential. Aqua PA is the parent company to Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company").

**Q. Are you the same William C. Packer who submitted direct testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Aqua's Application with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 17, 2023. I also submitted supplemental direct testimony with Aqua's Amended Application filed with the Commission on March 28, 2024.

**Q. What is the purpose of your rebuttal testimony?**

A. My rebuttal testimony addresses portions of the direct testimony of the Office of Consumer Advocate ("OCA") witness Nicholas A. DeMarco, the Commission's Bureau of

Investigation and Enforcement ("I&E") witnesses Christopher Keller and Ethan H. Cline, and Office of Small Business Advocate ("OSBA") witness Forbes. Specifically, my rebuttal testimony responds to each parties' position with respect to Aqua's proposed acquisition of the wastewater system and assets (the "System") of the City of Beaver Falls ("City" or "Beaver Falls").

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. Yes. I am sponsoring Aqua Exhibit WCP-1R.

**Q. Please briefly summarize the positions of the other parties that you will address in your rebuttal testimony.**

A. The OCA claims that Aqua has not supported the proposed acquisition of the System by providing affirmative public benefits, and recommends that, if the Commission does approve the acquisition, the Commission should adopt certain conditions regarding identification of certain transaction and closing costs, additional notice requirements, restrictions on closing where easements are missing, restrictions on certain costs related to easements and inclusion of Beaver Falls assets in rate base, and cost of service study ("COSS") filings. Mr. DeMarco's discussion and recommendations regarding environmental compliance of the system and tracking of capital costs will be addressed by Mr. Mark J. Bubel, Sr. Mr. DeMarco's discussion of the operational aspects of the system and recommendations concerning updating Aqua's long-term infrastructure improvement plan ("LTIIP") will be addressed by Mr. Zach Martin. Finally, Mr. DeMarco's discussion

regarding low-income customers, welcome letters, and hardship fund contributions will be addressed by Ms. Rita Black.

I&E does not recommend that the Commission deny the Application, but that certain conditions should be included if the Commission approves the Application, including conditions regarding missing easements, LTIIP updates, and filing a COSS. Mr. Zach Martin will address the LTIIP updates. The OSBA claims that the purchase price and ratemaking rate base is not reasonable, and the Commission should deny the Application, but if the Commission approves the Application, the ratemaking rate base should not exceed the RRR.

## II. RESPONSE TO OCA WITNESS DEMARCO

**Q. Please summarize the arguments and positions made by OCA witness DeMarco in his direct testimony.**

A. The key arguments and positions made by Mr. DeMarco are now the standard practice arguments of the OCA as an agency as a whole, developed over multiple Section 1329 Applications filed before the PUC, including a few such applications that have been appealed to the higher courts. If OCA's arguments were accepted, it would mean that any municipal- or government-run entity in the business of providing water or sewer utility service has no choice but to continue to provide this service to their constituents. OCA's arguments, if accepted, ultimately deny municipal systems in the Commonwealth to decide what services they want to provide, should provide, and who they can delegate that right too. In the OCA's view, investor-owned utilities seeking a certificate of public convenience under Sections 1329 and 1102 of the Public Utility Code, 66 Pa.C.S. §§ 1102

and 1329, would never be on a level playing field with the continued operation under government run systems.

Below are the OCA's main arguments as I have understood them:

- Revenue Requirement Deficiency and Rate Impacts are not outweighed by a showing of public benefits. *See, e.g.*, OCA St. No. 1, at pp. 14-24.
- The Beaver Falls System is not troubled and the City is capable of running the System itself, investing future capital, all at a lower cost of service than Aqua due to the Company's for-profit operating costs that are not charged by municipal run systems, such as income taxes, shareholder returns, and depreciation expense of utility assets in service. According to OCA witness DeMarco, the result is that Beaver Falls would incur less costs running the System itself for the same level of investment. *See, e.g.*, OCA St. No. 1, at pp. 4-11.
- Mr. DeMarco addresses claimed shortfalls in the Company's notice of rate impacts and make recommendations. *See, e.g.*, OCA St. No. 1, at pp. 36-37.
- Overall, OCA witness DeMarco recommends that the acquisition be denied as it does not meet the standards for approval, which he asserts are required by the Public Utility Code, and that there are no affirmative public benefits that outweigh the costs as a result of this transaction. OCA St. No. 1, at p. 25.
- Alternatively, if the Commission were to approve the Company's application, Mr. DeMarco recommends certain conditions for approval. OCA St. No. 1, at pp. 31-38.

**Q. What is your opinion of Mr. DeMarco and the OCA's arguments opposing the application?**

A. The arguments of Mr. DeMarco and the OCA, if accepted, would mean that no certificate of public convenience should ever be granted for a sale of a municipal system to an investor-owned utility. If their arguments were applied even on a historical context, I'll submit the Aqua PA wouldn't exist as a utility in its current form. The differences in costs incurred by investor-owned utilities and municipal systems were present in every acquisition previously completed by the Company, most prior to Section 1329's enactment into law. Even when investor-owned utilities were limited to depreciated original cost, less contributed property, and acquiring systems in Pennsylvania under Section 1101 and 1102, some with a Section 1327 acquisition rate base adjustment, the cost-of-service differences the OCA attempts to leverage here as a basis for denial existed in those non-fair market value ("FMV") acquisitions as well.

Moreover, the rate impact of 165.61% that Mr. DeMarco highlights is due to the very low rates that the City is currently charging; the City's average bill is **$33.38 per month ($100.13 per quarter)**. This average bill is significantly lower than tariffed rates for major public utilities in the Commonwealth.

**Q. Did Mr. DeMarco address or acknowledge the impact of the Beaver Falls system as it relates to economies of scale?**

A. Yes. At pages 28-29 of his testimony (OCA St. No. 1), Mr. DeMarco references my testimony concerning economies of scale that can be achieved as a result of this acquisition. However, his response is to assert that adding customers alone does not increase economies

of scale, and to contend that there is no information to show that the proposed transaction would make rates more affordable.

**Q. Did Aqua provide information regarding the economies of scale that can be achieved?**

A. Yes, in addition to specific operating and maintenance expense reductions noted in my direct testimony, I provided a graph (Figure 1) which showed the difference between the customer served and the cost to serve each customer as acquisitions were added as one of Aqua's systems. That graph, which I will update later in this rebuttal testimony demonstrates a declining "cost per customer" as measured by the weighted average revenue requirement for each system since the passage of Section 1329 of the code.

**Q. Please explain the importance of what this graph is showing as it relates to the impact of the acquisition of FMV systems such as Beaver Falls on existing customers rates.**

A. I must emphasize the importance of what graph is showing. Revenue requirement includes all components of cost of service in the utility rate making formula. Rate base, operating expenses, depreciation, income taxes, and lastly pre-tax return. Since 2016, this graph demonstrates that as Aqua has acquired systems under Section 1329, its consolidated revenue requirement per customer **has decreased**. The Company is providing sewer utility service to more customers at a **lower consolidated cost**. This is the very economies of scale showing that Mr. DeMarco claims has not been made. I disagree.

**Q. At pages 11-13 of OCA St. No. 1, Mr. DeMarco identifies the large number of Beaver Falls residential customers who are low income, but argues that only a limited subset**

**of low-income customers would see savings over Beaver Falls current rates. Please comment.**

A. Aqua witness Ms. Rita Black will provide the response regarding the benefits that low-income customers on the Beaver Falls System will receive if this acquisition is approved, as a part of her rebuttal testimony (Aqua Statement No. 9-R).

**Q. At page 14 of OCA St. No. 1, Mr. DeMarco references other pending Aqua Section 1329 acquisitions. Should these be relevant to this proceeding?**

A. No, as their impacts and assumed approval makes doing so speculative and should be given no weight.

**Q. At pages 17 to 20 of OCA St. No. 1, Mr. DeMarco references the Commission's recent Tentative Supplemental Implementation Order ("TSIO")[1] and Final Supplemental Implementation Order ("FSIO")[2] and the Reasonableness Review Ratio ("RRR") set forth in the FSIO. Should the FSIO be applicable to this proceeding?**

A. No. The FSIO specifically notes for transactions where an asset purchase agreement has been executed and where the application has been filed prior to the entry date of the FSIO that the Commission will give due consideration to the facts and circumstances surrounding the transaction, including the dates at which the asset purchase agreement was signed and the application filed.

[1] Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation, Docket No M-2016-2543193, Final Supplemental Implementation Order (Order entered Feb. 7, 2024)
[2] Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation, Docket No M-2016-2543193, Final Supplemental Implementation Order (Order entered Jul. 2, 2024).

Moreover, it appears Mr. DeMarco's calculation result using his depreciated original cost ("DOC") multiplied by the RRR is slightly flawed and should be corrected. The RRR of 1.68x should be multiplied by the average DOC as submitted in the application of the two UVEs. Here, it appears he has only used Scott Madden Inc.'s ("ScottMadden") DOC, and I believe the number he quotes is incorrect. The Scott Madden DOC is $5,003,844.[3] The Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett") DOC is $7,850,867.[4] The correct DOC, using the average of both the ScottMadden and Gannett Fleming UVE witness calculations is $6,427,266 and when multiplied by 1.68x RRR Factor, the result is $10,797,806, versus Mr. DeMarco's table shown on Page 20 of OCA St. No. 1.

**Q. Even if the FSIO were applicable, does the RRR prevent the Commission from approving this application?**

A. No. The FSIO specifically states that the RRR is only to be a guidepost in assessing the reasonableness of the FMV of a transaction. Further, I am advised by counsel that the provisions of Section 1329 do not provide a cap upon the authorized rate base, which is to be the lesser of the purchase price or the average of the FMV appraisals. If the General Assembly intended to set a cap, it certainly could have done so.

**Q. Mr. DeMarco argues, at page 25 of OCA St. No. 1, that in his opinion the benefits of the acquisition do not outweigh the rate effects. Please respond.**

[3] Aqua Application, Exhibit Q, Schedule 1, p. 2 of 25.
[4] Aqua Application, Exhibit R, Exhibit 7, p. 1 of 3.

A. Aqua has offered compelling and substantial evidence in the record and in contrary to Mr. DeMarco's opinion in this regard. There is clearly a substantial betterment in operational capabilities, one that the elected leadership of the City has come to the decision is in the best interest for their constituents. The City no longer wishes to operate and provide this service which is certainly their right. Section 1329 is a vehicle to do so as enacted by the legislature.

While the City's System is at best, hanging on, it is clearly underinvested and needs pro-active investment. It is not as simple as Mr. DeMarco posits as getting a Pennsylvania Infrastructure Investment Authority ("PENNVEST") Loan or Grant. Aqua witness Zach Martin addresses in his testimony the operational challenges facing the system (Aqua Statement Nos. 3, 3 Supp., and 3-R). Finally, Mr. DeMarco's simply glosses over the significant financial benefits that arise from this sale and the resulting substantial benefits that accrue to the City residents (i.e., the customers). Ms. Wilkins offered her calculations in her Direct Testimony, Appendix A. Mr. DeMarco responds that the OCA "does not weigh in on how a municipality spends the money post-acquisition", however, this completely misses the point that the rate deficiency of $4,288,000 by the City's customers is offset by $4,560,037 of benefits that include interest income, long term debt repayment, interest savings, avoided future rate increases, and other tangible benefits.

For example, the Company acquired the sewer utility assets of Limerick Township in 2018 and as a result, Limerick Township garnered nearly $60 million in net proceeds that were invested to produce future investment earnings that were utilized, and are still being utilized to this day. Attached to my direct testimony is Aqua Exhibit WCP-1R, which is an excerpt from Limerick Township's 2023 Annual Financial Statements that speaks to

the benefits still accruing to the residents to this day and provide offsetting benefits of lower to zero tax increases as compared to the expected and resulting rate increases post sale. Notably, Limerick Township posits that absent a sale, the real estate tax rates "would be at a minimum, 30% higher" and that "[t]his does not include costs the Township would be incurring for Township debt, which was eliminated with the sale proceeds, or financing costs for the new municipal building and fire company buildings, and capital projects completed to date with the sewer monies."[5] The very existence of the financial benefits are contrary to the OCA's assertion of lack of benefit, one that needs to be given considerable weight in this proceeding as it goes to the heart of Section 1329 in the first place.

Mr. DeMarco tries to minimize the transaction by making comparisons to assert "overpayment." His comparison of the sale of a public sewer utility to a car sale is completely off base. Here, we are talking about long lived assets, most at the time of acquisition are often 50, 75, 100, or greater years old. A more relevant comparison of purchase price, economic value, and market value would be in real estate. One would understand that the value of real estate in 2025 is vastly greater than the same real estate in say 1930 or 1950. This is simply an attempt to get "820%" into the record to achieve a "shock and awe" effect that in reality, is not credible.

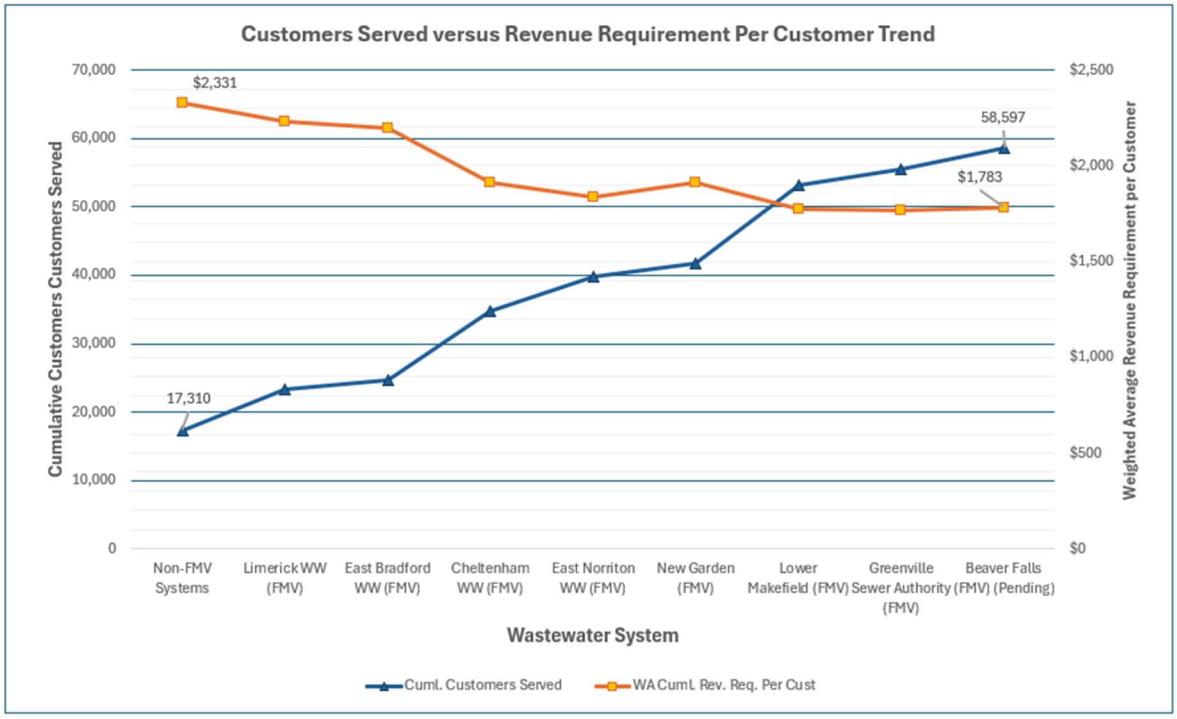
**Q. Mr. DeMarco, at page 29 of OCA St. No. 1, disputes that regionalization/consolidation are an affirmative public benefit. Do you agree?**

A. No. As I noted earlier the importance of revenue requirement per customer and what it demonstrates in terms of economies of scale, I have updated the graph for the most recent

[5] *See* Aqua Exhibit WCP-1R.

acquisitions operated by the Company and including the most recent investments in rate base for both pre-FMV existing customers and those systems which were acquired by using Section 1329. Please see Figure 1R below:

**Figure 1R:**




The above graph (including Beaver Falls) continues to demonstrate growth in customers being provided sewer utility service, while this service is being provided at a lower combined cost of service per customer. This should be given considerable weight by the PUC as it demonstrates the substantial public benefits that would result from Aqua acquisition of the System. Notably, the cost of service per customer prior to any acquisition of a FMV system is approximately 30% greater than the cost today. This is due to a significant amount of investments to upgrade wastewater facilities on our non-FMV systems since 2010. At the same time, completing acquisitions like East Norriton, East

Bradford, Cheltenham, and Lower Makefield added significantly to the Company's customer base at lower cost of service per customer. The end result is a larger, more diversified, wastewater utility that is more capable of balancing cost pressures on rates.

**Q. Mr. DeMarco recommends that Aqua be required to separately track all closing costs by category, and should not be permitted to claim any transaction and closing costs incurred by Beaver Falls in ratemaking rate base (OCA St. No. 1, at pp. 33-34). Please respond.**

A. As a matter of normal business and accounting, the Company tracks all closing costs as a result of any acquisition application and those costs will be claimed as rate base in our next rate filing. All of which would be available to review and any opposition in that next rate case. Consistent with claims made following other acquisitions, Aqua would not be seeking recovery of costs incurred by the selling entity.

**Q. At page 34 of OCA St. No. 1, Mr. DeMarco recommends that Aqua submit a separate COSS for the Beaver Falls system when Aqua files its next base rate. Do you agree?**

A. Yes. Aqua will agree to submit a separate COSS for the System in a similar manner as it has submitted a separate COSS for each system acquired under Section 1329 in its 2021 Base Rate Case proceeding and 2024 Base Rate Case proceeding.

**Q. Does OCA Witness DeMarco make any proposal regarding the rate impact notice to be provided in future Section 1329, 66 Pa.C.S. § 1329, transactions?**

A. Yes. On pages 36-37 of OCA St. No. 1, OCA witness DeMarco recommends that Aqua provide rate impact calculations at 5,000 gallons and 10,000 gallons in addition to the system average for all acquisition proceedings going forward. Then on page 39 Mr. DeMarco recommends that Aqua include the monthly or quarterly estimated volumetric charge along with DSIC impact in notices moving forward. I disagree with this for several reasons.

First, providing rate impact calculations at different levels is not required by Commission regulations (*see* 52 Pa. Code § 53.45). The Company cannot agree to the OCA attempting to re-write Commission regulations that would only apply to Aqua and not to other water or wastewater utilities seeking to acquire municipal systems in the Commonwealth. Moreover, the Commission has clearly discussed the notice of Section 1329 transactions as having an estimated non-binding impact:

> In the Commission's judgment, providing a notice with a complex set of potential rate increase based on a variety of assumptions and scenarios, or even a range of potential outcomes, will not provide any meaningful notice to affected customers. A notice of this sort would be more confusing than informative.[6]

Second, the Commission did not adopt the OCA's proposal to provide differing consumption levels in the Commission's most recent order on the implementation of Section 1329.[7]

Third, this proceeding is not the appropriate proceeding to establish future notice standards. If OCA believes the notice standards should be changed, it should be presented

[6] *See Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193, Final Supplemental Implementation Order, at p. 32 (Order entered February 28, 2019).
[7] *See Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193, Final Supplemental Implementation Order, at pp. 39, 58, 67-72 (Order entered July 2, 2024).

in a separate rulemaking proceeding, where all potentially affected entities will be provided notice and an opportunity to be heard.

Finally in regard to estimating the monthly or quarterly charges, Mr. DeMarco is suggesting that Aqua perform a billing analysis and rate design of what a potential future rate increase would be for a subject system which would not have the benefit of all the inputs that are found in a base rate case. This recommendation should not be adopted by the Commission.

**Q. Does Mr. DeMarco make any recommendations regarding easements in his testimony?**

A. Yes, at page 38 of OCA St. No. 1, Mr. DeMarco recommends that Aqua not be permitted to include the Beaver Falls assets into its rate base until it acquires all outstanding easements. He argues that without this condition, Aqua's ratepayers would be paying for assets that Aqua does not actually own.

**Q. Do you agree with Mr. DeMarco's recommendation?**

A. No. First, if maintenance or repair was needed on an asset where there was not easement, Aqua would notify the property owner that Aqua needs to perform service or repairs on assets on the property and enter into a temporary construction easement as needed until a permanent easement could be obtained from the property owner. On an emergency basis, Aqua would notify the property owner, and enter the property to perform the emergency service.

Second, the Asset Purchase Agreement ("APA") already protects Aqua and its customers in the event an easement was needed. Section 6.05(c) of the APA requires the Seller (Beaver Falls) to obtain all easements to be conveyed to Buyer (Aqua) and for the Seller to pay the costs regarding obtaining the missing easements:

> If . . . Seller determines . . . that there is a Missing Easement, Seller (at its cost and expense) shall take all actions (including the use of its power of condemnation) to obtain any Missing Easements so that the same may be sold, assigned, transferred and conveyed to Buyer at the Closing pursuant to the terms and conditions of this Agreement. The Seller shall pay for all costs and expenses incurred in connection with obtaining each Missing Easement (including any consideration payable to the landowner in connection with condemnation, in lieu of condemnation or otherwise to obtain Missing Easements).

Third, Section 6.05(e) of the APA sets forth a process by which a portion of the purchase price is set aside into an escrow account to be held to ensure that Beaver Falls obtains any missing easements after a closing occurs. This process has been used in several of the Company's acquisition applications, including recent FMV applications that have come before the Commission.

Finally, the Commission has previously ruled that such a condition is unnecessary as Aqua can gain access to address any repair or maintenance needs through temporary and construction easements, the Commission recognized that the provision establishing that the City will be required to pay the costs to obtain the missing easements, and that the APA's provision regarding escrow of a portion of the purchase price makes this condition not required.[8]

[8] *See Application of Aqua Pennsylvania Wastewater, Inc. (Aqua), pursuant to 66 Pa.C.S. §§ 1102 and 1329 for: (1) approval of the acquisition by Aqua of the Greenville Sanitary Authority (GSA); (2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the Borough of Greenville, Hempfield Township, and West Salem Township, Mercer County, Pennsylvania; and (3) an order approving the acquisition that includes the ratemaking rate base of the GSA's wastewater system assets pursuant to Section 1329(c)(2) of the*

Taken together, the steps Aqua would take to obtain access for needed maintenance or emergencies, the APA provisions that require Seller to obtain missing easements, the APA provisions that place a portion of the purchase price in escrow until the easements are obtained after a closing occurs, the fact that closing has occurred in other transactions where the escrow amount is established, and the fact that the Commission has previously ruled against the OCA on a similar condition,, all highlight that Mr. DeMarco's recommendation is unnecessary.

## III. RESPONSE TO I&E WITNESS KELLER

**Q. Please summarize the arguments and positions made by I&E witness Keller in his direct testimony (I&E St. No. 1).**

A. Mr. Keller covers two areas in his testimony. Specifically, (1) easements and other property rights (I&E St. No. 1, at pp. 4-5), and (2) rate impacts with an example of the difference between the pre-tax return on rate base afforded to regulated utilities, compared to the estimated interest rate of long-term debt that could be secured by a municipality to finance approximately $10.2 million in future capital investments (I&E St. No. 1, at pp. 7-10).

**Q. At pages 4-5 of I&E St. No. 1, Mr. Keller discusses needed leases, easements and rights-of-way, and the 2014 capital lease agreement. Do you have any updates or clarifications with respect to those matters?**

*Public Utility Code. Request for Approval of Contracts, including Assignment of Contracts, between Aqua and the GSA, Pursuant to Section 507 of the Public Utility Code*, Docket No. A-2023-3041695, Opinion and Order at p. 81 (Order Entered Dec. 20, 2024) ("GSA Order").

A. Yes. Regarding the 2014 Capital Lease Agreement, and as discussed in the Amended Application filed on March 28, 2024, Aqua and Beaver Falls engaged in settlement discussions with the Contributing Municipalities following the Complaint that was filed in the Court of Common Pleas of Beaver County. A settlement agreement (*see* New Exhibit F18 to the Amended Application) was reached in which New Wastewater Service Agreements (*see* New Exhibits F9-F15 to the Amended application) were established for the conveyance and treatment of wastewater from the Contributing Municipalities to the Beaver Falls system, and any prior agreement concerning collection, conveyance, treatment and disposal of wastewater to Beaver Falls would be terminated. Additionally, the Capital Lease Agreement's term expired at 11:59 PM on December 31, 2024.

**Q. Mr. Keller further proposes that as a condition to closing, an escrow account should be established in the event there are missing ownership interest documents (I&E St. No. 1, at p. 5). Please comment.**

A. Mr. Keller recommends that the Commission condition the approval of Aqua's Application and that closing should not occur until Beaver Falls has (1) identified all missing easements including rights-of-way and other property rights; (2) taken all necessary actions to obtain the missing easements and other property rights so that they may be conveyed to Aqua at closing; and (3) borne all costs and expenses for obtaining and conveying the missing easements and other property rights so that Aqua's ratepayers are not burdened with those costs. Mr. Keller further states that for circumstances beyond Beaver Falls' control where it is unable to transfer all missing easements including rights-of-way and other property rights before or at the closing of the transaction, Aqua and Beaver Falls may proceed to

close the transaction so long as an escrow account be established of an appropriate amount from the purchase price to obtain post-closing transfers.

The reality of utility service is often that not all property rights are accounted for as of closing on a transaction. While Aqua will require that all missing easements be identified, the acquisition should not be prevented from closing if every missing easement has not been acquired and conveyed at closing. Aqua and Beaver Falls have set up a mechanism in the APA to ensure that those easements are obtained by Beaver Falls and that an escrow fund will be established of a portion of the purchase price to ensure the easements are transferred. Moreover, the Commission has previously ruled that a similar condition was unnecessary.[9] For similar reasons as those I provided in response to OCA witness DeMarco, I&E witness Keller's recommendation should not be adopted.

**Q. Mr. Keller expresses concern that Aqua's ownership of the Beaver Falls system, as a private entity, will cause increased costs in comparison to continued municipal ownership of the system (I&E St. No. 1, at pp. 7-10). Please respond.**

A. As I explained previously in response to OCA Witness DeMarco, differences in costs between municipal and private ownership were present in every acquisition previously completed by the Company, most prior to Section 1329's enactment into law. Standing alone, these differences are not a basis for denying approval of the acquisition of a municipal system by Aqua. Furthermore, Mr. Keller also completely ignores the significant financial proceeds that will be afforded to the residents, who are also customers, within the City. Those proceeds produce financial benefits that ultimately are for the

[9] *See* GSA Order, at p. 81.

customers in the custody of their duly elected officials. The record evidence demonstrates that the revenue deficiency occasioned by the potential acquisition being approved are offset entirely. To have a one sided, impact only argument and basis for denial should be rejected.

## IV. RESPONSE TO I&E WITNESS CLINE

**Q. Please summarize the arguments and positions made by I&E witness Cline in his direct testimony (I&E St. No. 2).**

A. Mr. Cline recommends that the Commission apply three conditions: (1) that Aqua's LTIIP be amended within 90-days of closing to include the System (I&E St. No. 2, at p. 10); (2) that Aqua not include Beaver Falls investments in its DSIC unless it is charged to customers (I&E St. No. 2, at pp. 9-10); and (3) Aqua reflect Beaver Falls as a separate COSS in its next base rate case (I&E St. No. 2, at pp. 10-14).

**Q. Please comment on the recommendation that Aqua amend its LTIIP within 90 days of closing to include Beaver Falls?**

A. Mr. Zach Martin will address the recommendation on the LTIIP in his rebuttal testimony.

**Q. Please respond to Mr. Cline's second recommendation.**

A. I do agree that the Company would not include incremental investments in Beaver Falls in the DSIC until Beaver Falls customers are subject to the DSIC.

**Q. Mr. Cline also recommends that Aqua reflect Beaver Falls as a separate COSS in its next base rate case. Please comment.**

A. Mr. DeMarco makes a similar recommendation. Aqua agrees with this condition as set forth in response to Mr. DeMarco's testimony.

**Q. Do you agree with Mr. Cline's recommendation that the Contributing Municipalities should be separately identified in the Beaver Falls COSS?**

A. I believe this recommendation makes logical sense. However, I would reserve my final opinion until I am able to see the resulting rate design and cost of service analysis that goes into evaluating this change.

## V. RESPONSE TO OSBA WITNESS FORBES

**Q. Please summarize the arguments and positions made by OSBA witness Forbes in her direct testimony (OSBA St. No. 1).**

A. Ms. Forbes recommends that the Commission reject Aqua's proposed acquisition of Beaver Falls, arguing that a ratemaking rate base of $41,250,000 has not been shown to be reasonable (OSBA St. No. 1, at p. 9). Alternatively, Ms. Forbes recommends that the acquisition be approved subject to the condition that the acquisition premium eligible for inclusion rate base be capped at the RRR, which Ms. Forbes asserts should not exceed $8,454,113 (OSBA St. No. 1, at pp. 9-10).

**Q. What is your opinion of Ms. Forbes primary recommendations?**

A. I disagree with Ms. Forbes that the ratemaking rate base proposed in this transaction is not reasonable. The City and the Company complied with the requirements of Section 1329, which provide the manner by which to assess the reasonableness of the purchase price by certified UVEs. Ms. Forbes's testimony in this matter glosses over the fact that Section 1329 of the Public Utility Code, as enacted by the legislature, set out the process and procedure for valuating utility assets that were part of a municipal to investor-owned utility transaction. The whole point of Section 1329 was to provide municipal owners of utility systems the option to sell their system at a FMV that recognizes the true value of their assets. It was understood and clear that acquisitions using Section 1329 would have purchase prices that exceeded the historical benchmark of depreciated original cost when first devoted to public use. OSBA witness Forbes' assertions of incentives of the utility and the seller to "inflate" the purchase price are unfounded. This transaction was negotiated at arms-length. Both the City and the Company take into consideration the financial impacts, including rates, and other factors to arrive at a purchase price that is agreeable to both.

**Q. Ms. Forbes alternatively contends that the Commission should limit the amount included in rate base to the premium that would be computed under the RRR (OSBA St. No. 1, at pp. 9-10). Please comment.**

A. I am advised by counsel that Section 1329 does not authorize the Commission to establish a ratemaking rate base based upon a ratio derived from depreciated original cost. The statute provides for rate base to be set at the lesser of purchase price or the average of two FMV appraisals. Further, as noted in my response to OCA witness DeMarco, Ms. Forbes

similarly is incorrect in her calculation of the RRR as she only used the DOC from the ScottMadden appraisal and did not average the DOC of both the ScottMadden and Gannett appraisals.

**Q. Ms. Forbes asserts, at page 6 of OSBA St. No. 1, that Aqua is incentivized to attain as high an acquisition price as possible. Do you agree?**

A. I do not. The Company and the municipality understand that monetizing their system occasions a corresponding rate increase to customers and constituents. The reality is that the lower the purchase price paid for a system that can meet the needs of the municipality, will at the same time provide greater benefits to the existing Company's customers through consolidation. The increase in rates for the Beaver Falls customers is exacerbated by virtue of their low present rates, which do not yet include the cost of significant required upgrades. As I stated in my direct testimony (Aqua Statement No. 1) the average bill for Beaver Falls customers is approximately $33.38. The current average Aqua wastewater bill for residential customers is approximately $101.35. Moreover, the significant affirmative public benefits that are present in the acquisition outweigh the rate impact. Further, Section 1329 provides that the amount to be included in rate base will be the lesser of the average of FMV appraisals, as computed by two separate UVEs, and purchase price. The UVE valuations place a limit upon the rate base allowance and serve the purpose of incentivizing Aqua to not negotiate an excessive purchase price.

**Q. Ms. Forbes makes reference to the Commission's FSIO and the RRR (OSBA St. No. 1, at pp. 7-8). She further quotes the FSIO stating that, while the FSIO did recognize**

**that some transactions would be grandfathered, the RRR should be applied to this transaction (OSBA St. No. 1, at pp. 8-10). Should the terms of the FSIO be applied to this transaction?**

A. No. As I stated in my supplemental direct testimony (Aqua Statement No. 1 Supp.), the APA between the City and Aqua was signed in October 2021, just under two and a half years before the release of the TSIO. As I further commented, Aqua, Beaver Falls and the Contributing Municipalities worked to establish New Wastewater Service Agreements that would govern conveyance and treatment of wastewater going forward on the same basis as opposed to agreements that were out of date, not followed, or that did not exist. These are the type of "unique facts and circumstances" that the Commission should consider in granting grandfather status to this Application.

**Q. Do you agree with Ms. Forbes' contention that the primary focus in evaluating Section 1329 filings should be protecting customers from excessive financial burdens?**

A. I do not. I am advised by counsel that the Public Utility Code provides that acquisitions are to be approved if the Commission finds that a certificate is necessary or proper for the service, accommodation, convenience or safety of the public. Although rate burdens may be a relevant factor in that assessment, it is by no means the exclusive factor. As explained in the Application, direct testimony, Amended Application and updated direct testimony, and rebuttal testimony, the Beaver Falls System is in poor condition, and the City is in dire financial straits. It simply does not have the resources, financial or physical, to continue to operate and maintain the system. Ms. Forbes, like other witnesses opposing the approval of this acquisition ignores the significant financial benefits that will be afforded to the

residents, who are also customers, within the City. She further does not acknowledge the operational and managerial benefits that will be substantially different than the existing City operations. These benefits will be shared by employees of the Beaver Falls System, existing Aqua customers, and the many people who are concerned about a safe environment in Beaver Falls and downstream. Her testimony does not provide a complete assessment of the evidence. As such, her testimony should be rejected accordingly.

## VI. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

# Aqua Exhibit WCP-1R

# LIMERICK TOWNSHIP

# FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION

***Year Ended December 31, 2023***

**LIMERICK TOWNSHIP**
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
YEAR ENDED DECEMBER 31, 2023

Discussion also took place on the expected return to full staffing in several departments which have been understaffed due to attrition and related personnel departures. As stated previously in this report, discussion has been ongoing for several years on the need for higher level support for both the fire and EMS services within the Township. The additional funding that was identified to provide stability to both services was analyzed repeatedly against other funding requests to limit the burden on existing taxpayers.

Based on these guidelines, the following items are highlights of the issues incorporated into the Preliminary Budget presented to the Board for approval at their November 21st meeting.

**Taxes**

The projected assessed value of the Township is anticipated to realize General Fund real estate tax receipts of $3,307,000 which is a slight $10,000 increase from the final 2023 Budget amendment. Act 511 revenues are projected to decrease by $436,000 to $6,790,000. The reduction is mostly due to the continued decline of Real Estate Transfer Taxes from the high mark of 2022 when $1,405,900 was received. Only $500,000 is projected for 2024 based on the ongoing impacts of inflation and high interest rates.

To support the volunteer fire department, an increase of Real Estate Fire Taxes was approved from .421 mils to .721 mils. This is projected to generate an additional $454,000 for fire department operations. To better account for the ongoing costs of fire hydrants, a separate Hydrant Fund was established, and the $160,000 of fire tax revenue used to maintain all township hydrants, which equates to .10 mils, will now be shifted into this new fund.

**Interest Income**

General Fund interest earnings are projected to be $430,200 which is a $161,000 decrease from 2023. This conservation projection is based on economic reports that the Federal Reserve will begin to lower interest rates in 2024 if signs of a recession come to fruition. The General Fund Balance is estimated to be $7,658,155 at the end of 2024.

Capital Reserve Funds interest earnings on the PFM Investments are budgeted at $1,550,000, which could fluctuate based on what transpires with interest rates. The Capital Reserve Fund holds the net proceeds from the 2018 sale of the sewer system and the business strategy of utilizing the investment earnings of these funds, to offset the need for additional taxes, continues to provide benefits. The planned transfer of $1,200,000 of interest earnings into the General Fund represents 26% of the Real Estate tax burden required to balance this fund. As School District and County property taxes continue to rise due to inflation, the Township can turn to these investment earnings, as another source of revenue, to offset rising costs instead of enacting additional taxes. If the sale of the sewer system did not occur, it is safe to assume that Limerick Township real estate taxes would be at a minimum, 30% higher. This does not include costs the Township would be incurring for Township debt, which was eliminated with the sale proceeds, or financing costs which for the new municipal and fire company buildings, and capital projects completed to date with the sewer monies.

**General Fund Deficit and Capital Reserve Transfer**

Discussion ensued on the use of General Fund Reserves to bridge an operating deficit. For 2024, the deficit is projected to be $753,831. This is after a transfer of $1.2 million from the Capital Reserves Fund which, per the approved 2018 Investment Strategy, is interest funding available to offset the need for additional General Fund taxes. The Board was reminded that this transfer of $1.2 million, along with the projected deficit, represents an operational funding shortfall above recurrent revenue stream. The Township's ability to offset 61% of this $1,953,831 shortfall with interest earnings, as opposed to increased taxes, is another example of the benefits of the business strategy behind the sale of the sewer system. The Board was also reminded that when the sale took place in 2018, projections showed that

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 2-R**

# REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

**With Regard To:**
**Environmental Compliance**
**Capital Improvements**

**February 24, 2025**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1
II. RESPONSE TO OCA WITNESS DEMARCO ..... 2
III. CONCLUSION ..... 10

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Mark J. Bubel, Sr. My business address is 762 West Lancaster Avenue, Bryn Mawr, PA 19010.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA") as Project Engineer III.

**Q. Are you the same Mark J. Bubel, Sr. who submitted direct testimony in this proceeding?**

A. Yes. I submitted direct testimony with Application filed with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 17, 2023.

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to respond to the Direct Testimony of Office of Consumer Advocate ("OCA") witness Nicholas DeMarco regarding environmental compliance and capital improvements needed for the City of Beaver Falls ("City" or "Beaver Falls") wastewater system (the "System").

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. Yes. Attached to my rebuttal testimony is Aqua Exhibit MJB-1R (DEP Sewage Inspection Reports) and Aqua Exhibit MJB-2R (Aqua's response to the Commission's Bureau and Investigation and Enforcement's ("I&E") Interrogatory I&E-II-12).

## II. RESPONSE TO OCA WITNESS DEMARCO

**Q. Please summarize the arguments and positions made by OCA witness DeMarco in his direct testimony.**

A. In his direct testimony, Mr. DeMarco summarizes my direct testimony related to past environmental compliance issues, including notices of violation ("NOV") issued by the Pennsylvania Department of Environmental Protection ("DEP") and the Corrective Action Plan ("CAP") that the City is currently operating under. OCA St. No. 1, at pp. 4-5. Mr. DeMarco then concludes that Beaver Falls is not currently out of compliance with any state environmental standard and is effectively managing the CAP with DEP. OCA St. No. 1, at pp. 5-6. Mr. DeMarco further states that outside of ongoing maintenance, the System does not need anything more than a single system improvement to meet compliance. OCA St. No. 1, at pp. 6-7. Finally, Mr. DeMarco makes a recommendation that, if the Commission approves the acquisition of the System by Aqua, Aqua should track and quantify the costs of capital improvements and include them separately in Aqua's next base rate case. OCA St. No. 1, at pp. 33-34.

**Q. Do you agree with Mr. DeMarco's arguments with respect to environmental compliance matters?**

A. No.

**Q. Have there been any more recent NOVs issued by DEP or other environmental issues at the Beaver Falls system since you submitted your direct testimony with the Application?**

A. Yes.

**Q. Please discuss the NOVs and environmental issues.**

A. It appears that DEP generally conducts annual inspections of the City's wastewater treatment plant ("WWTP") more typically in the summertime. DEP prepares an inspection report which summarizes general observations and recommendations, including any National Pollution Discharge Elimination System ("NPDES") Permit non-compliance typically dating back to the previous inspection report. As I noted in my direct testimony, in the last NOV which I discussed, DEP had conducted an inspection in July of 2021 which resulted in the issuance of an NOV for non-compliance with the facility's NPDES effluent discharge permit. This NOV was issued for violation of the total suspended solids ("TSS") limit of the subject permit. Please see Aqua Exhibit MJB-1R for more recent DEP inspection reports.

DEP conducted another inspection in June of 2022 which did not note any NPDES permit monthly discharge monitoring report ("DMR") violations between July 2021 and April 2022, the period covered by the report. There were recommendations in the report including providing information to update DEP's records regarding the Chief Operator, a recommendation to install a skimming system on the chlorine contact tanks ("CCT"), a recommendation to keep written records for influent composite samples including date,

time of sample, as well as the name of the collector, and finally, a recommendation to update the Pollution Prevention and Control ("PPC") Plan, as needed.

In regard to the skimming system in the CCT, although not mandated by DEP for compliance, I submit that capital improvements such as this may likely have a direct correlation to compliance. Although not noted in DEP's report, the reason that the recommendation would be made by DEP would be due to the presence of scum and or floating solids on the CCT. This is an example of what I discuss further below to counter Mr. DeMarco's assertion that there is only one compliance issue which needs to be addressed. The lack of skimming on the CCT is not a direct permit violation, however, it could very easily result in an effluent fecal and or TSS permit violation, both of which the WWTP has had and continues to experience.

DEP conducted a subsequent WWTP inspection on August 10, 2023 which resulted in effluent permit violations in the report. The violations noted within the report include a failure to submit DMR monitoring reports or properly completing reports, a December 2022 TSS violation, a February 2023 TSS violation, a March 2023 TSS violation, and a June 2023 fecal coliform violation. A failure to submit monitoring reports or properly complete monitoring reports was also noted. In addition, the report included certain recommendations. DEP recommended that (1) repairs to the WWTP be continued as needed, (2) to ensure that samples are representative of flow, and (3) that the required (apparently past due) 2022 annual Chapter 94 Report, due March 31, 2023, be submitted as soon as possible.

DEP also conducted a WWTP inspection July 23, 2024 which resulted in the issuance of an NOV which is included in Aqua Exhibit MJB-1R. The inspection report

noted the following violations of the NPDES Permit: effluent TSS violations for October and November of 2023 as well as TSS violations for April and May, 2024, fecal coliform violation for April of 2024, and an effluent pH violation for January 2024. Violations which may occur between July 2024 and the summer of 2025, if any, will likely not be recognized in an inspection report until the summer of 2025 which appears to be the timeframe when DEP performs these plant inspections. It is clear that the facility has deficiencies relative to effluent TSS and fecal coliform which require capital expenditures to correct contrary to Mr. DeMarco's assertion.

I believe it is important to note that the supplemental direct testimony of Aqua witness Zach Martin filed on March 28, 2024, identified many operational concerns which he personally observed at the WWTP on at several times as this transaction has progressed. These concerns include confidential and highly confidential concerns. In addition, Mr. Martin observed the presence of scum and floatable matter on the CCT at the time adding to and corroborating DEP's recommendations as noted above. Both would contribute to NPDES effluent TSS and fecal coliform violations which the City has failed to address to date.

**Q. Do you agree with Mr. DeMarco's statement in his direct testimony that the System only needs one improvement to meet compliance (OCA St. No. 1, at p. 6)?**

A. No. Mr. Demarco is focusing on one highly confidential issue which violates the requirements of the EPA. There are a multitude of significant safety and general facility capital needs which could result in an impact to onsite personnel as well as treatment facility effluent compliance. These items and issues were laid out in my direct testimony

as well as by Mr. Martin is his direct testimony and his supplemental direct testimony. They could quickly result in a non-compliance should a failure occur under continued City ownership with its dire financial condition and before Aqua has the opportunity to address them in Aqua's capital plan.

I had also provided further reasoning and justification in my response to I&E-II-12 attached to my rebuttal testimony as Aqua Exhibit MJB-2R. This included a full audit of electrical and mechanical equipment conditions which were not possible to assess during the due diligence period. Failure of mechanical equipment could quickly lead to a facility violation. In the way of an example, failure of the trickling filter tower recycle pumping system would likely quickly result in a violation of effluent carbonaceous biological oxygen demand ("CBOD") and TSS. This would impart an increased oxygen demand on the receiving stream and the stream biota. It would also impact effluent ammonia-nitrogen as well as total nitrogen, which, although not presently permitted, would negatively impact the receiving stream biota due to ammonia- nitrogen's impact on stream dissolved oxygen decreasing it. In laymen's terms, the impacts could lead to fish kills or potentially algal blooms. Again, although not presently regulated with a numerical limit for these two parameters, the fact that they exist within the current NPDES Permit as monitor and report (ammonia-nitrogen twice per week) illustrates DEP's knowledge of the importance of the effluent parameter to stream health.

As also shown in Aqua Exhibit MJB-2R, work to assess the collection system relative to infiltration and inflow ("I&I") is needed. I note in my direct testimony that the Company's review of the flow and billing data from the City indicates that there is likely I&I present in the system. I also note in my direct testimony that the City experienced a

secondary (WWTP) bypass of 1,035,000 gallons in September 2018 due to high levels of rainfall. This incident was reported to DEP via email included in Exhibit O1 to the Application. The CAP requires the City to continue to address unpermitted discharges which are sanitary sewer overflows ("SSO") as described in my direct testimony. The source of potential SSOs is I&I originating within the City's collection system as well as the collection systems of the Contributing Municipalities over which the City has little control. However, under the New Wastewater Treatment Agreements negotiated by Aqua with the Contributing Municipalities, the Contributing Municipalities are required to address I&I within their systems if Aqua or another governing authority determines that there is excessive I&I in the system, and imposes penalties if peak flow limitations are exceeded.[1] Moreover, through the Settlement Agreement that Aqua negotiated with the City, certain funds that will be paid at closing are restricted to the improvement of the Contributing Municipalities systems.[2]

The City had installed backflow prevention devices in some residents home laterals to address SSOs occurring within their basements. This however did not address the source of the I&I and as such Aqua has included a program to identify the drainage basins within the City which exhibit the highest amount of I&I through flow metering, manhole inspections, closed circuit televising of the sewers targeted and rehabilitation and lining of manholes and sewers is also part of Aqua's capital plan which would also address potential flow by-passing within the treatment plant which is a compliance issue. The City did notify

[1] See Amended Application, Exhibits F9-F15, Sections 7.5 and 15.
[2] See Amended Application, Exhibit F18, Section 3(b).

DEP of the secondary by-passing of flow due to high rain in September of 2018 as I note in my direct testimony.

The explanation in Aqua Exhibit MJB-2R also addressed the Trickling Filter Tower No. 1 which shows signs of aging and cracking. Loss of this biological unit process in this tank would have an immediate impact on compliance, especially in winter, aside from personnel safety should a sudden catastrophic failure of the walls of the tank occur.

Another significant item discussed in Aqua Exhibit MJB-2R was the headworks which is a confined space and has obvious NFPA 820 violation issues. Upgrades are required to address screening and HVAC issues. Electrical upgrades are also required to address electrical and controls. Arc flash studies are required to address operator safety and the risk of arc flash. The conversion of chlorine gas disinfection to liquid sodium hypochlorite is scheduled due to safety concerns of using chlorine gas for operational staff as well as the general public in proximity to the WWTP.

Upgrade to the primary clarifier sludge collector will be made to protect solids from being delivered into the biological treatment process of the trickling filter system, SCADA will be implemented so that operational staff can access the system when not on site to confirm operational conditions and make process changes as needed. Plant personnel presently do not have this capability remotely.

The City conducted a Phase I Environmental Site Assessment ("ESA") which concluded the presence of four (4) Recognized Environmental Conditions ("REC") and two (2) Historical Recognized Environmental Conditions ("HREC"). The subject Phase I ESA recommended a Phase II ESA to characterize the subsurface soil and whether the soil meets or exceeds applicable regulatory criteria. The Phase II ESA will also verify the

presence or absence of hazardous building materials at the site. The Phase II ESA has not been started or completed by the City to the best of Aqua's knowledge due to lack of funds.

**Q. Does the City have a capital plan in place to address these issues?**

A. No. Currently, the City has no actionable plan to address these challenges. Furthermore, it does not appear that they will be able to implement such a plan if the acquisition is not approved given the status of the City's finances, as discussed by Ms. Wilkins in her supplemental direct and rebuttal testimony. Mr. Martin further emphasizes this point in his rebuttal testimony.

**Q. What does Mr. DeMarco recommend in his direct testimony regarding capital improvements for the System if the Commission does approve the acquisition (OCA St. No. 1, at p. 34)?**

A. Mr. DeMarco recommends that Aqua should track and quantify the costs of capital improvements to the Beaver Falls system that Aqua makes post-closing into two categories, and present them in Aqua's next base rate case: (1) necessary capital improvements – defined as bringing the system into: (i) conformity with PUC standards, and (ii) environmental compliance – capital improvements; and (2) the costs associated with integrating the system into Company-wide standards.

**Q. Do you agree with Mr. DeMarco's recommendation regarding capital improvements?**

A. No. It is not necessary to track these costs in the way that Mr. DeMarco is requesting. In no prior acquisition of any water or wastewater system has the PUC required that capital

improvement costs be broken out into the categories that Mr. DeMarco has recommended as it exhibits no discernable benefit or purpose. Further, there is overlap relative to capital expenditures to meet PUC compliance, DEP and EPA regulatory compliance as well as Aqua's standards which focus on safety, compliance, general renewing of aged equipment and facilities, and addressing imminent threat of failure of the same.

## III. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

# Aqua Exhibit MJB-1R

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

3800-FM-BCW0436 3/2012

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **April** Year: **2024**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 3.47 | 120.0 | 3,473 | 42.5 | 1,230 | | | | | |
| 2 | 11.25 | | | | | | | | | |
| 3 | 15.39 | | | | | | | | | |
| 4 | 11.01 | | | | | | | | | |
| 5 | 6.5 | | | | | | | | | |
| 6 | 4.81 | | | | | | | | | |
| 7 | 4.03 | 96.1 | 3,230 | 77.0 | 2,588 | | | | | |
| 8 | 3.68 | 51.2 | 1,571 | 29.0 | 890 | | | | | |
| 9 | 3.19 | | | | | | | | | |
| 10 | 3.43 | | | | | | | | | |
| 11 | 7.5 | | | | | | | | | |
| 12 | 15.09 | | | | | | | | | |
| 13 | 11.39 | | | | | | | | | |
| 14 | 6.49 | 5.1 | 276 | 10.5 | 568 | | | | | |
| 15 | 5.07 | 34.9 | 1,476 | 23.0 | 973 | | | | | |
| 16 | 3.84 | | | | | | | | | |
| 17 | 3.93 | | | | | | | | | |
| 18 | 3.6 | | | | | | | | | |
| 19 | 3.25 | | | | | | | | | |
| 20 | 2.91 | | | | | | | | | |
| 21 | 2.6 | 89.9 | 1,949 | 40.5 | 878 | | | | | |
| 22 | 2.57 | 117.0 | 2,508 | 98.0 | 2,101 | | | | | |
| 23 | 2.62 | | | | | | | | | |
| 24 | 2.63 | | | | | | | | | |
| 25 | 2.52 | | | | | | | | | |
| 26 | 2.37 | | | | | | | | | |
| 27 | 2.69 | | | | | | | | | |
| 28 | 2.28 | | | | | | | | | |
| 29 | 2.25 | 24.0 | 450 | 13.5 | 253 | | | | | |
| 30 | 2.25 | 337.0 | 6,324 | 22.3 | 418 | | | | | |
| 31 | | | | | | | | | | |
| Avg | **5.154** | **97** | **2,362** | **40** | **1,100** | | | | | |
| Max | **15.39** | **337** | **6,324** | **98** | **2,588** | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Brian M Petronchak** License No.: **S22917**
Title: **Chief Operator** Date: **5/7/2024**

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER

## SEWAGE INSPECTION REPORT

| Permit Number | Inspection Date | Entry Time | Exit Time | Inspection Type | Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 06/09/2022 | 10:00 | 11:36 | CEI | 3375024 |

| | | | |
|---|---|---|---|
| **Municipality** | Beaver Falls | **County** | Beaver |
| **Facility Name** | CITY OF BEAVER FALLS STP | **Permittee Name** | BEAVER FALLS CITY BEAVER CNTY |
| **24-Hour Emergency Contact Person/Phone** | Joe Durish Jr. / (724) 561-6511 | **Email** | bfstp@outlook.com |
| **Physical Location Address** | LOWER SEVENTH AVE, BEAVER FALLS, PA, 15010 | | |
| **Permit Expiration Date** | 10/31/2023 | **Next Submittal Renewal Due Date** | 05/04/2023 |

**Violations***

No Violations Noted

**Recommendations**

--Ensure Available Operator form is submitted to update the Department's records regarding Chief Operator
--Install skimming system on Chlorine Contact tanks
--Keep written records for Influent composite samples to include date and time of sample collection, along with name of collector
--Update PPC Plan as needed

| | | | |
|---|---|---|---|
| **Person Interviewed** Brian Petronchak & Joe Durish | **Date** 06/09/2022 | **Inspector** AMANDA J SCHMIDT | **Date** 06/09/2022 |
| **Signature** | **Phone Number** (724) 843-7184 | **Signature** | **Phone Number** (724) 847-5279 |
| **Title** Chief Operator & Maint. Supervisor | | **Title** WTR QLTY SPCST | |
| **Email** bfstp@outlook.com | | **Email** amschmidt@pa.gov | |

**This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. *Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.**

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# DEPARTMENT OF ENVIRONMENTAL PROTECTION
## BUREAU OF CLEAN WATER

## SEWAGE INSPECTION REPORT

| Facility Details Section | | | | | |
|---|---|---|---|---|---|
| **Responsible Official** | STEPHEN JOHNSON | | | **Title** | CITY ADMIN |
| **Business Phone** | (724) 843-2808 | | | **Email** | bfwpcp@hotmail.com |
| **Permittee Address** | 715 15TH ST, BEAVER FALLS, PA, 15010-4124 | | | | |
| **Certified Operator** | DURISH JOSEPH M JR | | | **Client ID** | 296046 |
| **Certificates** | A,E-2,4 | **Certification Status** | Active | **Expiration Date** | 12/31/2022 |
| **Is a Copy of the permit(s) on-site?** | | | | | Yes |
| **Has the interviewed operator/person reviewed the facility's permit(s)?** | | | | | Yes |

**Comments**

Inspection conducted for routine monitoring.

Responsible official is now Joe Durish Jr.
Operator in charge is now Brian Petronchak, A/E-2,4; 350258, Exp 9/30/23

**Participants:**
Joe Durish (Maintenance Supervisor), Brian Petronchak (Cheif Operator)

## SEWAGE INSPECTION REPORT

**Mon,Rpts&Rcds: 0472402 - TRTMT PLT**

### Influent Sampling

| | | | |
|---|---|---|---|
| MRR-1 | Is influent monitoring required by the permit? | Yes | |
| MRR-2 | Are influent samples collected? | Yes | |
| MRR-3 | Is the influent sampling location prior to all treatment? | Yes | |
| MRR-4 | Is the influent sampling location prior to all return flows? | Yes | |
| MRR-5 | Are representative influent samples collected? | Yes | |

### Effluent Sampling

| | | | |
|---|---|---|---|
| MRR-6 | Is the effluent sample collected at the location identified in the permit? | Yes | |
| MRR-7 | Where is the effluent sample collection location? | IMP 001 | |
| MRR-8 | Is the effluent sample location after all treatment? | Yes | |
| MRR-9 | Are representative effluent samples collected? | Yes | |

### Sample Collection

| | | | |
|---|---|---|---|
| MRR-10 | Are samples collected as required by the permit? | Yes | |
| MRR-11 | Is proper sampling equipment / containers used during collection? | Yes | |
| MRR-12 | Are the proper type of samples collected in accordance with the permit? | Yes | |
| MRR-13 | Are the samples collected at the frequency in accordance with the permit? | Yes | |
| MRR-14 | Is the proper sample size (minimum aliquot 100 mL) collected? | Yes | |
| MRR-15 | Is proper temperature control provided during collection, storage and shipping? | Yes | |
| MRR-16 | Is the temperature of the sampler or storage refrigerator monitored using an NIST traceable thermometer and recorded? | Yes | |
| MRR-17 | Is the sample storage temperature <=6 °C ? | Yes | |
| MRR-18 | What is the sample storage temperature?<br>**Notes:** New composite sampler on order | 2.7 | |

### On-site Lab Accreditation-by-Rule

| | | | |
|---|---|---|---|
| MRR-19 | Does the facility analyze accredited-by-rule parameters only? | Yes | |
| MRR-20 | Which accredited-by-rule parameters are analyzed by the on-site lab? | Other<br>pH<br>DO<br>TRC | |
| MRR-21 | Is the on-site lab registered? | Yes | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| MRR-22 | Laboratory Registration ID | 04-01709 | |

**Lab Accreditation**

| | | | |
|---|---|---|---|
| MRR-23 | Does the on-site laboratory analyze permit parameters? | No | |
| MRR-29 | Are permit parameters analyzed by a contract lab? | Yes | |
| MRR-30 | Contract Lab Name, City, Phone | CMA Env Labs | |
| MRR-31 | Contract Laboratory Accreditation ID | 33-00411 | |
| MRR-32 | Is the contract lab accredited for those permit parameters? | Yes | |
| MRR-33 | Have any changes occurred with the accredited-by-rule or the accredited parameters or labs? | No | |

**Analysis**

| | | | |
|---|---|---|---|
| MRR-35 | Are approved test methods (per 40 CFR Part 136 or others) used for permit parameters? | Yes | |
| MRR-36 | Are the methods used sufficiently sensitive for permit parameters? | Not Observed | |
| MRR-37 | Are the samples analyzed within the required holding time? | Yes | |
| MRR-38 | Are laboratory equipment/meters calibrated in accordance with the manufacturers' specifications? | Yes | |
| MRR-39 | Are laboratory meters operated and maintained in accordance with the manufacturers' specifications? | Yes | |
| MRR-40 | Are pH buffers and other reagent standards current? | Yes | |

**Records**

| | | | |
|---|---|---|---|
| MRR-41 | Are sampling, calibration, laboratory results, chain-of-custody and other required records readily available for review and complete? | Yes | |
| MRR-42 | Do the sampling records include collector, date/time, location information? | Yes | |
| MRR-43 | Do the analysis records include the analyst's name, the analysis date and time, the test method used, the quantitation limits, and the results? | Yes | |
| MRR-44 | Are the required facility records retained for a minimum of 3 years? | Yes | |
| MRR-45 | Are the required sludge use and disposal records retained for a minimum of 5 years? | Yes | |
| MRR-46 | Was access provided to information or to facility records upon request? | Yes | |

**Reports**

| | | | |
|---|---|---|---|
| MRR-47 | Identify the month/year of the DMRs and supporting data reviewed. | July 2021-April 2022 | |
| MRR-48 | Are the reviewed DMRs and supplemental reports properly completed? | Yes | |
| MRR-49 | Are the reviewed bench sheets/lab reports consistent with the reported data? | Yes | |
| MRR-50 | Are samples collected more frequently than required in the permit? | No | |
| | | | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| MRR-52 | Are DMRs submitted on time? | Yes | |
| MRR-53 | Are the required supplemental reports submitted? | Yes | |
| MRR-54 | Is the facility using the eDMR system, if required? | Yes | |

## 2 Flow Measurement: 0472402 - TRTMT PLT

### Flow Measurement

| | | | |
|---|---|---|---|
| Q-2 | If influent flows are measured, are they measured before all return lines and after hauled-in waste? | Yes | |
| Q-3 | Is a flume present? | No | |
| Q-6 | Is a weir present? | Yes | |
| Q-7 | Are weirs clean with a visible air space below nappe? | Yes | |
| Q-8 | What is the max flow that can be measured at the primary device (flume or weir)? | 15.415 | |

### Meter & Recorder

| | | | |
|---|---|---|---|
| Q-9 | Does the permit require continuous flow monitoring and recording? | Yes | |
| Q-10 | Does the facility have the required flow monitoring and recording capabilities? | Yes | |
| Q-11 | What type of flow meter is used? | Ultrasonic | |
| Q-12 | What type of flow recorder is used? | Totalizer | |
| Q-13 | Are the meter and recorder operable and operating? | Yes | |
| Q-14 | What is the date of the most recent flow meter calibration? | 1/24/22 | |
| Q-15 | What is the calibration range of the flow meter? | 0-15.92 MGD | |
| Q-16 | What is the flow range of the recorder? | 0-15.92 MGD | |
| Q-17 | What is the current flow meter reading (MGD or gpm)? | 2138 gpm eff | |

### High Flows

| | | | |
|---|---|---|---|
| Q-18 | Does the permit require a High Flow Management Plan? | No | |

## 3 TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

| | | | |
|---|---|---|---|
| TP-1 | Are all treatment units operable? | Yes | |
| TP-2 | Are the treatment units/equipment as described in the WQM permit(s) or in the previous inspection report? | Yes | |

### Stand-by Power

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| TP-7 | Is stand-by power provided? | Yes | |
| TP-8 | Type of Stand-by Power | Emergency generator | |
| TP-9 | How often is the stand-by power unit maintained? | Weekly | |
| TP-10 | How often is the stand-by power unit exercised? | Weekly | |
| TP-11 | Is the stand-by power unit exercised under load? | Yes | |
| TP-12 | Is the stand-by power system operable and maintained? | Yes | |

**Alarms**

| | | | |
|---|---|---|---|
| TP-13 | Is an alarm system available? | Yes | |
| TP-14 | Type of Alarm | Other | |
| TP-15 | How often is the alarm system tested? | Twice Yearly | |
| TP-16 | What conditions trigger an alarm? Select all that apply. | Other<br>Power failure<br>High level<br>Pump faults<br>Pump failure<br>Intrusion<br>Leaks | |
| TP-17 | Is the alarm system(s) operable? | Yes | |

**Chemicals**

| | | | |
|---|---|---|---|
| TP-18 | Are chemicals used for treatment or otherwise added to the waste stream? | Yes | |
| TP-19 | Which chemicals are added? | Polymer | |
| TP-20 | What is the purpose of the chemical addition? | Sludge | |
| TP-21 | Where are the chemicals added? | NS4375 | |
| TP-22 | Are chemicals properly handled and stored to prevent a pollution incident? | Yes | |

**Bypasses**

| | | | |
|---|---|---|---|
| TP-23 | Did a treatment plant bypass occur since the last inspection? | No | |

**Planned Changes**

| | | | |
|---|---|---|---|
| TP-35 | Have any changes (new pollutants, different or increased volume or loadings) to the waste stream from industrial or hauled-in wastes occurred since the last inspection? | No | |

**4 O&M: 0472402 - TRTMT PLT**

# SEWAGE INSPECTION REPORT

## O&M

| | | | |
|---|---|---|---|
| OM-1 | Which of the following treatment plant and equipment records are available? | Other | |
| OM-2 | Is a daily operations log on-site? | Yes | |
| OM-3 | Is the daily operations log up to date? | Yes | |
| OM-4 | Which operational conditions/actions are recorded in the log? | Observations Process adjustments Problems or Concerns | |
| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) | Yes | |
| OM-6 | Is an influent/process control supplemental report form completed and submitted with the DMR? | Yes | |
| OM-7 | Does the daily operations log include maintenance and repair records?<br>Notes: Seperate | Yes | |
| OM-10 | Are the PM and repair logs up to date? | Yes | |
| OM-11 | Were major equipment repairs/replacements done since the last inspection?<br>Notes: Rehab on all 3 primary tanks | No | |
| OM-12 | Is a spare parts inventory, either written or electronic, maintained? | Yes | |
| OM-13 | Are spare parts and equipment (pumps, motors) maintained on-site or readily available? | Yes | |

## Solids Management

| | | | |
|---|---|---|---|
| OM-14 | What is the sludge storage capacity? | 460,000 gallons | |
| OM-15 | How much sludge was removed from the facility in the past year? | N/O | |
| OM-16 | How does the facility determine how much sludge to waste? | Obs dig. Supernatant | |
| OM-17 | Is sludge/biosolids production & disposal information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-18 | Does the facility test the removed sludge for %TS? | Yes | |
| OM-19 | Who provides sludge hauling/disposal/land application? | Brunner | |
| OM-20 | Where is the sludge disposal/biosolids application location? | Brunner Landfill | |
| OM-21 | How and where are other solid materials, such as collected screenings and grit, disposed? | Brunner Landfill | |
| OM-22 | Has the facility obtained or assured that contracted agents have the necessary permits and approvals for the disposal of solid materials? | Yes | |
| OM-23 | Are solid materials handled and disposed of in compliance with a disposal permit and requirements? | Yes | |
| OM-24 | Is the facility in compliance with all other Part C Special Conditions regarding Solids Management? | Yes | |

## Hauled in Wastes

| | | | |
|---|---|---|---|
| | | | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| OM-25 | Does the facility accept hauled-in wastes? | Yes | |
| OM-26 | Does the facility accept hauled-in Municipal Wastes? | Yes | |
| OM-27 | Which types of municipal wastes are accepted? | Septage Wastewater sludge Holding tank | |
| OM-28 | Is hauled-in municipal waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-29 | Are hauled-in Residual Wastes accepted? | Yes | |
| OM-30 | Which types of residual wastes are accepted? | Other Landfill Leachate | |
| OM-31 | Is hauled-in residual waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-32 | At what flow does the facility stop accepting hauled-in wastes? | N/A | |
| OM-33 | Have the maximum amounts of hauled-in wastes that can be accepted (daily, weekly, etc.) been determined? | Yes | |
| OM-34 | Does the influent sampling location capture all hauled-in waste? | Yes | |
| OM-35 | Is all hauled in waste accounted for in the influent loading? | Yes | |
| OM-36 | Is the facility in compliance with other the Part C Hauled-In Waste Restrictions? | Yes | |

**Stormwater**

| | | | |
|---|---|---|---|
| OM-37 | Does the permit include a special condition or other requirements regarding stormwater management? | Yes | |
| OM-38 | Has a PPC Plan for stormwater discharges been submitted? | Yes | |
| OM-39 | Is the Stormwater PPC Plan available on-site? | Yes | |
| OM-40 | When was the Stormwater PPC Plan last updated? | 8/2020 | |
| OM-41 | Is the facility in compliance with all permit requirements applicable to stormwater outfalls? | Not Observed | |

**Special Conditions**

| | | | |
|---|---|---|---|
| OM-42 | Is the facility subject to industrial pretreatment requirements, or does the permit include a Part C Special Condition regarding Industrial Pretreatment? | No | |
| OM-45 | Does the permit contain a condition regarding whole effluent toxicity (WET) tests? | Yes | |
| OM-46 | Has WET testing been conducted? | Yes | |
| OM-47 | Is the facility in compliance with all other permit requirements applicable to WET testing? | Yes | |
| OM-48 | Are any other special conditions in the permit not covered in this inspection report? | No | |

**5 DP Discharge Point: 001 - OUTFALL 001**

**Outfall**

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| DP-1 | Outfall Observations | IMP Ok | |
| DP-2 | Were field measurements taken? | No | |
| DP-4 | Were effluent samples collected for laboratory analysis? | No | |

**Downstream**

| | | | |
|---|---|---|---|
| DP-10 | Is the receiving stream clear of floating or deposited materials, scum, sheen, foam, oil, grease or other substances associated with the discharge? | Yes | |
| DP-11 | Were downstream field measurements taken? | No | |
| DP-13 | Were downstream samples collected for laboratory analysis? | No | |

**Upstream**

| | | | |
|---|---|---|---|
| DP-19 | Was the stream observed upstream from the outfall? | Yes | |
| DP-20 | Were upstream field measurements taken? | No | |
| DP-22 | Were upstream samples collected for laboratory analysis? | No | |

### 7 PS Pump Stations: 0472402 - TRTMT PLT

**Pump Stations**

| | | | |
|---|---|---|---|
| PS-1 | How many pump stations are part of the facility's collection system? | 8 | |
| PS-2 | Are pump station flows recorded? | Yes | |
| PS-3 | How are flows measured? | Metered | |
| PS-4 | What type of flow meter/sensor is in use? | Magnetic | |
| PS-5 | When was the most recent flow meter calibration done? | N/A | |
| PS-7 | Are pump stations monitored with alarms? | Yes | |
| PS-8 | Are the alarms operable? | Not Observed | |
| PS-9 | Are the pump stations equipped with backup auxiliary power? | Yes | |
| PS-10 | Type of Stand-by Power | Emergency generator | |
| PS-11 | Is the stand-by power system operable? | Yes | |
| PS-12 | Is the stand-by power system maintained in accordance with manufacturer's recommendations? | Yes | |
| PS-13 | How often is the stand-by power unit maintained? | Weekly | |
| PS-14 | How often is the stand-by power unit exercised? | Weekly | |
| PS-15 | Is the stand-by power unit exercised under load? | Yes | |

## SEWAGE INSPECTION REPORT

### OpCert: 0472402 - TRTMT PLT

**Operator Certification**

| | | | |
|---|---|---|---|
| OP-1 | Is a properly certified operator employed for the treatment plant? | Yes | |
| OP-2 | Is at least one collection system pump station part of the permitted facility? | Yes | |
| OP-3 | Is an operator with a valid E-4 certificate employed for the operation of the facility's collection system pump station(s)? | Yes | |
| OP-4 | How many properly certified available operators make process control decisions at this facility? | 3 | |
| OP-5 | Is at least one available operator's current certificate displayed at the treatment plant? | Yes | |
| OP-6 | Have the available operators been provided with a copy of the current NPDES/WQM Permits? | Yes | |
| OP-7 | On which days of the week is an available operator at the plant? | Sunday<br>Monday<br>Tuesday<br>Wednesday<br>Thursday<br>Friday<br>Saturday | |
| OP-8 | How many hours are spent at the plant by the available operator(s) each day (weekdays/weekends/holidays)? | 8.5-all | |
| OP-9 | Does the operator notify the owner about violations or conditions that may cause a violation, and needed resources? | Yes | |
| OP-10 | How does the operator notify the owner about known violations or conditions that may cause a violation, and about needed resources? | Email<br>Phone call | |
| OP-11 | Does the owner respond to the operator's notification about needed resources? | Yes | |
| OP-12 | Does the operator act to resolve the condition(s) and/or violation(s)? | Yes | |
| OP-13 | Are non-certified or not properly certified persons expected to perform work that requires process control decisions? | No | |
| OP-19 | If the available operator/operator in charge (OIC) has changed, was a change of operator form submitted to DEP within 10 days? | Not Observed | |

**Circuit Rider**

| | | | |
|---|---|---|---|
| OP-20 | Is the facility operated by a circuit rider? | No | |

### 6 CV Conveyance: 0472402 - TRTMT PLT

**Collection System**

| | | | |
|---|---|---|---|
| CV-1 | Does the permitted entity own, operate & maintain the entire collection system? | No | |
| CV-2 | How many collection systems owned by others contribute to this facility's system? | 8 | |
| CV-3 | Are the contributing collection systems causing problems with this facility or it's collection system? | Not Observed | |
| CV-4 | Is collection system maintenance performed? | Yes | |
| CV-5 | Is maintenance regularly scheduled? | Yes | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| CV-6 | Is maintenance done as problems occur? | Yes | |
| CV-7 | Which types of maintenance are performed? | Televising etc. | |
| CV-8 | Does the system experience infiltration and/or inflow that causes or could cause O&M problems or interferes with treatment? | Yes | |
| CV-9 | Is an I&I program in place? | Yes | |
| CV-10 | Select the I&I detection work performed since last inspection | Other<br>Downspout/Floor Drain Inspections<br>Televising | |
| CV-11 | Select the I&I removal work performed since last inspection | Other<br>Manhole Repair<br>Pipe Replacement | |

**Sanitary Sewer Overflows**

| | | | |
|---|---|---|---|
| CV-12 | Have any sanitary sewer overflows occurred since the last inspection? | No | |

SEWAGE INSPECTION REPORT

## 3 TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

**TP-1** Are all treatment units operable?

| Treatment Units | Total | On-Line | Inoperable | Comments |
|---|---|---|---|---|
| Grit Removal | 1 | 1 | 0 | |
| Primary Clarifier | 3 | 3 | 0 | |
| Belt Filter Press | 1 | 1 | 0 | |
| Sludge Holding Tank/Lagoon | 1 | 1 | | For Skimmer |
| Aeration Basin | 1 | 1 | 0 | |
| Grease Removal | 1 | 1 | 0 | |
| Other | 1 | 1 | 0 | Sludge Decant Tank |
| Secondary Clarifier | 5 | 5 | 0 | |
| Other | 2 | 2 | 0 | Primary and secondary wet wells |
| Trickling Filter | 2 | 2 | 0 | |
| Chlorine Contact Tank | 2 | 2 | 0 | Gas chlorination |
| Anaerobic Digester | 2 | 2 | 0 | |

## 4 O&M: 0472402 - TRTMT PLT

### O&M

**OM-5** Are process control parameters monitored? (Record the monitoring frequency and current results)

| Parameter / Calculation | Frequency Of Testing | Current Testing Results |
|---|---|---|
| Settleability | 7/week | 10 |
| *Dissolved Oxygen* | 7/week | 6.0 |
| Alkalinity | 7/week | 351 |
| Sludge Blanket | Daily (Visual) | OK |
| pH | Inf 7/week | 7.11 |
| Temperature | Daily | 66.8 |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

# SEWAGE INSPECTION REPORT

| Permit Number | Inspection Date | Entry Time | Exit Time | Inspection Type | Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 08/10/2023 | 08:27 | 13:10 | CEI | 3598626 |

| | | | |
|---|---|---|---|
| **Municipality** | Beaver Falls | **County** | Beaver |
| **Facility Name** | CITY OF BEAVER FALLS STP | **Permittee Name** | BEAVER FALLS CITY BEAVER CNTY |
| **24-Hour Emergency Contact Person/Phone** | Brian Petronchak / (724) 513-6748 | **Email** | petronchak@gmail.com |
| **Physical Location Address** | LOWER SEVENTH AVE, BEAVER FALLS, PA, 15010 | | |
| **Permit Expiration Date** | 10/31/2023 | **Next Submittal Annual Report DueDate** | 03/31/2024 |

**Violations*** Violation(s) Noted

1. **25 Pa. Code 92a.41(a)(12):** Failure to submit monitoring reports or properly complete monitoring reports.
   Staff changing, eDMRs will be submitted on time moving forward.
2. **25 Pa. Code 92a.44:** NPDES - Violation of effluent limits in Part A of permit
   Dec '22- TSS violation
   Feb '23- TSS violation
   March '23- TSS violation
   June '23- Fecal coliform violation

## Recommendations

-Continue with repairs to plant as needed.
-Ensure samples are representative of flow.
-Ensure 2022 Chapter 94 Report is submitted as soon as possible

| | | | |
|---|---|---|---|
| **Person Interviewed** Brian Petronchak | **Date** 08/10/2023 | **Inspector** TIMOTHY D SMOLAR | **Date** 08/10/2023 |
| **Signature** | **Phone Number** (724) 513-6748 | **Signature** | **Phone Number** (412) 225-6087 |
| **Title** Chief Operator | | **Title** ENVTL TRN | |
| **Email** brianpetronchak@yahoo.com | | **Email** tsmolar@pa.gov | |

**This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. *Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.**

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER



## SEWAGE INSPECTION REPORT

| Facility Details Section | | | | | |
|---|---|---|---|---|---|
| **Responsible Official** | STEPHEN JOHNSON | | | **Title** | CITY ADMIN |
| **Business Phone** | (724) 843-2808 | | | **Email** | bfwpcp@hotmail.com |
| **Permittee Address** | 715 15TH ST, BEAVER FALLS, PA, 15010-4124 | | | | |
| **Certified Operator** | PETRONCHAK BRIAN M | | | **Client ID** | 350258 |
| **Certificates** | A,E-2,4 | **Certification Status** | Active | **Expiration Date** | 09/30/2026 |
| **Is a Copy of the permit(s) on-site?** | | | | | Yes |
| **Has the interviewed operator/person reviewed the facility's permit(s)?** | | | | | Yes |

**Comments**

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**Participants:**

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## SEWAGE INSPECTION REPORT

### 1 Mon,Rpts&Rcds: 0472402 - TRTMT PLT

**Influent Sampling**

| | | | |
|---|---|---|---|
| MRR-1 | Is influent monitoring required by the permit? | Yes | |
| MRR-2 | Are influent samples collected? | Yes | |
| MRR-3 | Is the influent sampling location prior to all treatment? | Yes | |
| MRR-4 | Is the influent sampling location prior to all return flows? | Yes | |
| MRR-5 | Are representative influent samples collected?<br>**Notes:** Recommendation- ensure samples are flow proportional as required by permit. | Yes | |

**Effluent Sampling**

| | | | |
|---|---|---|---|
| MRR-6 | Is the effluent sample collected at the location identified in the permit? | Yes | |
| MRR-7 | Where is the effluent sample collection location? | Outfall | |
| MRR-8 | Is the effluent sample location after all treatment? | Yes | |
| MRR-9 | Are representative effluent samples collected? | Yes | |

**Sample Collection**

| | | | |
|---|---|---|---|
| MRR-10 | Are samples collected as required by the permit? | Yes | |
| MRR-11 | Is proper sampling equipment / containers used during collection? | Yes | |
| MRR-12 | Are the proper type of samples collected in accordance with the permit? | Yes | |
| MRR-13 | Are the samples collected at the frequency in accordance with the permit? | Yes | |
| MRR-14 | Is the proper sample size (minimum aliquot 100 mL) collected? | Yes | |
| MRR-15 | Is proper temperature control provided during collection, storage and shipping? | Yes | |
| MRR-16 | Is the temperature of the sampler or storage refrigerator monitored using an NIST traceable thermometer and recorded? | Yes | |
| MRR-17 | Is the sample storage temperature <=6 °C ? | Yes | |
| MRR-18 | What is the sample storage temperature? | 4 C influent, 3 C ef | |

**On-site Lab Accreditation-by-Rule**

| | | | |
|---|---|---|---|
| MRR-19 | Does the facility analyze accredited-by-rule parameters only? | Yes | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| MRR-20 | Which accredited-by-rule parameters are analyzed by the on-site lab? | Other<br>pH<br>DO<br>TRC<br>Temperature | |
| MRR-21 | Is the on-site lab registered? | Yes | |
| MRR-22 | Laboratory Registration ID | 04-01709 | |

Lab Accreditation

| | | | |
|---|---|---|---|
| MRR-23 | Does the on-site laboratory analyze permit parameters? | No | |
| MRR-29 | Are permit parameters analyzed by a contract lab? | Yes | |
| MRR-30 | Contract Lab Name, City, Phone | Campbell<br>Beaver Fall | |
| MRR-31 | Contract Laboratory Accreditation ID | 04-00483 | |
| MRR-32 | Is the contract lab accredited for those permit parameters? | Yes | |
| MRR-33 | Have any changes occurred with the accredited-by-rule or the accredited parameters or labs? | Yes | |
| MRR-34 | Is a lab accreditation form submitted with the DMR when changes have occurred? | Not<br>Observed | |

Analysis

| | | | |
|---|---|---|---|
| MRR-35 | Are approved test methods (per 40 CFR Part 136 or others) used for permit parameters? | Yes | |
| MRR-36 | Are the methods used sufficiently sensitive for permit parameters? | Yes | |
| MRR-37 | Are the samples analyzed within the required holding time? | Yes | |
| MRR-38 | Are laboratory equipment/meters calibrated in accordance with the manufacturers' specifications? | Yes | |
| MRR-39 | Are laboratory meters operated and maintained in accordance with the manufacturers' specifications? | Yes | |
| MRR-40 | Are pH buffers and other reagent standards current? | Yes | |

Records

| | | | |
|---|---|---|---|
| MRR-41 | Are sampling, calibration, laboratory results, chain-of-custody and other required records readily available for review and complete? | Yes | |
| MRR-42 | Do the sampling records include collector, date/time, location information? | Yes | |
| MRR-43 | Do the analysis records include the analyst's name, the analysis date and time, the test method used, the quantitation limits, and the results? | Yes | |
| MRR-44 | Are the required facility records retained for a minimum of 3 years? | Yes | |
| MRR-45 | Are the required sludge use and disposal records retained for a minimum of 5 years? | Yes | |
| MRR-46 | Was access provided to information or to facility records upon request? | Yes | |

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER



SEWAGE INSPECTION REPORT

## Reports

| | | | |
|---|---|---|---|
| MRR-47 | Identify the month/year of the DMRs and supporting data reviewed. | March 2023 | |
| MRR-48 | Are the reviewed DMRs and supplemental reports properly completed? | Yes | |
| MRR-49 | Are the reviewed bench sheets/lab reports consistent with the reported data? | Yes | |
| MRR-50 | Are samples collected more frequently than required in the permit? | No | |
| MRR-52 | Are DMRs submitted on time? | No | 1 |
| MRR-53 | Are the required supplemental reports submitted? | Yes | |
| MRR-54 | Is the facility using the eDMR system, if required? | Yes | |

## 2 Flow Measurement: 0472402 - TRTMT PLT

### Flow Measurement

| | | | |
|---|---|---|---|
| Q-1 | Where is the flow measured for DMR reporting? | Effluent | |
| Q-2 | If influent flows are measured, are they measured before all return lines and after hauled-in waste? | No | |
| Q-3 | Is a flume present? | Yes | |
| Q-4 | Is the flow uniform across flume channel? | Yes | |
| Q-5 | Is the upstream channel section and the flume free of debris and deposits? | Yes | |
| Q-6 | Is a weir present? | Yes | |
| Q-7 | Are weirs clean with a visible air space below nappe? | Yes | |
| Q-8 | What is the max flow that can be measured at the primary device (flume or weir)? | 15 mgd | |

### Meter & Recorder

| | | | |
|---|---|---|---|
| Q-9 | Does the permit require continuous flow monitoring and recording? | Yes | |
| Q-10 | Does the facility have the required flow monitoring and recording capabilities? | Yes | |
| Q-11 | What type of flow meter is used? | Ultrasonic Magnetic | |
| Q-12 | What type of flow recorder is used? | Totalizer 7-day Chart | |
| Q-13 | Are the meter and recorder operable and operating? | Yes | |
| Q-14 | What is the date of the most recent flow meter calibration? | Jan 30, 2023 | |
| Q-15 | What is the calibration range of the flow meter? | 0-15.92 mgd | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| Q-16 | What is the flow range of the recorder? | 0-15.92 mgd | |
| Q-17 | What is the current flow meter reading (MGD or gpm)? | 1.57 mgd | |

### High Flows

| | | | |
|---|---|---|---|
| Q-18 | Does the permit require a High Flow Management Plan? | No | |

## 3 TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

| | | | |
|---|---|---|---|
| TP-1 | Are all treatment units operable? | Yes | |
| TP-2 | Are the treatment units/equipment as described in the WQM permit(s) or in the previous inspection report? | Yes | |

### Stand-by Power

| | | | |
|---|---|---|---|
| TP-7 | Is stand-by power provided? | Yes | |
| TP-8 | Type of Stand-by Power | Emergency generator | |
| TP-9 | How often is the stand-by power unit maintained? | Weekly+annually | |
| TP-10 | How often is the stand-by power unit exercised? | Weekly | |
| TP-11 | Is the stand-by power unit exercised under load? | Yes | |
| TP-12 | Is the stand-by power system operable and maintained? | Yes | |

### Alarms

| | | | |
|---|---|---|---|
| TP-13 | Is an alarm system available? | Yes | |
| TP-14 | Type of Alarm | SCADA | |
| TP-15 | How often is the alarm system tested? | N/O | |
| TP-16 | What conditions trigger an alarm? Select all that apply. | Power failure<br>High level<br>Pump faults<br>Pump failure<br>Intrusion<br>Leaks | |
| TP-17 | Is the alarm system(s) operable? | Yes | |

### Chemicals

| | | | |
|---|---|---|---|
| TP-18 | Are chemicals used for treatment or otherwise added to the waste stream? | No | |

## SEWAGE INSPECTION REPORT

### Bypasses

| | | | |
|---|---|---|---|
| TP-23 | Did a treatment plant bypass occur since the last inspection? | No | |

### Planned Changes

| | | | |
|---|---|---|---|
| TP-35 | Have any changes (new pollutants, different or increased volume or loadings) to the waste stream from industrial or hauled-in wastes occurred since the last inspection? | No | |

## 4 O&M: 0472402 - TRTMT PLT

### O&M

| | | | |
|---|---|---|---|
| OM-1 | Which of the following treatment plant and equipment records are available? | Other<br>O&M Manual<br>As-built drawings<br>Maintenance schedule<br>Equipment Manuals | |
| OM-2 | Is a daily operations log on-site? | Yes | |
| OM-3 | Is the daily operations log up to date? | Yes | |
| OM-4 | Which operational conditions/actions are recorded in the log? | Not Observed | |
| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) | Yes | |
| OM-6 | Is an influent/process control supplemental report form completed and submitted with the DMR? | Yes | |
| OM-7 | Does the daily operations log include maintenance and repair records? | No | |
| OM-8 | Is a routine preventative maintenance (PM) schedule and log maintained? | Yes | |
| OM-9 | Is a repair log on-site? | Yes | |
| OM-10 | Are the PM and repair logs up to date? | Yes | |
| OM-11 | Were major equipment repairs/replacements done since the last inspection?<br>**Notes:** New secondary flight pump 4/23 | Yes | |
| OM-12 | Is a spare parts inventory, either written or electronic, maintained? | Yes | |
| OM-13 | Are spare parts and equipment (pumps, motors) maintained on-site or readily available? | Yes | |

### Solids Management

| | | | |
|---|---|---|---|
| OM-14 | What is the sludge storage capacity? | 400,060 gals | |
| OM-15 | How much sludge was removed from the facility in the past year? | 357.18 tons | |
| OM-16 | How does the facility determine how much sludge to waste? | Obs. spr natant | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| OM-17 | Is sludge/biosolids production & disposal information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-18 | Does the facility test the removed sludge for %TS? | Yes | |
| OM-19 | Who provides sludge hauling/disposal/land application? | Brunners | |
| OM-20 | Where is the sludge disposal/biosolids application location? | Brunner Landfill | |
| OM-21 | How and where are other solid materials, such as collected screenings and grit, disposed? | Brunners | |
| OM-22 | Has the facility obtained or assured that contracted agents have the necessary permits and approvals for the disposal of solid materials? | Yes | |
| OM-23 | Are solid materials handled and disposed of in compliance with a disposal permit and requirements? | Yes | |
| OM-24 | Is the facility in compliance with all other Part C Special Conditions regarding Solids Management? | Yes | |

### Hauled in Wastes

| | | | |
|---|---|---|---|
| OM-25 | Does the facility accept hauled-in wastes? | Yes | |
| OM-26 | Does the facility accept hauled-in Municipal Wastes? | Yes | |
| OM-27 | Which types of municipal wastes are accepted? | Septage Wastewater sludge Holding tank | |
| OM-28 | Is hauled-in municipal waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-29 | Are hauled-in Residual Wastes accepted? | Yes | |
| OM-30 | Which types of residual wastes are accepted? | Other Landfill Leachate | |
| OM-31 | Is hauled-in residual waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-32 | At what flow does the facility stop accepting hauled-in wastes? | N/A | |
| OM-33 | Have the maximum amounts of hauled-in wastes that can be accepted (daily, weekly, etc.) been determined? | No | |
| OM-34 | Does the influent sampling location capture all hauled-in waste? | Yes | |
| OM-35 | Is all hauled in waste accounted for in the influent loading? | Yes | |
| OM-36 | Is the facility in compliance with other the Part C Hauled-In Waste Restrictions? | Yes | |

### Stormwater

| | | | |
|---|---|---|---|
| OM-37 | Does the permit include a special condition or other requirements regarding stormwater management? | Yes | |
| OM-38 | Has a PPC Plan for stormwater discharges been submitted? | Yes | |
| OM-39 | Is the Stormwater PPC Plan available on-site? | Yes | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| OM-40 | When was the Stormwater PPC Plan last updated? | Feb '23 | |
| OM-41 | Is the facility in compliance with all permit requirements applicable to stormwater outfalls? | Yes | |

**Special Conditions**

| | | | |
|---|---|---|---|
| OM-42 | Is the facility subject to industrial pretreatment requirements, or does the permit include a Part C Special Condition regarding Industrial Pretreatment? | No | |
| OM-45 | Does the permit contain a condition regarding whole effluent toxicity (WET) tests? | Yes | |
| OM-46 | Has WET testing been conducted? | Yes | |
| OM-47 | Is the facility in compliance with all other permit requirements applicable to WET testing? | Yes | |
| OM-48 | Are any other special conditions in the permit not covered in this inspection report? | No | |

**DP Discharge Point: 001 - OUTFALL 001**

**Outfall**

| | | | |
|---|---|---|---|
| DP-1 | Outfall Observations | IMP okay | |
| DP-2 | Were field measurements taken? | No | |
| DP-4 | Were effluent samples collected for laboratory analysis? | No | |

**Downstream**

| | | | |
|---|---|---|---|
| DP-10 | Is the receiving stream clear of floating or deposited materials, scum, sheen, foam, oil, grease or other substances associated with the discharge? | Yes | |
| DP-11 | Were downstream field measurements taken? | No | |
| DP-13 | Were downstream samples collected for laboratory analysis? | No | |

**Upstream**

| | | | |
|---|---|---|---|
| DP-19 | Was the stream observed upstream from the outfall? | Yes | |
| DP-20 | Were upstream field measurements taken? | No | |
| DP-22 | Were upstream samples collected for laboratory analysis? | No | |

**CV Conveyance: 0472402 - TRTMT PLT**

**Collection System**

| | | | |
|---|---|---|---|
| CV-1 | Does the permitted entity own, operate & maintain the entire collection system?<br><br>**Notes:** Beaver Falls owns and maintains BF collection system, contributing municipalities own and maintain their collection systems. | Yes | |
| CV-4 | Is collection system maintenance performed? | Yes | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| CV-5 | Is maintenance regularly scheduled? | Yes | |
| CV-6 | Is maintenance done as problems occur? | Yes | |
| CV-7 | Which types of maintenance are performed? | N/A, street dept | |
| CV-8 | Does the system experience infiltration and/or inflow that causes or could cause O&M problems or interferes with treatment? | Yes | |
| CV-9 | Is an I&I program in place?<br>**Notes:** Handled by street dept, contributing systems are handled by respective owners. All contributing systems under CAP at time of inspection. | Not Applicable | |
| CV-10 | Select the I&I detection work performed since last inspection | Smoke Tests<br>Metering<br>Manhole Inspections<br>Downspout/Floor Drain Inspections<br>Televising | |
| CV-11 | Select the I&I removal work performed since last inspection<br>**Notes:** Street dept, contributing systems handle removal work | Not Observed | |

**Sanitary Sewer Overflows**

| | | | |
|---|---|---|---|
| CV-12 | Have any sanitary sewer overflows occurred since the last inspection? | No | |

## 7 PS Pump Stations: 0472402 - TRTMT PLT

**Pump Stations**

| | | | |
|---|---|---|---|
| PS-1 | How many pump stations are part of the facility's collection system?<br>**Notes:** Big Beaver Boro. oversees operation and maintenance for seven of eight pump stations contributing flow to Beaver Falls STP. Beaver Falls maintains Eastvale pump station only. North Sewickley Twp also contributes flow from 5 pump stations. | 13 | |
| PS-2 | Are pump station flows recorded? | Yes | |
| PS-3 | How are flows measured? | Metered | |
| PS-4 | What type of flow meter/sensor is in use? | Ultrasonic | |
| PS-5 | When was the most recent flow meter calibration done? | N/A | |
| PS-6 | How often are the pump stations inspected? | Annually | |
| PS-7 | Are pump stations monitored with alarms? | Yes | |
| PS-8 | Are the alarms operable? | Yes | |
| PS-9 | Are the pump stations equipped with backup auxiliary power? | Yes | |
| PS-10 | Type of Stand-by Power | Emergency generator | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| PS-11 | Is the stand-by power system operable? | Yes | |
| PS-12 | Is the stand-by power system maintained in accordance with manufacturer's recommendations? | Yes | |
| PS-13 | How often is the stand-by power unit maintained? | Weekly | |
| PS-14 | How often is the stand-by power unit exercised? | Weekly | |
| PS-15 | Is the stand-by power unit exercised under load? | Yes | |

## OpCert: 0472402 - TRTMT PLT

### Operator Certification

| | | | |
|---|---|---|---|
| OP-1 | Is a properly certified operator employed for the treatment plant? | Yes | |
| OP-2 | Is at least one collection system pump station part of the permitted facility? | Yes | |
| OP-3 | Is an operator with a valid E-4 certificate employed for the operation of the facility's collection system pump station(s)? | Yes | |
| OP-4 | How many properly certified available operators make process control decisions at this facility? | 1 | |
| OP-5 | Is at least one available operator's current certificate displayed at the treatment plant? | Yes | |
| OP-6 | Have the available operators been provided with a copy of the current NPDES/WQM Permits? | Yes | |
| OP-7 | On which days of the week is an available operator at the plant? | Sunday<br>Monday<br>Tuesday<br>Wednesday<br>Thursday<br>Friday<br>Saturday | |
| OP-8 | How many hours are spent at the plant by the available operator(s) each day (weekdays/weekends/holidays)? | 8 hours a day | |
| OP-9 | Does the operator notify the owner about violations or conditions that may cause a violation, and needed resources? | Yes | |
| OP-10 | How does the operator notify the owner about known violations or conditions that may cause a violation, and about needed resources? | Email | |
| OP-11 | Does the owner respond to the operator's notification about needed resources? | Yes | |
| OP-12 | Does the operator act to resolve the condition(s) and/or violation(s)? | Yes | |
| OP-13 | Are non-certified or not properly certified persons expected to perform work that requires process control decisions? | No | |
| OP-19 | If the available operator/operator in charge (OIC) has changed, was a change of operator form submitted to DEP within 10 days? | Yes | |

### Circuit Rider

| | | | |
|---|---|---|---|
| OP-20 | Is the facility operated by a circuit rider? | No | |

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER



SEWAGE INSPECTION REPORT

SEWAGE INSPECTION REPORT

## TP Treatment Plant: 0472402 - TRTMT PLT

### Treatment Units

| | |
|---|---|
| TP-1 | Are all treatment units operable? |

| Treatment Units | Total | On-Line | Inoperable | Comments |
|---|---|---|---|---|
| Other<br>Mechanical bar screen | 1 | 1 | 0 | |
| Grit Removal | 1 | 1 | 0 | Teacup separator |
| Other<br>Sludge return | 1 | 1 | 0 | |
| Other<br>Recirculation chamber | 1 | 1 | 0 | |
| Other<br>Gas chlorination | 1 | 1 | 0 | Flow proportional |
| Chlorine Contact Tank | 2 | 2 | 0 | |
| Anaerobic Digester | 2 | 2 | 0 | |
| Belt Filter Press | 1 | 1 | 0 | Running, new belt ordered |
| Other<br>Skimmer/holding tank | 1 | 1 | 0 | |
| Grease Removal | 1 | 1 | 0 | Grease decant from prim sett tanks, water back to |
| Other<br>Sludge bed | 1 | 1 | 0 | Maintained for backup only |
| Other<br>Manual bar screen | 3 | 3 | 0 | One used for backup. |
| Other<br>Primary wet well | 1 | 1 | 0 | |
| Other<br>Primary settling tanks | 3 | 3 | 0 | Annual cleaning |
| Aeration Basin | 1 | 1 | 0 | Backup only |
| Other<br>Sludge decant tank | 1 | 1 | 0 | |
| Other<br>Secondary wet well | 1 | 1 | 0 | Flow shutoff at 7.5 mgd |
| Trickling Filter | 2 | 2 | 0 | |
| Other<br>Secondary settling tanks | 5 | 5 | 0 | Drained/cleaned annually. |

## O&M: 0472402 - TRTMT PLT

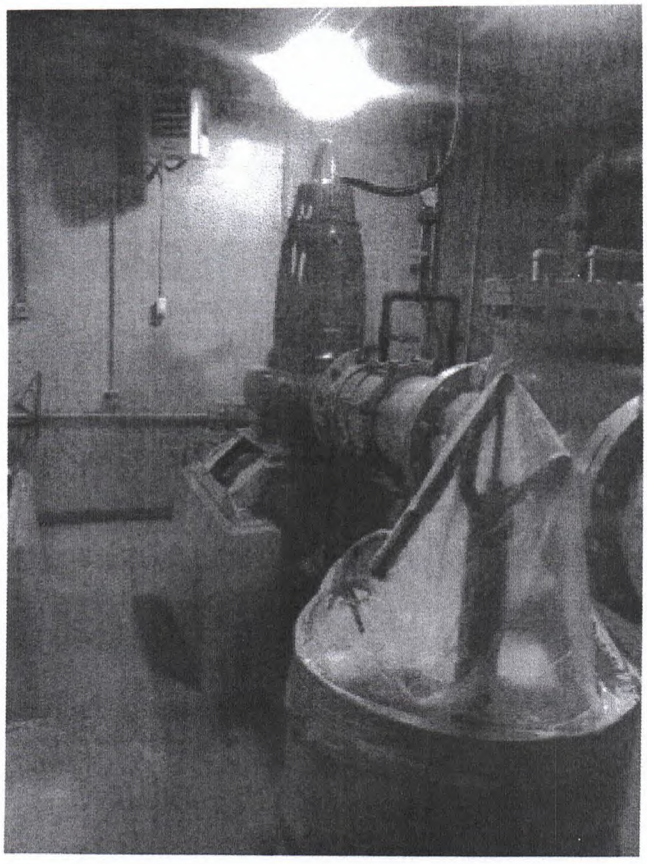
### O&M

## SEWAGE INSPECTION REPORT

| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) |
|---|---|

| Parameter / Calculation | Frequency Of Testing | Current Testing Results |
|---|---|---|
| Settleability | Daily | 2 |
| Dissolved Oxygen | Daily | 5.17 |
| Alkalinity | Daily | 150 |
| Sludge Blanket | Daily | Ok |
| pH | 7/week | 710 |
| Temperature | Daily | 70.1F |

## Inspection Images



#:

Photo # 1 New secondary pump.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0435 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**
Laboratories: **CMA Environmental Labs**

Month: **2** (select number) Year: **2023**
Permit No.: **PA0026883** Outfall: **101**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | | Parameter | Flow | | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | | | | | |
| Week | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Sun | 1/29/23 | 3.07 | | | | 7.25 | | 8.52 | | 0.46 | | 9.1 | | 26.0 | | 1.06 | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/30/23 | 3.0 | | 20.0 | | 7.22 | | 8.86 | | 0.42 | | 15.3 | | 38.0 | | 2.73 | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/31/23 | 2.9 | | 25.0 | | 7.18 | | 10.12 | | 0.43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 2/1/23 | 2.68 | | | | 7.15 | | 8.69 | | 0.58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 2/2/23 | 2.54 | | | | 7.12 | | 8.14 | | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 2/3/23 | 2.14 | | | | 7.3 | | 9.01 | | 0.58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 2/4/23 | 2.26 | | | | 7.17 | | 9.29 | | 0.54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 2/5/23 | 2.25 | | | | 7.17 | | 8.86 | | 0.52 | | 23.9 | | 26.0 | | 2.85 | | | | | | | | | | | | | | | | | | | |
| | Mon | 2/6/23 | 2.2 | | 72.0 | | 7.13 | | 8.19 | | 0.47 | | 16.8 | | 42.5 | | 2.34 | | | | | | | | | | | | | | | | | | | |
| | Tue | 2/7/23 | 2.17 | | 10.0 | | 7.18 | | 8.19 | | 0.52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 2/8/23 | 2.13 | | | | 6.99 | | 8.54 | | 0.47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 2/9/23 | 2.27 | | | | 7.06 | | 7.78 | | 0.43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 2/10/23 | 2.14 | | | | 7.05 | | 8.79 | | 0.19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 2/11/23 | 2.14 | | | | 6.99 | | 8.24 | | 0.47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 2/12/23 | 2.14 | | | | 7.08 | | 7.74 | | 0.51 | | 11.0 | | 15.0 | | 2.67 | | | | | | | | | | | | | | | | | | | |
| | Mon | 2/13/23 | 2.18 | < | 1.0 | | 7.2 | | 7.93 | | 0.45 | | 15.3 | | 55.0 | | 9.51 | | | | | | | | | | | | | | | | | | | |
| | Tue | 2/14/23 | 2.15 | | 20.0 | | 7.07 | | 8.06 | | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 2/15/23 | 2.12 | | | | 7.14 | | 7.4 | | 0.41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 2/16/23 | 2.13 | | | | 7.15 | | 7.73 | | 0.53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 2/17/23 | 2.05 | | | | 7.16 | | 8.6 | | 0.38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 2/18/23 | 2.01 | | | | 7.22 | | 8.97 | | 0.52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 2/19/23 | 1.98 | | | | 7.27 | | 8.25 | | 0.36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 2/20/23 | 1.98 | | | | 7.23 | | 6.79 | | 0.4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 2/21/23 | 1.89 | | | | 7.16 | | 7.16 | | 0.19 | | 9.8 | | 50.0 | | 11.0 | | | | | | | | | | | | | | | | | | | |
| | Wed | 2/22/23 | 2.37 | | 22.0 | | 7.15 | | 7.67 | | 0.3 | | 10.1 | | 54.0 | | 5.34 | | | | | | | | | | | | | | | | | | | |
| | Thu | 2/23/23 | 2.1 | | 24.0 | | 7.18 | | 7.96 | | 0.37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 2/24/23 | 1.97 | | | | 6.87 | | 9.3 | | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 2/25/23 | 2.0 | | | | 7.01 | | 9.03 | | 0.38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Sun | 2/26/23 | 1.94 | | | | 7.1 | | 8.33 | | 0.35 | | 27.0 | | 48.0 | | 2.27 | | | | | | | | | | | | | | | | | | | |
| | Mon | 2/27/23 | 2.83 | | 20.0 | | 7.11 | | 8.12 | | 0.47 | | 24.6 | | 54.0 | | 2.55 | | | | | | | | | | | | | | | | | | | |
| | Tue | 2/28/23 | 3.39 | | 2500.0 | | 7.06 | | 8.49 | | 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | < | 1 | | 6.87 | | 6.79 | | 0.19 | | 9.8 | | 15 | | 2.27 | | | | | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | | 2500 | | 7.3 | | 9.3 | | 0.58 | | 27 | | 55 | | 11 | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 8.95 | | 0.5 | | 20.4 | | 52 | | 8.17 | | | | | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 8.26 | | 0.4 | | 17 | | 43 | | 4.82 | | | | | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | < | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | | 2.66 | | | | | | 198 | | 11 | | 378.4 | | 927.7 | | 139 | | | | | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | | 2.22 | | | | | | 153 | | 8 | | 325.3 | | 805.2 | | 87 | | | | | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | | 62.15 | | | | | | 4285 | | 223 | | 9109.8 | | 22546.9 | | 2425 | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | | 1.89 | | | | | | 112 | | 3 | | 154.5 | | 267.7 | | 37 | | | | | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | | 3.39 | | | | | | 240 | | 13 | | 580.6 | | 1274.5 | | 173 | | | | | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Joseph M. Durish, Jr. License No.: **S18320**
Title: Manager Date: **9-Mar**

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0436 3/2012

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **February** Year: **2023**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 2.68 | | | | | | | | | |
| 2 | 2.54 | | | | | | | | | |
| 3 | 2.14 | | | | | | | | | |
| 4 | 2.26 | | | | | | | | | |
| 5 | 2.25 | 303.0 | 5,686 | 197.0 | 3,697 | | | | | |
| 6 | 2.2 | 136.0 | 2,495 | 96.6 | 1,772 | | | | | |
| 7 | 2.17 | | | | | | | | | |
| 8 | 2.13 | | | | | | | | | |
| 9 | 2.27 | | | | | | | | | |
| 10 | 2.14 | | | | | | | | | |
| 11 | 2.14 | | | | | | | | | |
| 12 | 2.14 | 308.0 | 5,497 | 280.0 | 4,997 | | | | | |
| 13 | 2.18 | 556.0 | 10,109 | 860.0 | 15,636 | | | | | |
| 14 | 2.15 | | | | | | | | | |
| 15 | 2.12 | | | | | | | | | |
| 16 | 2.13 | | | | | | | | | |
| 17 | 2.05 | | | | | | | | | |
| 18 | 2.01 | | | | | | | | | |
| 19 | 1.98 | | | | | | | | | |
| 20 | 1.98 | | | | | | | | | |
| 21 | 1.89 | 403.0 | 6,352 | 240.0 | 3,783 | | | | | |
| 22 | 2.37 | 388.0 | 7,669 | 366.0 | 7,234 | | | | | |
| 23 | 2.1 | | | | | | | | | |
| 24 | 1.97 | | | | | | | | | |
| 25 | 2.0 | | | | | | | | | |
| 26 | 1.94 | 208.0 | 3,365 | 120.0 | 1,942 | | | | | |
| 27 | 2.83 | 275.0 | 6,491 | 1,460.0 | 34,459 | | | | | |
| 28 | 3.39 | | | | | | | | | |
| 29 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 31 | | | | | | | | | | |
| Avg | 2.22 | 322 | 5,958 | 452 | 9,190 | | | | | |
| Max | 3.39 | 556 | 10,109 | 1,460 | 34,459 | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Joseph M. Durish, Jr.** License No.: **S18320**
Title: **Manager** Date: **3/9/2023**

3800-FM-BCW0438 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT
# SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **February** Year: **2023**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration
This permit will expire on: **October 31, 2023**

## SEWAGE SLUDGE / BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

| Date | Liquid Sewage Sludge/Biosolids Hauled Off-site | | | Dewatered Sewage Sludge/Biosolids Hauled Off-site | | | Sewage Sludge/Biosolids Dewatered and Incinerated On-site | | |
|---|---|---|---|---|---|---|---|---|---|
| | Gallons | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons |
| 2/1/23 | | | | 15.11 | 18.40 | **2.78** | | | |
| 2/2/23 | | | | 15.27 | 18.05 | **2.76** | | | |
| 2/5/23 | | | | 16.00 | 18.23 | **2.92** | | | |
| 2/8/23 | | | | 14.94 | 17.98 | **2.69** | | | |
| 2/11/23 | | | | 16.10 | 16.93 | **2.73** | | | |
| 2/14/23 | | | | 15.91 | 17.22 | **2.74** | | | |
| 2/16/23 | | | | 16.01 | 17.02 | **2.72** | | | |
| 2/19/23 | | | | 16.22 | 15.30 | **2.48** | | | |
| 2/22/23 | | | | 16.10 | 16.75 | **2.70** | | | |
| 2/25/23 | | | | 15.86 | 15.22 | **2.41** | | | |
| | | | | 157.20 | 17.11 | | | | |
| | TOTAL: | | | TOTAL: | | 26.922 | | TOTAL: | |

## SEWAGE SLUDGE / BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
**(Identify all sites where biosolids or ash were disposed or land applied)**

| | | | | |
|---|---|---|---|---|
| **Site Name** | **Joseph J. Brunner** | | | |
| **Municipality** | New Sewickley | | | |
| **County** | Beaver | | | |
| **DEP Permit No.** | 101439 | | | |
| **Type of Material*** | sewage sludge | | | |
| **Dry Tons Applied/Disposed** | 26.92 | | | |
| **Type of Disposal/Use*** | Landfill | | | |
| **Hauler Name** | Joseph J. Brunner | | | |

* See Instructions for explanation.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Joseph M. Durish, Jr.** License No.: **S18320**
Title: **Manager** Date: **March 13, 2023**

From: depgreenporthelpdesk@state.pa.us
Subject: Your eDMR Report Has Been Received For Permit No. PA0026883
Date: Jul 23, 2023 at 8:18:23 AM
To: brianpetronchak@yahoo.com, jsuasum@gmail.com, brianpetronchak@yahoo.com, bfstp@outlook.com

---

This email is to confirm that the following report was received by DEP through the eDMR system:

**Facility Name**: CITY OF BEAVER FALLS STP
**Permit Number**: PA0026883
**Report Frequency**: Monthly
**Report Type**: DMR
**Reporting Period**: 06/01/2023-06/30/2023
**Report Due Date**: 07/28/2023

**Submitted By**: Brian Petronchak
**Submission Id**: 404851
**Submission Status**: Received
**Submission Type**: Original
To view the details of this report, access the eDMR system through DEP's GreenPort and select the link for View/Revise Submitted.

3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2023 | 06 | 01 | TO | 2023 | 06 | 30 |

Reporting Frequency: **Monthly**
DMR Effective From: **06/01/2023**
DMR Effective To: **06/30/2023**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.06 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.41 | *** | 7.13 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 294.4 | 458.4 | lbs/day | *** | 19.0 | 28.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 19 | *** | lbs/day | *** | 1.18 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 1.77 | 3.06 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .30 | .50 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (May-Sep) | Sample Measurement | *** | *** | *** | *** | < 40 | 15000 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 200 Geo Mean | 1000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 201.7 | 236.0 | lbs/day | *** | 14.0 | 15.6 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: BEAVER FALLS CITY BEAVER CNTY
ADDRESS: 715 15TH ST, BEAVER FALLS PA, 15010-4124
FACILITY: CITY OF BEAVER FALLS STP
LOCATION: LOWER SEVENTH AVE, BEAVER FALLS PA, 15010
STAGE: Raw Sewage Influent

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2023 | 06 | 01 | TO | 2023 | 06 | 30 |

Reporting Frequency: Monthly
DMR Effective From: 06/01/2023
DMR Effective To: 06/30/2023
Permit Expires: 10/31/2023
Permit Application Due: 05/04/2023
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 3233 | 5399 | lbs/day | *** | 223 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2424 | 6332 | lbs/day | *** | 167 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**BUREAU OF CLEAN WATER**

# DISCHARGE MONITORING REPORT (DMR)



## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Municipal Waste JUN 2023.xlsx | Hauled-In Municipal Waste Form | 2023-07-23T08:10:30-04:00 | |
| Hauled In Residual Waste JUN 2023.xlsx | Hauled-In Residual Waste Form | 2023-07-23T08:10:49-04:00 | |
| Hauled In Residual Waste JUN 2023 MAHONING Sheet 1.xlsx | Hauled-In Residual Waste Form | 2023-07-23T08:11:18-04:00 | |
| Hauled In Residual Waste JUN 2023 MAHONING Sheet 2.xlsx | Hauled-In Residual Waste Form | 2023-07-23T08:11:37-04:00 | |
| Hauled In Residual Waste JUN 2023 MAHONING Sheet 3.xlsx | Hauled-In Residual Waste Form | 2023-07-23T08:11:52-04:00 | |
| Daily Effluent 2023 JUN.xlsx | Daily Effluent Monitoring Form | 2023-07-23T08:04:13-04:00 | |
| Daily Influent 2023 JUN.xlsx | Influent and Process Control Form | 2023-07-23T08:04:34-04:00 | |
| Sewage Sludge 2023 JUN.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2023-07-23T08:05:59-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192719 | 06/01/2023 | 06/30/2023 | Fecal Coliform | Instantaneous Maximum | 15000 | 1000 | No./100 ml | Final Effluent (101) | Equipment malfunction/failure | Equipment repaired | |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in Hauled-In municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. municipal wastes and hauled-in residual wastes. | Brian M. Petronchak | s22917 | (724)-513-6748 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | **Brian Petronchak** | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **bpetronchak** | | | (724) | 513-6748 | 2023 | 07 | 23 |
| | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0436 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: Beaver Falls STP
Municipality: Beaver Falls City
County: Beaver
Watershed: 20-B
Laboratories: CMA Environmental Labs

Month: 6 (select number)
Year: 2023
Permit No.: PA0026883
Outfall: 101
Renewal application due 180 days prior to expiration.
This permit will expire on: October 31, 2023

| | Parameter | | Flow | | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Stage | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | | | |
| | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | | | |
| | Thu | 6/1/23 | 1.45 | | | | 6.97 | | 6.67 | | 0.27 | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 6/2/23 | 1.44 | | | | 6.7 | | 6.13 | | 0.32 | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 6/3/23 | 1.39 | | | | 6.41 | | 7.12 | | 0.36 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Sun | 6/4/23 | 1.39 | | | | 6.96 | | 6.44 | | 0.28 | | 11.6 | | 10.0 | | 0.73 | | | | | | | | | | | | | | | | | |
| | Mon | 6/5/23 | 1.42 | | 4.0 | | 6.89 | | 7.08 | | 0.36 | | 11.7 | | 32.0 | | 0.7 | | | | | | | | | | | | | | | | | |
| | Tue | 6/6/23 | 1.42 | | 40.0 | | 6.94 | | 6.49 | | 0.34 | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 6/7/23 | 1.42 | | | | 6.95 | | 6.43 | | 0.27 | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 6/8/23 | 1.48 | | | | 6.98 | | 6.74 | | 0.4 | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 6/9/23 | 1.41 | | | | 6.93 | | 7.95 | | 0.32 | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 6/10/23 | 1.38 | | | | 6.77 | | 6.45 | | 0.25 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 6/11/23 | 1.48 | | | | 6.82 | | 7.38 | | 0.36 | | 13.6 | | 12.0 | | 0.86 | | | | | | | | | | | | | | | | | |
| | Mon | 6/12/23 | 2.1 | | 15000.0 | | 7.13 | | 6.97 | | 0.13 | | 17.5 | | 44.0 | | 3.84 | | | | | | | | | | | | | | | | | |
| | Tue | 6/13/23 | 1.72 | < | 1.0 | | 6.72 | | 6.41 | | 0.26 | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 6/14/23 | 3.06 | | | | 7.0 | | 7.42 | | 0.2 | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 6/15/23 | 1.72 | | | | 6.87 | | 6.93 | | 0.45 | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 6/16/23 | 2.98 | | | | 6.95 | | 7.04 | | 0.18 | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 6/17/23 | 1.88 | | | | 6.88 | | 7.27 | | 0.44 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 6/18/23 | 1.69 | | | | 6.83 | | 7.16 | | 0.34 | | 18.4 | | 18.0 | | 0.56 | | | | | | | | | | | | | | | | | |
| | Mon | 6/19/23 | 1.63 | | 20.0 | | 6.94 | | 7.11 | | 0.36 | | 10.7 | | 10.0 | | 0.63 | | | | | | | | | | | | | | | | | |
| | Tue | 6/20/23 | 1.6 | | 10.0 | | 6.83 | | 7.34 | | 0.44 | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 6/21/23 | 1.54 | | | | 6.65 | | 6.61 | | 0.4 | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 6/22/23 | 1.58 | | | | 6.82 | | 6.87 | | 0.37 | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 6/23/23 | 1.9 | | | | 6.78 | | 6.78 | | 0.25 | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 6/24/23 | 1.69 | | | | 6.87 | | 7.03 | | 0.38 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 6/25/23 | 1.55 | | | | 6.81 | | 6.55 | | 0.3 | | 12.0 | | 13.0 | | 0.71 | | | | | | | | | | | | | | | | | |
| | Mon | 6/26/23 | 2.89 | | 48.0 | | 6.84 | | 6.06 | | 0.33 | | 12.8 | | 16.0 | | 1.39 | | | | | | | | | | | | | | | | | |
| | Tue | 6/27/23 | 2.41 | | 290.0 | | 6.96 | | 6.31 | | 0.5 | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 6/28/23 | 2.11 | | | | 6.94 | | 6.73 | | 0.28 | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 6/29/23 | 1.78 | | | | 6.98 | | 6.42 | | 0.31 | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 6/30/23 | 1.66 | | | | 6.81 | | 6.93 | | 0.44 | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 7/1/23 | 3.52 | | | | 6.84 | | 5.93 | | 0.43 | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | < | 1 | | 6.41 | | 6.06 | | 0.13 | | 10.7 | | 10 | | 0.56 | | | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | | 15000 | | 7.13 | | 7.95 | | 0.5 | | 18.4 | | 44 | | 3.84 | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 7.06 | | 0.4 | | 15.6 | | 28 | | 2.35 | | | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 6.83 | | 0.3 | | 14 | | 19 | | 1.18 | | | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | < | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | 2.27 | | | | | | | 126 | | 7 | | 236.0 | | 458.4 | | 39 | | | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | 1.77 | | | | | | | 101 | | 5 | | 201.7 | | 294.4 | | 19 | | | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | 53.15 | | | | | | | 3026 | | 143 | | 6050.9 | | 8831.1 | | 576 | | | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | 1.38 | | | | | | | 74 | | 2 | | 134.5 | | 115.9 | | 8 | | | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | 3.06 | | | | | | | 189 | | 10 | | 308.5 | | 770.6 | | 67 | | | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Brian M Petronchak
Title: Chief Operator
License No.: S22917
Date: 17-Jul

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

3800-FM-BCW0436 3/2012

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **June** Year: **2023**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 1.45 | | | | | | | | | |
| 2 | 1.44 | | | | | | | | | |
| 3 | 1.39 | | | | | | | | | |
| 4 | 1.39 | 152.0 | 1,762 | 47.5 | 551 | | | | | |
| 5 | 1.42 | 203.0 | 2,404 | 170.0 | 2,013 | | | | | |
| 6 | 1.42 | | | | | | | | | |
| 7 | 1.42 | | | | | | | | | |
| 8 | 1.48 | | | | | | | | | |
| 9 | 1.41 | | | | | | | | | |
| 10 | 1.38 | | | | | | | | | |
| 11 | 1.46 | 399.0 | 4,858 | 520.0 | 6,332 | | | | | |
| 12 | 2.1 | 142.0 | 2,487 | 140.0 | 2,452 | | | | | |
| 13 | 1.72 | | | | | | | | | |
| 14 | 3.06 | | | | | | | | | |
| 15 | 1.72 | | | | | | | | | |
| 16 | 2.98 | | | | | | | | | |
| 17 | 1.88 | | | | | | | | | |
| 18 | 1.69 | 222.0 | 3,129 | 67.5 | 951 | | | | | |
| 19 | 1.63 | 248.0 | 3,371 | 135.0 | 1,835 | | | | | |
| 20 | 1.6 | | | | | | | | | |
| 21 | 1.54 | | | | | | | | | |
| 22 | 1.58 | | | | | | | | | |
| 23 | 1.9 | | | | | | | | | |
| 24 | 1.69 | | | | | | | | | |
| 25 | 1.55 | 190.0 | 2,456 | 84.0 | 1,086 | | | | | |
| 26 | 2.89 | 224.0 | 5,399 | 173.0 | 4,170 | | | | | |
| 27 | 2.41 | | | | | | | | | |
| 28 | 2.11 | | | | | | | | | |
| 29 | 1.78 | | | | | | | | | |
| 30 | 1.66 | | | | | | | | | |
| 31 | | | | | | | | | | |
| Avg | 1.772 | 223 | 3,233 | 167 | 2,424 | | | | | |
| Max | 3.06 | 399 | 5,399 | 520 | 6,332 | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Brian M Petronchak** License No.: **S22917**
Title: **Chief Operator** Date: **7/15/2023**

3800-FM-BCW0438 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT
# SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **June** Year: **2023**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration
This permit will expire on: **October 31, 2023**

## SEWAGE SLUDGE / BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

| Date | Liquid Sewage Sludge/Biosolids Hauled Off-site | | | Dewatered Sewage Sludge/Biosolids Hauled Off-site | | | Sewage Sludge/Biosolids Dewatered and Incinerated On-site | | |
|---|---|---|---|---|---|---|---|---|---|
| | Gallons | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons |
| 6/1/23 | | | | 15.17 | 20.57 | **3.12** | | | |
| 6/8/23 | | | | 15.76 | 20.22 | **3.19** | | | |
| 6/20/23 | | | | 16.69 | 20.57 | **3.43** | | | |
| 6/22/23 | | | | 16.38 | 20.65 | **3.38** | | | |
| 6/27/23 | | | | 16.45 | 20.43 | **3.36** | | | |
| 6/29/23 | | | | 16.48 | 21.03 | **3.47** | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | 96.93 | | | | | |
| **TOTAL:** | | | | **TOTAL:** | | 19.949 | | | **TOTAL:** |

## SEWAGE SLUDGE / BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
**(Identify all sites where biosolids or ash were disposed or land applied)**

| | | | | |
|---|---|---|---|---|
| **Site Name** | **Joseph J. Brunner** | | | |
| **Municipality** | New Sewickley | | | |
| **County** | Beaver | | | |
| **DEP Permit No.** | 101439 | | | |
| **Type of Material*** | sewage sludge | | | |
| **Dry Tons Applied/Disposed** | | | | |
| **Type of Disposal/Use*** | Landfill | | | |
| **Hauler Name** | Joseph J. Brunner | | | |

* See Instructions for explanation.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Brian m petronchak** License No.: **s22917**
Title: **chief operator** Date: **July 15, 2023**

Aqua Exhibit MJB-1R
Page 38 of 71

From: depgreenporthelpdesk@state.pa.us
Subject: Your eDMR Report Has Been Received For Permit No. PA0026883
Date: Jul 15, 2023 at 10:12:02 AM
To: brianpetronchak@yahoo.com, jsuasum@gmail.com, brianpetronchak@yahoo.com, bfstp@outlook.com

---

This email is to confirm that the following report was received by DEP through the eDMR system:

**Facility Name**: CITY OF BEAVER FALLS STP
**Permit Number**: PA0026883
**Report Frequency**: Monthly
**Report Type**: DMR
**Reporting Period**: 03/01/2023-03/31/2023
**Report Due Date**: 04/28/2023

**Submitted By**: Brian Petronchak
**Submission Id**: 402889
**Submission Status**: Received
**Submission Type**: Original
To view the details of this report, access the eDMR system through DEP's GreenPort and select the link for View/Revise Submitted.

3800-FM-BCW0462 12/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

NAME: BEAVER FALLS CITY BEAVER CNTY
ADDRESS: 715 15TH ST, BEAVER FALLS PA, 15010-4124
FACILITY: CITY OF BEAVER FALLS STP
LOCATION: LOWER SEVENTH AVE, BEAVER FALLS PA, 15010
STAGE: Final Effluent

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2023 | 03 | 01 | TO | 2023 | 03 | 31 |

Reporting Frequency: Monthly
DMR Effective From: 03/01/2023
DMR Effective To: 03/31/2023
Permit Expires: 10/31/2023
Permit Application Due: 05/04/2023
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 7.81 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 7.02 | *** | 7.29 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 1031.8 | 1502.5 | lbs/day | *** | 42.0 | 54.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 37.0 | *** | lbs/day | *** | 1.61 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 2.92 | 5.98 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .4 | .49 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | < 13 | 360 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 314.2 | 508.7 | lbs/day | *** | 13.0 | 25.8 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: BEAVER FALLS CITY BEAVER CNTY
ADDRESS: 715 15TH ST, BEAVER FALLS PA, 15010-4124
FACILITY: CITY OF BEAVER FALLS STP
LOCATION: LOWER SEVENTH AVE, BEAVER FALLS PA, 15010
STAGE: Raw Sewage Influent

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2023 | 03 | 01 | TO | 2023 | 03 | 31 |

Reporting Frequency: Monthly
DMR Effective From: 03/01/2023
DMR Effective To: 03/31/2023
Permit Expires: 10/31/2023
Permit Application Due: 05/04/2023
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 5211 | 9355 | lbs/day | *** | 223 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 2952 | 8443 | lbs/day | *** | 125 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**BUREAU OF CLEAN WATER**

# DISCHARGE MONITORING REPORT (DMR)



## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Daily Effluent 2023 MAR.xlsx | Daily Effluent Monitoring Form | 2023-07-15T09:57:12-04:00 | |
| Hauled In Municipal Waste 2023 MAR.xlsx | Hauled-In Municipal Waste Form | 2023-07-15T09:58:00-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 1.xlsx | Hauled-In Residual Waste Form | 2023-07-15T09:58:23-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 2.xlsx | Hauled-In Residual Waste Form | 2023-07-15T09:59:10-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 3.xlsx | Hauled-In Residual Waste Form | 2023-07-15T09:59:47-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 4.xlsx | Hauled-In Residual Waste Form | 2023-07-15T10:00:12-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 5.xlsx | Hauled-In Residual Waste Form | 2023-07-15T10:00:41-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 6.xlsx | Hauled-In Residual Waste Form | 2023-07-15T10:01:41-04:00 | |
| Hauled In Residual Waste 2023 MAR SHEET 7.xlsx | Hauled-In Residual Waste Form | 2023-07-15T10:02:24-04:00 | |
| Daily Influent 2023 MAR.xlsx | Influent and Process Control Form | 2023-07-15T09:57:34-04:00 | |
| Sewage Sludge 2023 MAR.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2023-07-15T10:03:55-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192041 | 03/01/2023 | 03/31/2023 | Total Suspended Solids | Average Monthly | 42 | 30 | mg/L | Final Effluent (101) | Operator error | Operator training | |
| 192042 | 03/01/2023 | 03/31/2023 | Total Suspended Solids | Weekly Average | 54 | 45 | mg/L | Final Effluent (101) | Operator error | Operator training | |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|
| 192043 | Late DMR Submission | | | | | Due to sickness, we've been behind. |

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Hauled-in municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in municipal wastes and hauled-in residual wastes. | Brian M. Petronchak | s22917 | (724)-513-6748 |

## SUBMISSION INFORMATION

| SUBMITTED BY GREENPORT USER | *Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities). | Brian Petronchak | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| | | | (724) | 513-6748 | 2023 | 07 | 15 |
| bpetronchak | | SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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Aqua Exhibit MJB-1R
Page 42 of 71

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0435 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: Beaver Falls STP
Municipality: Beaver Falls City  County: Beaver
Watershed: 20-B
Laboratories: CMA Environmental Labs

Month: 3 (select number)  Year: 2023
Permit No.: PA0026883  Outfall: 101
Renewal application due 180 days prior to expiration.
This permit will expire on: October 31, 2023

| Parameter | | | Flow | | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stage | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | |
| Week | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | Q | |
| 1 | Sun | 2/26/23 | 1.94 | | | | 7.1 | | 8.33 | | 0.35 | | 27.0 | | 48.0 | | 2.27 | | | | | | | | | | | | | | | |
| | Mon | 2/27/23 | 2.83 | | 20.0 | | 7.11 | | 8.12 | | 0.47 | | 24.6 | | 54.0 | | 2.55 | | | | | | | | | | | | | | | |
| | Tue | 2/28/23 | 3.39 | | 2500.0 | | 7.06 | | 8.49 | | 0.25 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 3/1/23 | 2.87 | | | | 7.12 | | 8.33 | | 0.36 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 3/2/23 | 2.45 | | | | 7.12 | | 7.93 | | 0.37 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 3/3/23 | 3.07 | | | | 7.07 | | 8.52 | | 0.4 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 3/4/23 | 5.92 | | | | 7.2 | | 8.86 | | 0.13 | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 3/5/23 | 3.68 | | | | 7.14 | | 9.56 | | 0.28 | | 22.1 | | 50.0 | | 2.15 | | | | | | | | | | | | | | | |
| | Mon | 3/6/23 | 3.04 | | 360.0 | | 7.2 | | 8.74 | | 0.38 | | 13.2 | | 58.0 | | 2.3 | | | | | | | | | | | | | | | |
| | Tue | 3/7/23 | 2.87 | | 240.0 | | 7.09 | | 8.12 | | 0.38 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 3/8/23 | 2.59 | | | | 7.16 | | 8.42 | | 0.44 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 3/9/23 | 2.45 | | | | 7.15 | | 7.94 | | 0.45 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 3/10/23 | 2.55 | | | | 7.18 | | 8.3 | | 0.37 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 3/11/23 | 2.46 | | | | 7.18 | | 9.37 | | 0.45 | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 3/12/23 | 2.37 | | | | 7.14 | | 8.15 | | 0.35 | | 12.5 | | 14.0 | | 1.22 | | | | | | | | | | | | | | | |
| | Mon | 3/13/23 | 2.24 | < | 1.0 | | 7.11 | | 8.13 | | 0.39 | | 13.8 | | 30.0 | | 1.71 | | | | | | | | | | | | | | | |
| | Tue | 3/14/23 | 2.2 | | 4.0 | | 7.16 | | 8.64 | | 0.45 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 3/15/23 | 2.11 | | | | 7.11 | | 8.45 | | 0.41 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 3/16/23 | 2.12 | | | | 7.11 | | 8.84 | | 0.38 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 3/17/23 | 2.43 | | | | 7.07 | | 8.36 | | 0.34 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 3/18/23 | 2.26 | | | | 7.16 | | 8.85 | | 0.45 | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 3/19/23 | 2.16 | | | | 7.19 | | 8.75 | | 0.41 | | 14.4 | | 38.5 | | 2.27 | | | | | | | | | | | | | | | |
| | Mon | 3/20/23 | 2.04 | < | 1.0 | | 7.26 | | 8.74 | | 0.44 | | 5.6 | | 64.0 | | 1.62 | | | | | | | | | | | | | | | |
| | Tue | 3/21/23 | 1.99 | < | 1.0 | | 7.14 | | 8.84 | | 0.42 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 3/22/23 | 1.95 | | | | 7.07 | | 7.81 | | 0.34 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 3/23/23 | 4.09 | | | | 7.02 | | 8.42 | | 0.27 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 3/24/23 | 4.56 | | | | 7.29 | | 9.86 | | 0.19 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 3/25/23 | 5.98 | | | | 7.18 | | 8.85 | | 0.02 | | | | | | | | | | | | | | | | | | | | | |
| 5 | Sun | 3/26/23 | 4.16 | | | | 7.23 | | 8.92 | | 0.3 | | 9.7 | | 41.0 | | 0.47 | | | | | | | | | | | | | | | |
| | Mon | 3/27/23 | 3.29 | | 18.0 | | 7.08 | | 9.14 | | 0.32 | | 11.1 | | 44.0 | | 1.14 | | | | | | | | | | | | | | | |
| | Tue | 3/28/23 | 2.84 | | 140.0 | | 7.23 | | 8.05 | | 0.4 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 3/29/23 | 2.63 | | | | 7.15 | | 9.19 | | 0.49 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 3/30/23 | 2.47 | | | | 7.21 | | 8.13 | | 0.36 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 3/31/23 | 2.91 | | | | 7.17 | | 8.63 | | 0.43 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 4/1/23 | 4.37 | | | | 7.11 | | 8.77 | | 0.13 | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | < | 1 | | 7.02 | | 7.81 | | 0.02 | | 5.6 | | 14 | | 0.47 | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | | 360 | | 7.29 | | 9.86 | | 0.49 | | 22.1 | | 64 | | 2.3 | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 8.72 | | 0.4 | | 25.8 | | 54 | | 2.41 | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 8.6 | | 0.4 | | 13 | | 42 | | 1.61 | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | < | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | | 3.25 | | | | | | 240 | | 9 | | 508.7 | | 1502.5 | | 62 | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | | 2.92 | | | | | | 211 | | 8 | | 314.2 | | 1031.8 | | 37 | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | | 90.55 | | | | | | 6548 | | 249 | | 9740.2 | | 31985.9 | | 1149 | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | | 1.95 | | | | | | 127 | | 1 | | 95.3 | | 276.7 | | 16 | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | | 5.98 | | | | | | 441 | | 11 | | 678.3 | | 1534.6 | | 66 | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Joseph M. Durish, Jr.  License No.: S18320
Title: Manager  Date: 6-Apr

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

3800-FM-BCW0436 3/2012

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **March** Year: **2023**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 2.67 | | | | | | | | | |
| 2 | 2.45 | | | | | | | | | |
| 3 | 3.07 | | | | | | | | | |
| 4 | 5.92 | | | | | | | | | |
| 5 | 3.68 | 210.0 | 6,445 | 42.0 | 1,289 | | | | | |
| 6 | 3.04 | 369.0 | 9,355 | 333.0 | 8,443 | | | | | |
| 7 | 2.87 | | | | | | | | | |
| 8 | 2.59 | | | | | | | | | |
| 9 | 2.45 | | | | | | | | | |
| 10 | 2.55 | | | | | | | | | |
| 11 | 2.46 | | | | | | | | | |
| 12 | 2.37 | 202.0 | 3,993 | 63.3 | 1,251 | | | | | |
| 13 | 2.24 | 251.0 | 4,689 | 95.0 | 1,775 | | | | | |
| 14 | 2.2 | | | | | | | | | |
| 15 | 2.11 | | | | | | | | | |
| 16 | 2.12 | | | | | | | | | |
| 17 | 2.43 | | | | | | | | | |
| 18 | 2.26 | | | | | | | | | |
| 19 | 2.16 | 272.0 | 4,900 | 96.6 | 1,740 | | | | | |
| 20 | 2.04 | 215.0 | 3,658 | 200.0 | 3,403 | | | | | |
| 21 | 1.99 | | | | | | | | | |
| 22 | 1.95 | | | | | | | | | |
| 23 | 4.09 | | | | | | | | | |
| 24 | 4.56 | | | | | | | | | |
| 25 | 5.98 | | | | | | | | | |
| 26 | 4.16 | 202.0 | 7,008 | 135.0 | 4,684 | | | | | |
| 27 | 3.29 | 59.7 | 1,638 | 37.5 | 1,029 | | | | | |
| 28 | 2.84 | | | | | | | | | |
| 29 | 2.63 | | | | | | | | | |
| 30 | 2.47 | | | | | | | | | |
| 31 | 2.91 | | | | | | | | | |
| Avg | 2.921 | 223 | 5,211 | 125 | 2,952 | | | | | |
| Max | 5.98 | 369 | 9,355 | 333 | 8,443 | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Joseph M. Durish, Jr.**
Title: **Manager**

License No.: **S18320**
Date: **4/6/2023**

Aqua Exhibit MJB-1R
Page 44 of 71

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0435 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**
Laboratories: **CMA Environmental Labs**

Month: **12** (select number) Year: **2022**
Permit No.: **PA0026883** Outfall: **101**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| Parameter | | | Flow | | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stage | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | |
| Week | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | Q | |
| | Thu | 12/1/22 | 3.23 | | | | 7.26 | | 10.98 | | 0.53 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 12/2/22 | 2.59 | | | | 7.17 | | 10.64 | | 0.56 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 12/3/22 | 2.86 | | | | 7.19 | | 10.08 | | 0.46 | | | | | | | | | | | | | | | | | | | | | |
| 1 | Sun | 12/4/22 | 2.54 | | | | 7.17 | | 10.6 | | 0.45 | | 11.5 | | 9.0 | | 0.95 | | | | | | | | | | | | | | | |
| | Mon | 12/5/22 | 2.34 | | 38.0 | | 7.19 | | 10.08 | | 0.41 | | 19.7 | | 48.0 | | 5.41 | | | | | | | | | | | | | | | |
| | Tue | 12/6/22 | 2.3 | < | 2.0 | | 7.12 | | 8.8 | | 0.5 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 12/7/22 | 2.38 | | | | 7.08 | | 9.75 | | 0.43 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 12/8/22 | 2.25 | | | | 7.06 | | 9.81 | | 0.3 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 12/9/22 | 2.13 | | | | 7.06 | | 10.38 | | 0.48 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 12/10/22 | 2.1 | | | | 7.06 | | 11.14 | | 0.59 | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 12/11/22 | 2.23 | | | | 7.07 | | 9.07 | | 0.47 | | 16.3 | | 32.0 | | 1.4 | | | | | | | | | | | | | | | |
| | Mon | 12/12/22 | 2.14 | | 156.0 | | 7.06 | | 7.4 | | 0.4 | | 16.0 | | 68.0 | | 6.68 | | | | | | | | | | | | | | | |
| | Tue | 12/13/22 | 2.04 | | 6100.0 | | 7.37 | | 10.96 | | 0.01 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 12/14/22 | 2.05 | | | | 7.08 | | 8.3 | | 0.33 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 12/15/22 | 3.52 | | | | 7.27 | | 7.37 | | 0.11 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 12/16/22 | 2.77 | | | | 7.19 | | 10.27 | | 0.43 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 12/17/22 | 2.66 | | | | 7.16 | | 7.71 | | 0.47 | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 12/18/22 | 2.4 | | | | 7.13 | | 8.45 | | 0.5 | | 11.9 | | 18.0 | | 1.02 | | | | | | | | | | | | | | | |
| | Mon | 12/19/22 | 2.28 | | 308.0 | | 7.19 | | 9.0 | | 0.32 | | 33.0 | | 64.0 | | 5.82 | | | | | | | | | | | | | | | |
| | Tue | 12/20/22 | 2.25 | | 60.0 | | 7.08 | | 9.01 | | 0.44 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 12/21/22 | 2.16 | | | | 7.21 | | 9.35 | | 0.46 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 12/22/22 | 2.1 | | | | 7.03 | | 10.54 | | 0.5 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 12/23/22 | 2.54 | | | | 7.09 | | 9.51 | | 0.36 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 12/24/22 | 2.07 | | | | 7.11 | | 9.11 | | 0.47 | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 12/25/22 | 2.69 | | | | 7.14 | | 8.71 | | 0.37 | | 29.0 | | 48.0 | | 4.05 | | | | | | | | | | | | | | | |
| | Mon | 12/26/22 | 3.46 | | 132.0 | | 7.02 | | 9.57 | | 1.26 | | 8.7 | | 25.0 | | 1.68 | | | | | | | | | | | | | | | |
| | Tue | 12/27/22 | 2.09 | < | 1.0 | | 7.2 | | 8.91 | | 0.35 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 12/28/22 | 1.94 | | | | 7.17 | | 8.71 | | 0.41 | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 12/29/22 | 2.03 | | | | 6.97 | | 9.09 | | 0.42 | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 12/30/22 | 2.06 | | | | 7.05 | | 10.06 | | 0.46 | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 12/31/22 | 2.35 | | | | 7.02 | | 10.35 | | 0.5 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | < | 1 | | 6.97 | | 7.37 | | 0.01 | | 8.7 | | 9 | | 0.95 | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | | 6100 | | 7.37 | | 11.14 | | 1.26 | | 33 | | 68 | | 6.68 | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 10.08 | | 0.5 | | 22.5 | | 50 | | 4.04 | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 9.47 | | 0.4 | | 18 | | 39 | | 3.38 | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | < | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | | 2.49 | | | | | | 192 | | 12 | | 450.8 | | 904.4 | | 73 | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | | 2.4 | | | | | | 190 | | 9 | | 373.0 | | 789.0 | | 68 | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | | 74.55 | | | | | | 5885 | | 282 | | 11563.5 | | 24457.9 | | 2098 | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | | 1.94 | | | | | | 132 | | 0.2 | | 238.2 | | 190.7 | | 20 | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | | 3.52 | | | | | | 296 | | 36 | | 650.6 | | 1217.0 | | 119 | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Joseph M. Durish, Jr. License No.: **S18320**
Title: Manager Date: **6-Jan**

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0436 3/2012

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **December** Year: **2022**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 3.23 | | | | | | | | | |
| 2 | 2.59 | | | | | | | | | |
| 3 | 2.86 | | | | | | | | | |
| 4 | 2.54 | 129.0 | 2,733 | 48.0 | 1,017 | | | | | |
| 5 | 2.34 | 66.6 | 1,300 | 26.0 | 507 | | | | | |
| 6 | 2.3 | | | | | | | | | |
| 7 | 2.38 | | | | | | | | | |
| 8 | 2.25 | | | | | | | | | |
| 9 | 2.13 | | | | | | | | | |
| 10 | 2.1 | | | | | | | | | |
| 11 | 2.23 | 122.0 | 2,269 | 42.0 | 781 | | | | | |
| 12 | 2.14 | 78.3 | 1,397 | 100.0 | 1,785 | | | | | |
| 13 | 2.04 | | | | | | | | | |
| 14 | 2.05 | | | | | | | | | |
| 15 | 3.52 | | | | | | | | | |
| 16 | 2.77 | | | | | | | | | |
| 17 | 2.66 | | | | | | | | | |
| 18 | 2.4 | 99.0 | 1,982 | 38.0 | 761 | | | | | |
| 19 | 2.28 | 521.0 | 9,907 | 1,282.0 | 24,377 | | | | | |
| 20 | 2.25 | | | | | | | | | |
| 21 | 2.16 | | | | | | | | | |
| 22 | 2.1 | | | | | | | | | |
| 23 | 2.54 | | | | | | | | | |
| 24 | 2.07 | | | | | | | | | |
| 25 | 2.69 | 429.0 | 9,624 | 720.0 | 16,153 | | | | | |
| 26 | 3.46 | 1,028.0 | 29,664 | 56.0 | 1,616 | | | | | |
| 27 | 2.09 | | | | | | | | | |
| 28 | 1.94 | | | | | | | | | |
| 29 | 2.03 | | | | | | | | | |
| 30 | 2.06 | | | | | | | | | |
| 31 | 2.35 | | | | | | | | | |
| Avg | **2.405** | **309** | **7,360** | **289** | **5,875** | | | | | |
| Max | **3.52** | **1,028** | **29,664** | **1,282** | **24,377** | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Joseph M. Durish, Jr.** License No.: **S18320**
Title: **Manager** Date: **1/9/2023**

3800-FM-BCW0438 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# SUPPLEMENTAL REPORT
# SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **December** Year: **2022**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration
This permit will expire on: **October 31, 2023**

## SEWAGE SLUDGE / BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

| Date | Liquid Sewage Sludge/Biosolids Hauled Off-site | | | Dewatered Sewage Sludge/Biosolids Hauled Off-site | | | Sewage Sludge/Biosolids Dewatered and Incinerated On-site | | |
|---|---|---|---|---|---|---|---|---|---|
| | Gallons | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons | Tons Dewatered | % Solids | Dry Tons |
| 12/1/22 | | | | 15.76 | 20.22 | **3.19** | | | |
| 12/8/22 | | | | 14.85 | 21.88 | **3.25** | | | |
| 12/13/22 | | | | 15.94 | 21.34 | **3.40** | | | |
| 12/14/22 | | | | 14.48 | 20.47 | **2.96** | | | |
| 12/19/22 | | | | 15.51 | 19.64 | **3.05** | | | |
| 12/22/22 | | | | 15.93 | 20.25 | **3.23** | | | |
| 12/25/22 | | | | 16.36 | 22.50 | **3.68** | | | |
| 12/28/22 | | | | 13.12 | 21.01 | **2.76** | | | |
| | | | | | 167.31 | | | | |
| | | | | | 20.9% | | | | |
| | TOTAL: | | | | TOTAL: | 25.511 | | TOTAL: | |

## SEWAGE SLUDGE / BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
**(Identify all sites where biosolids or ash were disposed or land applied)**

| | | | | |
|---|---|---|---|---|
| **Site Name** | **Joseph J. Brunner** | | | |
| **Municipality** | New Sewickley | | | |
| **County** | Beaver | | | |
| **DEP Permit No.** | 101439 | | | |
| **Type of Material*** | sewage sludge | | | |
| **Dry Tons Applied/Disposed** | 25.51 | | | |
| **Type of Disposal/Use*** | Landfill | | | |
| **Hauler Name** | Joseph J. Brunner | | | |

* See Instructions for explanation.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Joseph M. Durish, Jr.** License No.: **S18320**
Title: **Manager** Date: **January 12, 2023**

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 23, 2024

**NOTICE OF VIOLATION**

City of Beaver Falls
Attn: Brian Petronchak
715 15th Street
Beaver Falls, PA 15010

Re: Beaver Falls STP
NPDES Permit No. PA002688
City of Beaver Falls, Beaver County

Dear Mr. Petronchak:

This is to confirm the results of the Department's inspection conducted July 23, 2024. The attached electronic Inspection Report notes conditions which are violations of your NPDES permit and/or The Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. Sections 691.1 - 691.1001 (The Clean Streams Law). The report may also note conditions that may contribute to or develop into violations of your NPDES permit and/or The Clean Streams Law and therefore need to be addressed. Any violation of The Clean Streams Law is subject to penalties provided by law.

This Notice of Violation is neither an order nor any other final action of the Department of Environmental Protection (Department). It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions, please contact me at 412.225.6087.

Sincerely,

Tim Smolar

Tim Smolar
Water Quality Specialist

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

# SEWAGE INSPECTION REPORT

| Permit Number | Inspection Date | Entry Time | Exit Time | Inspection Type | Inspection ID |
|---|---|---|---|---|---|
| PA0026883 | 07/23/2024 | 10:17 | 12:49 | CEI | 3800198 |

| | | | |
|---|---|---|---|
| **Municipality** | Beaver Falls | **County** | Beaver |
| **Facility Name** | CITY OF BEAVER FALLS STP | **Permittee Name** | BEAVER FALLS CITY BEAVER CNTY |
| **24-Hour Emergency Contact Person/Phone** | Bryan Petronchak / (724) 513-6748 | **Email** | petronchak@gmail.com |
| **Physical Location Address** | LOWER SEVENTH AVE, BEAVER FALLS, PA, 15010 | | |
| **Permit Expiration Date** | 10/31/2023 | **Next Submittal Annual Report DueDate** | ---- |

**Violations***

Violation(s) Noted

1. **25 Pa. Code 92a.44:** NPDES - Violation of effluent limits in Part A of permit
   Effluent limit violations noted, see comments for monitoring period and parameter in question.

**Recommendations**

Remove plant growth from skimmer tanks.

| | | | |
|---|---|---|---|
| **Person Interviewed** Brian Petronchak | **Date** 07/23/2024 | **Inspector** TIMOTHY D SMOLAR | **Date** 07/23/2024 |
| **Signature** | **Phone Number** (724) 513-6748 | **Signature** | **Phone Number** (412) 225-6087 |
| **Title** Chief Operator | | **Title** ENVTL TRN | |
| **Email** petronchak@gmail.com | | **Email** tsmolar@pa.gov | |

**This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. *Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and/or review of Department records.**

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

# SEWAGE INSPECTION REPORT

## Facility Details Section

| | | | |
|---|---|---|---|
| **Responsible Official** | STEPHEN JOHNSON | **Title** | CITY ADMIN |
| **Business Phone** | (724) 843-2808 | **Email** | bfwpcp@hotmail.com |
| **Permittee Address** | 715 15TH ST, BEAVER FALLS, PA, 15010-4124 | | |
| **Certified Operator** | PETRONCHAK BRIAN M | **Client ID** | 350258 |
| **Certificates** | A,E-2,4 | **Certification Status** | Active |
| **Expiration Date** | 09/30/2026 | | |

**Is a Copy of the permit(s) on-site?** Yes

**Has the interviewed operator/person reviewed the facility's permit(s)?** Yes

**Comments**

This inspection was performed for routine monitoring purposes. Representing the facility were Brian Petronchak, Chief Operator and Joe Durish Sr, Chief Mechanic. Representing the Department was Tim Smolar, WQS. Conditions were sunny and in the low 80s.

Inspection consisted of review of records both through eDMR and on site and a physical inspection of the plant.

A violation for effluent exceedances was noted at this time, for monitoring periods 5/1/24-5/31/24 (TSS), 4/1/24-4/30/24 (TSS, fecal coliforms), 1/1/24-1/31/24 (pH), 11/1/23-11/30/23 (TSS) and 10/1/23-10/31/23 (TSS).

**Participants:**
Brian Petronchak (Chief Operator), Joe Durish Sr. (Chief Mechanic)

## SEWAGE INSPECTION REPORT

I Mon,Rpts&Rcds: 0472402 - TRTMT PLT

### Influent Sampling

| | | | |
|---|---|---|---|
| MRR-1 | Is influent monitoring required by the permit? | Yes | |
| MRR-2 | Are influent samples collected? | Yes | |
| MRR-3 | Is the influent sampling location prior to all treatment? | Yes | |
| MRR-4 | Is the influent sampling location prior to all return flows? | Yes | |
| MRR-5 | Are representative influent samples collected? | Yes | |

### Effluent Sampling

| | | | |
|---|---|---|---|
| MRR-6 | Is the effluent sample collected at the location identified in the permit? | Yes | |
| MRR-7 | Where is the effluent sample collection location? | Outfall | |
| MRR-8 | Is the effluent sample location after all treatment? | Yes | |
| MRR-9 | Are representative effluent samples collected? | Yes | |

### Sample Collection

| | | | |
|---|---|---|---|
| MRR-10 | Are samples collected as required by the permit? | Yes | |
| MRR-11 | Is proper sampling equipment / containers used during collection? | Yes | |
| MRR-12 | Are the proper type of samples collected in accordance with the permit? | Yes | |
| MRR-13 | Are the samples collected at the frequency in accordance with the permit? | Yes | |
| MRR-14 | Is the proper sample size (minimum aliquot 100 mL) collected? | Yes | |
| MRR-15 | Is proper temperature control provided during collection, storage and shipping? | Yes | |
| MRR-16 | Is the temperature of the sampler or storage refrigerator monitored using an NIST traceable thermometer and recorded? | Yes | |
| MRR-17 | Is the sample storage temperature <=6 ¿C ? | Yes | |
| MRR-18 | What is the sample storage temperature? | 2C inf, 3C eff | |

### On-site Lab Accreditation-by-Rule

| | | | |
|---|---|---|---|
| MRR-19 | Does the facility analyze accredited-by-rule parameters only? | Yes | |
| MRR-20 | Which accredited-by-rule parameters are analyzed by the on-site lab?<br>**Notes:** Other: Settleable solids | Other<br>pH<br>DO<br>TRC<br>Temperature | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| MRR-21 | Is the on-site lab registered? | Yes | |
| MRR-22 | Laboratory Registration ID | 04-01709 | |

Lab Accreditation

| | | | |
|---|---|---|---|
| MRR-23 | Does the on-site laboratory analyze permit parameters? | No | |
| MRR-29 | Are permit parameters analyzed by a contract lab? | Yes | |
| MRR-30 | Contract Lab Name, City, Phone | Microbac Warrendale | |
| MRR-31 | Contract Laboratory Accreditation ID | 02-00257 | |
| MRR-32 | Is¿the contract lab accredited for those permit parameters? | Yes | |
| MRR-33 | Have any changes occurred with the accredited-by-rule or the accredited parameters or labs? | No | |

Analysis

| | | | |
|---|---|---|---|
| MRR-35 | Are approved test methods (per 40 CFR Part 136 or others) used for permit parameters? | Yes | |
| MRR-36 | Are the methods used sufficiently sensitive for permit parameters? | Yes | |
| MRR-37 | Are the samples analyzed within the required holding time? | Yes | |
| MRR-38 | Are laboratory equipment/meters calibrated in accordance with the manufacturers' specifications? | Yes | |
| MRR-39 | Are laboratory meters operated and maintained in accordance with the manufacturers' specifications? | Yes | |
| MRR-40 | Are pH buffers and other reagent standards current? | Yes | |

Records

| | | | |
|---|---|---|---|
| MRR-41 | Are sampling, calibration, laboratory results, chain-of-custody and other required records readily available for review and complete? | Yes | |
| MRR-42 | Do the sampling records include collector, date/time, location information? | Yes | |
| MRR-43 | Do the analysis records include the analyst's name, the analysis date and time, the test method used, the quantitation limits, and the results? | Yes | |
| MRR-44 | Are the required facility records retained for a minimum of 3 years? | Yes | |
| MRR-45 | Are the required sludge use and disposal records retained for a minimum of¿5 years? | Yes | |
| MRR-46 | Was access provided to information or to facility records upon request? | Yes | |

Reports

| | | | |
|---|---|---|---|
| MRR-47 | Identify the month/year of the DMRs and supporting data reviewed. | March '24 | |
| MRR-48 | Are the reviewed DMRs and supplemental reports properly completed? | Yes | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| MRR-49 | Are the reviewed bench sheets/lab reports consistent with the reported data? | Yes | |
| MRR-50 | Are samples collected more frequently than required in the permit? | Yes | |
| MRR-51 | Are additional sample results incorporated into the DMR calculations? | Yes | |
| MRR-52 | Are DMRs submitted on time? | Yes | |
| MRR-53 | Are the required supplemental reports submitted? | Yes | |
| MRR-54 | Is the facility using the eDMR system, if required? | Yes | |

### ? Flow Measurement: 0472402 - TRTMT PLT

#### Flow Measurement

| | | | |
|---|---|---|---|
| Q-1 | Where is the flow measured for DMR reporting? | Effluent | |
| Q-2 | If influent flows are measured, are they measured before all return lines and after hauled-in waste?<br>Notes: No measurement taken for influent flow | Not Observed | |
| Q-3 | Is a flume present? | Yes | |
| Q-4 | Is the flow¿uniform across flume channel? | Yes | |
| Q-5 | Is the upstream channel section and the flume free of debris and deposits? | Yes | |
| Q-6 | Is a weir present? | Yes | |
| Q-7 | Are weirs clean with a visible air space below nappe? | Yes | |
| Q-8 | What is the max flow that can be measured at the primary device (flume or weir)? | 15 MGD | |

#### leter & Recorder

| | | | |
|---|---|---|---|
| Q-9 | Does the permit require continuous flow monitoring and recording? | Yes | |
| Q-10 | Does the facility have the required flow monitoring and recording capabilities? | Yes | |
| Q-11 | What type of flow meter is used? | Ultrasonic | |
| Q-12 | What type of flow recorder is used? | Totalizer<br>7-day Chart | |
| Q-13 | Are¿the meter and recorder operable and operating?¿ | Yes | |
| Q-14 | What is the date of the most recent flow meter calibration? | 1/25/2024 | |
| Q-15 | What is the calibration range of the flow meter? | 0-15.29 mgd | |
| Q-16 | What is the flow range of the recorder? | 0-15.29 mgd | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| Q-17 | What is the current flow meter reading (MGD or gpm)? | 11,000 GPM | |

High Flows

| | | | |
|---|---|---|---|
| Q-18 | Does the permit require a High Flow Management Plan? | No | |

TP Treatment Plant: 0472402 - TRTMT PLT

Treatment Units

| | | | |
|---|---|---|---|
| TP-1 | Are all treatment units operable? | Yes | |
| TP-2 | Are the treatment units/equipment as described in the WQM permit(s) or in the previous inspection report? | Yes | |

Stand-by Power

| | | | |
|---|---|---|---|
| TP-7 | Is stand-by power provided? | Yes | |
| TP-8 | Type of Stand-by Power | Emergency generator | |
| TP-9 | How often is the stand-by power unit maintained? | Weekly | |
| TP-10 | How often is the stand-by power unit exercised? | Weekly | |
| TP-11 | Is the stand-by power unit exercised under load? | Yes | |
| TP-12 | Is the stand-by power system operable and maintained? | Yes | |

Alarms

| | | | |
|---|---|---|---|
| TP-13 | Is an alarm system available? | Yes | |
| TP-14 | Type of Alarm | SCADA<br>Power failure<br>High level<br>Pump faults<br>Pump failure | |
| TP-15 | How often is the alarm system tested? | Weekly | |
| TP-16 | What conditions trigger an alarm? Select all that apply.<br>**Notes:** Other: Chlorine, high channel. | Other | |
| TP-17 | Is the alarm system(s) operable? | Yes | |

Chemicals

| | | | |
|---|---|---|---|
| TP-18 | Are chemicals used for treatment or otherwise added to the waste stream? | No | |

Bypasses

| | | | |
|---|---|---|---|
| TP-23 | Did a treatment plant bypass occur since the last inspection? | No | |

## SEWAGE INSPECTION REPORT

### Planned Changes

| | | | |
|---|---|---|---|
| TP-35 | Have any changes (new pollutants, different or increased volume or loadings) to the waste stream from industrial or hauled-in wastes occurred since the last inspection? | No | |

### O&M: 0472402 - TRTMT PLT

#### O&M

| | | | |
|---|---|---|---|
| OM-1 | Which of the following treatment plant and equipment records are available? | O&M Manual<br>As-built drawings<br>Maintenance schedule<br>Equipment Manuals | |
| OM-2 | Is a daily operations log on-site? | Yes | |
| OM-3 | Is the daily operations log up to date? | Yes | |
| OM-4 | Which operational conditions/actions are recorded in the log? | Observations | |
| OM-5 | Are process control parameters monitored? (Record the monitoring frequency and current results) | Yes | |
| OM-6 | Is an influent/process control supplemental report form completed and submitted with the DMR? | Yes | |
| OM-7 | Does the daily operations log include maintenance and repair records? | No | |
| OM-8 | Is a routine preventative maintenance (PM) schedule and log maintained? | Yes | |
| OM-9 | Is a repair log on-site? | Yes | |
| OM-10 | Are the PM and repair logs up to date? | Yes | |
| OM-11 | Were major equipment repairs/replacements done since the last inspection?<br>**Notes:** One primary, one secondary pumps rebuilt. Backup chlorine system chlorinator replaced. | Yes | |
| OM-12 | Is a¿spare parts inventory, either written or electronic, maintained? | No | |
| OM-13 | Are spare parts and equipment (pumps, motors) maintained on-site or readily available? | Yes | |

#### olids Management

| | | | |
|---|---|---|---|
| OM-14 | What is the sludge storage capacity? | 400,060 gals | |
| OM-15 | How much sludge was removed from the facility in the past year? | 204 tons | |
| OM-16 | How does the facility determine how much sludge to waste? | Observation | |
| OM-17 | Is sludge/biosolids production & disposal information submitted on the applicable supplemental report form with the DMR? | Yes | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| OM-18 | Does the facility test the removed sludge for %TS? | Yes | |
| OM-19 | Who provides sludge hauling/disposal/land application? | Brunner | |
| OM-20 | Where is the sludge disposal/biosolids application location? | Brunner landfill | |
| OM-21 | How and where are other solid materials, such as collected screenings and grit, disposed? | Brunner landfill | |
| OM-22 | Has the facility obtained or assured that contracted agents have the necessary permits and approvals for the disposal of solid materials? | Yes | |
| OM-23 | Are solid materials handled and disposed of in compliance with a disposal permit and requirements? | Yes | |
| OM-24 | Is the facility in compliance with all other Part C Special Conditions regarding Solids Management? | Yes | |

Hauled in Wastes

| | | | |
|---|---|---|---|
| OM-25 | Does the facility accept hauled-in wastes? | Yes | |
| OM-26 | Does the facility accept hauled-in Municipal Wastes? | Yes | |
| OM-27 | Which types of municipal wastes are accepted? | Septage Wastewater sludge Holding tank | |
| OM-28 | Is hauled-in municipal waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-29 | Are hauled-in¿Residual Wastes accepted? | Yes | |
| OM-30 | Which types of residual wastes are accepted? | Landfill Leachate | |
| OM-31 | Is hauled-in residual waste information submitted on the applicable supplemental report form with the DMR? | Yes | |
| OM-32 | At what flow does the facility stop accepting hauled-in wastes? | N/O | |
| OM-33 | Have the maximum amounts of hauled-in wastes that can be accepted (daily, weekly, etc.) been determined? | No | |
| OM-34 | Does the influent sampling location capture all hauled-in waste? | Yes | |
| OM-35 | Is all hauled in waste accounted for in the influent loading? | Yes | |
| OM-36 | Is the facility in compliance with other the Part C Hauled-In Waste Restrictions? | Yes | |

tormwater

| | | | |
|---|---|---|---|
| OM-37 | Does the permit include a special condition or other requirements regarding stormwater management? | Yes | |
| OM-38 | Has a PPC Plan for stormwater discharges been submitted? | Yes | |
| OM-39 | Is the Stormwater PPC Plan available on-site? | Yes | |
| OM-40 | When was the Stormwater PPC Plan last updated? | Jan 2024 | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| OM-41 | Is the facility in compliance with all permit requirements applicable to stormwater outfalls? | Yes | |

Special Conditions

| | | | |
|---|---|---|---|
| OM-42 | Is the facility subject to industrial pretreatment requirements, or does the permit include a Part C Special Condition regarding Industrial Pretreatment? | No | |
| OM-45 | Does the permit contain a condition regarding whole effluent toxicity (WET) tests? | Yes | |
| OM-46 | Has WET testing been conducted? | Yes | |
| OM-47 | Is the facility in compliance with all other permit requirements applicable to WET testing? | Yes | |
| OM-48 | Are any other special conditions in the permit not covered in this inspection report? | No | |

DP Discharge Point: 201 - SW OUTFALL 201

Outfall

| | | | |
|---|---|---|---|
| DP-1 | Outfall Observations | IMP clear | |
| DP-2 | Were field measurements taken? | No | |
| DP-4 | Were effluent samples collected for laboratory analysis? | No | |

Downstream

| | | | |
|---|---|---|---|
| DP-10 | Is the receiving stream clear of floating or deposited materials, scum, sheen, foam, oil, grease or other substances associated with the discharge? | Yes | |
| DP-11 | Were downstream field measurements taken? | No | |
| DP-13 | Were downstream samples collected for laboratory analysis? | No | |

Upstream

| | | | |
|---|---|---|---|
| DP-19 | Was the stream observed upstream from the outfall? | Yes | |
| DP-20 | Were upstream field measurements taken? | No | |
| DP-22 | Were upstream samples collected for laboratory analysis? | No | |

CV Conveyance: 0472402 - TRTMT PLT

Collection System

| | | | |
|---|---|---|---|
| CV-1 | Does the permitted entity own, operate & maintain the entire collection system? | Yes | |
| CV-4 | Is collection system maintenance performed? | Yes | |
| CV-5 | Is maintenance regularly scheduled? | Yes | |

## SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| CV-6 | Is maintenance done as problems occur? | Yes | |
| CV-7 | Which types of maintenance are performed?<br>Notes: Facility shares conveyance maintenance with Beaver Falls Street Department. | TV, smoke, metering | |
| CV-8 | Does the system experience infiltration and/or inflow that causes or could cause O&M problems or interferes with treatment? | Yes | |
| CV-9 | Is an I&I program in place?<br>Notes: Contributing municipalities maintain their own lines, Beaver Falls Street Department is responsible for this portion of conveyance maintenance. | Not Observed | |
| CV-10 | Select the I&I detection work performed¿since last inspection | Metering Manhole Inspections | |
| CV-11 | Select the I&I removal work performed since last inspection<br>Notes: Beaver Falls Street Department responsible for bulk of conveyance maintenance. Facility utilizes metering and performs manhole inspections where their meters are located. | Not Observed | |

### Sanitary Sewer Overflows

| | | | |
|---|---|---|---|
| CV-12 | Have any sanitary sewer overflows occurred since the last inspection? | No | |

### PS Pump Stations: 0472402 - TRTMT PLT

### Pump Stations

| | | | |
|---|---|---|---|
| PS-1 | How many pump stations are part of the facility's collection system?<br>Notes: Beaver Falls STP maintains Eastvale pump station only. Big Beaver Borough and North Sewickley Township own the remaining stations. | 13 | |
| PS-2 | Are pump station flows recorded? | Yes | |
| PS-3 | How are flows measured? | Metered | |
| PS-4 | What type of flow meter/sensor is in use? | Daily Bubbler | |
| PS-5 | When was the most recent flow meter calibration done? | 1/25/24 | |
| PS-6 | How often are the pump stations inspected? | Daily | |
| PS-7 | Are pump stations monitored with alarms? | Yes | |
| PS-8 | Are¿the alarms¿operable? | Yes | |
| PS-9 | Are the pump stations¿equipped with backup auxiliary power? | Yes | |
| PS-10 | Type of Stand-by Power | Emergency generator | |
| PS-11 | Is the stand-by power system operable? | Yes | |
| PS-12 | Is the stand-by power system maintained in accordance with manufacturer's recommendations? | Yes | |
| PS-13 | How often is the stand-by power unit maintained? | Weekly | |

SEWAGE INSPECTION REPORT

| | | | |
|---|---|---|---|
| PS-14 | How often is the stand-by power unit exercised? | Weekly | |
| PS-15 | Is the stand-by power unit exercised under load? | Yes | |

OpCert: 0472402 - TRTMT PLT

Operator Certification

| | | | |
|---|---|---|---|
| OP-1 | Is a properly certified operator employed for the treatment plant? | Yes | |
| OP-2 | Is at least one collection system pump station part of the permitted facility? | Yes | |
| OP-3 | Is an operator with a valid E-4 certificate employed for the operation of the facility's collection system pump station(s)? | Yes | |
| OP-4 | How many properly certified available operators make process control decisions at this facility? | One | |
| OP-5 | Is at least one¿available operator's current¿certificate displayed at the treatment plant? | Yes | |
| OP-6 | Have the available operators been provided with a copy of the current¿NPDES/WQM Permits? | Yes | |
| OP-7 | On which days of the week is an available operator at the plant? | Monday<br>Tuesday<br>Wednesday<br>Thursday<br>Friday | |
| OP-8 | How many hours are spent at the plant by the available operator(s) each day (weekdays/weekends/holidays)? | 8/8/8 | |
| OP-9 | Does the operator notify the owner about violations or conditions that may cause a violation, and needed resources? | Yes | |
| OP-10 | How does the operator notify the owner about known violations or conditions that may cause a violation, and about needed resources? | Verbal<br>Text message<br>Phone call<br>Letter/Report/Memo | |
| OP-11 | Does the owner¿respond to the operator's notification about needed resources? | Yes | |
| OP-12 | Does the operator act to resolve the condition(s) and/or violation(s)? | Yes | |
| OP-13 | Are¿non-certified or not properly certified persons expected to perform work¿that requires process control decisions? | No | |
| OP-19 | If the available operator/operator in charge (OIC) has changed, was a change of operator form submitted to DEP within 10 days? | Not Applicable | |

Circuit Rider

| | | | |
|---|---|---|---|
| OP-20 | Is the facility operated by a circuit rider? | No | |

## SEWAGE INSPECTION REPORT

### TP Treatment Plant: 0472402 - TRTMT PLT

#### Treatment Units

**TP-1** Are all treatment units operable?

| Treatment Units | Total | On-Line | Inoperable | Comments |
|---|---|---|---|---|
| Anaerobic Digester | 2 | 2 | 0 | ---- |
| Chlorine Contact Tank | 2 | 2 | 0 | ---- |
| Primary Clarifier | 3 | 3 | 0 | ---- |
| Secondary Clarifier | 5 | 5 | 0 | ---- |
| Grease Removal | 3 | 3 | 0 | ---- |
| Belt Filter Press | 1 | 1 | 0 | ---- |
| Trickling Filter | 2 | 2 | 0 | ---- |
| Aeration Basin | 1 | 1 | 0 | ---- |

### O&M: 0472402 - TRTMT PLT

#### O&M

**OM-5** Are process control parameters monitored? (Record the monitoring frequency and current results)

| Parameter / Calculation | Frequency Of Testing | Current Testing Results |
|---|---|---|
| Temperature | Daily | 70.5 F |
| Dissolved Oxygen | Daily | 3.83 mg/l |
| pH | Daily | 6.93 su |
| Alkalinity | Daily | 275 mg/l |
| Settleability | Daily | 10 ml/l |

## SEWAGE INSPECTION REPORT

### Inspection Images

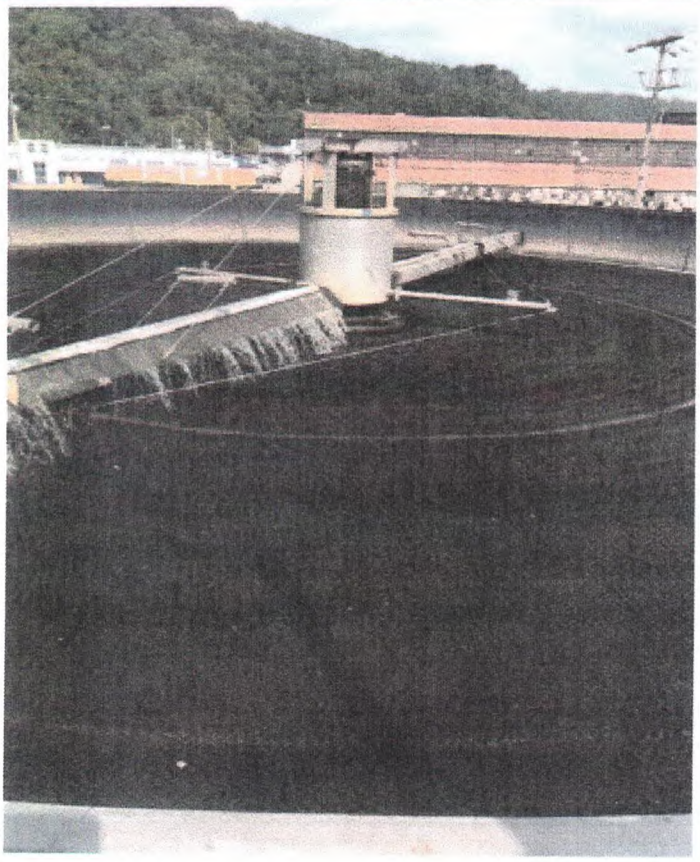


Photo #1: Trickling filter.



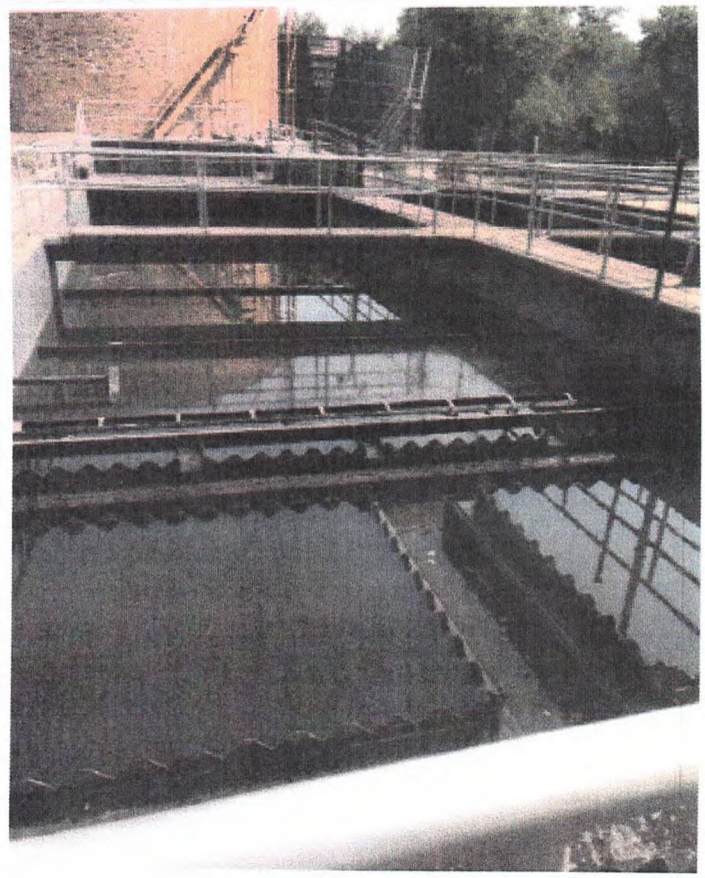
Photo #2: Aeration basin.

## SEWAGE INSPECTION REPORT



:

Photo #3: Weir bed.



#:

Photo #4: Secondary clarification.

From: depgreenporthelpdesk@state.pa.us
Subject: Your eDMR Report Has Been Received For Permit No. PA0026883
Date: Feb 16, 2024 at 9:27:45 AM
To: brianpetronchak@yahoo.com, jsuasum@gmail.com, brianpetronchak@yahoo.com, bfstp@outlook.com

---

This email is to confirm that the following report was received by DEP through the eDMR system:

**Facility Name**: CITY OF BEAVER FALLS STP
**Permit Number**: PA0026883
**Report Frequency**: Monthly
**Report Type**: DMR
**Reporting Period**: 01/01/2024-01/31/2024
**Report Due Date**: 02/28/2024

**Submitted By**: Brian Petronchak
**Submission Id**: 442388
**Submission Status**: Received
**Submission Type**: Original
To view the details of this report, access the eDMR system through DEP's GreenPort and select the link for View/Revise Submitted.

3800-FM-BCW0462 12/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Final Effluent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 2024 | 01 | 01 | TO | 2024 | 01 | 31 |

Reporting Frequency: **Monthly**
DMR Effective From: **01/01/2024**
DMR Effective To: **01/31/2024**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 5.89 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 5.92 | *** | 7.15 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 390.0 | 1180.3 | lbs/day | *** | 15.0 | 31.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.6 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | 23.0 | *** | lbs/day | *** | 1.17 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 3.0 | 7.0 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .30 | .55 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.6 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | 42 | 921 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | 175.7 | 365.6 | lbs/day | *** | 8.0 | 9.9 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| **Facility Sampling Point Comments** | | | | | | | | | | |

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0435 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**
Laboratories: **CMA Environmental Labs**

Month: **1** (select number) Year: **2024**
Permit No.: **PA0026883** Outfall: **101**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| Parameter | | | Flow | | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stage | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | | | | | |
| Week | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Sun | 12/31/23 | 2.1 | | | | 6.94 | | 9.16 | | 0.38 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/1/24 | 2.19 | | | | 6.9 | | 5.89 | | 0.46 | | 6.8 | | 7.0 | | 0.54 | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/2/24 | 2.11 | | 39.0 | | 5.92 | | 9.71 | | 0.41 | | 7.6 | | 13.5 | | 1.26 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 1/3/24 | 2.04 | | 2.0 | | 6.92 | | 8.83 | | 0.48 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 1/4/24 | 1.98 | | | | 6.9 | | 6.73 | | 0.37 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 1/5/24 | 1.92 | | | | 7.07 | | 9.07 | | 0.55 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 1/6/24 | 1.86 | | | | 6.92 | | 8.32 | | 0.39 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 1/7/24 | 1.92 | | | | 6.89 | | 8.12 | | 0.42 | | 8.3 | | 13.5 | | 0.42 | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/8/24 | 1.89 | | 89.0 | | 6.95 | | 8.46 | | 0.44 | | 8.0 | | 9.5 | | 1.98 | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/9/24 | 6.26 | | | | 6.94 | | 8.11 | | 0.14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 1/10/24 | 5.53 | | 921.0 | | 7.15 | | 9.1 | | 0.24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 1/11/24 | 3.33 | | | | 7.06 | | 8.04 | | 0.22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 1/12/24 | 3.05 | | | | 6.96 | | 10.5 | | 0.48 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 1/13/24 | 3.55 | | | | 6.94 | | 9.22 | | 0.38 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 1/14/24 | 2.51 | | | | 6.96 | | 9.76 | | 0.47 | | 6.9 | | 8.0 | | 1.03 | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/15/24 | 2.19 | | 120.0 | | 6.96 | | 9.61 | | 0.38 | | 5.5 | | 11.0 | | 2.02 | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/16/24 | 2.28 | | 26.0 | | 6.98 | | 9.33 | | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 1/17/24 | 2.16 | | | | 6.79 | | 8.25 | | 0.37 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 1/18/24 | 2.13 | | | | 6.77 | | 7.97 | | 0.24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 1/19/24 | 2.0 | | | | 6.69 | | 9.07 | | 0.18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 1/20/24 | 1.83 | | | | 6.63 | | 9.94 | | 0.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 1/21/24 | 1.83 | | | | 6.84 | | 9.73 | | 0.44 | | 10.2 | | 17.5 | | 1.04 | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/22/24 | 1.9 | | 4.0 | | 6.77 | | 7.98 | | 0.39 | | 7.2 | | 11.5 | | 1.73 | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/23/24 | 2.06 | | 6.0 | | 6.8 | | 7.74 | | 0.37 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 1/24/24 | 2.71 | | | | 6.84 | | 7.81 | | 0.22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 1/25/24 | 4.06 | | | | 6.67 | | 8.62 | | 0.07 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 1/26/24 | 5.92 | | | | 6.92 | | 9.78 | | 0.04 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 1/27/24 | 3.42 | | | | 7.01 | | 9.59 | | 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Sun | 1/28/24 | 7.0 | | | | 6.87 | | 9.13 | | 0.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mon | 1/29/24 | 4.78 | | | | 6.99 | | 8.76 | | 0.11 | | 13.9 | | 50.5 | | 0.68 | | | | | | | | | | | | | | | | | | | | | |
| | Tue | 1/30/24 | 3.71 | | 179.0 | | 7.03 | | 8.14 | | 0.33 | | 5.8 | | 11.5 | | 1.01 | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 1/31/24 | 3.12 | | 196.0 | | 6.97 | | 7.79 | | 0.28 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 2/1/24 | 2.67 | | | | 6.99 | | 9.1 | | 0.36 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 2/2/24 | 2.5 | | | | 6.89 | | 9.25 | | 0.43 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 2/3/24 | 2.24 | | | | 6.96 | | 9.42 | | 0.15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | | 2 | | 5.92 | | 5.89 | | 0.04 | | 5.5 | | 7 | | 0.42 | | | | | | | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | | 921 | | 7.15 | | 10.5 | | 0.55 | | 13.9 | | 50.5 | | 2.02 | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 9.13 | | 0.4 | | 9.9 | | 31 | | 1.53 | | | | | | | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 8.65 | | 0.3 | | 8 | | 15 | | 1.17 | | | | | | | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | | 3.71 | | | | | | 272 | | 9 | | 365.6 | | 1188.3 | | 29 | | | | | | | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | | 3 | | | | | | 219 | | 7 | | 175.7 | | 390.0 | | 23 | | | | | | | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | | 93.1 | | | | | | 6779 | | 220 | | 5446.3 | | 12090.1 | | 708 | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | | 1.8 | | | | | | 108 | | 2 | | 100.5 | | 127.9 | | 7 | | | | | | | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | | 7 | | | | | | 533 | | 12 | | 551.8 | | 2004.8 | | 37 | | | | | | | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Brian M Petronchak License No.: S22917
Title: Chief Operator Date: 15-Feb

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0436 3/2012

# SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**

Month: **January** Year: **2024**
NPDES Permit No.: **PA0026883**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | Influent | | | | | Process Control | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Day | Flow (MGD) | $BOD_5$ (mg/l) | $BOD_5$ (lbs) | TSS (mg/l) | TSS (lbs) | Aeration MLSS (mg/l) | Aeration DO (mg/l) | Sludge Wasted (gallons) | | |
| 1 | 2.19 | 60.9 | 1,112 | 21.0 | 384 | | | | | |
| 2 | 2.11 | 99.4 | 1,749 | 86.0 | 1,513 | | | | | |
| 3 | 2.04 | | | | | | | | | |
| 4 | 1.98 | | | | | | | | | |
| 5 | 1.92 | | | | | | | | | |
| 6 | 1.86 | | | | | | | | | |
| 7 | 1.92 | 68.9 | 1,103 | 59.0 | 945 | | | | | |
| 8 | 1.89 | 246.0 | 3,878 | 190.0 | 2,995 | | | | | |
| 9 | 6.26 | | | | | | | | | |
| 10 | 5.53 | | | | | | | | | |
| 11 | 3.33 | | | | | | | | | |
| 12 | 3.05 | | | | | | | | | |
| 13 | 3.55 | | | | | | | | | |
| 14 | 2.51 | 51.3 | 1,074 | 21.5 | 450 | | | | | |
| 15 | 2.19 | 264.0 | 4,822 | 214.0 | 3,909 | | | | | |
| 16 | 2.26 | | | | | | | | | |
| 17 | 2.16 | | | | | | | | | |
| 18 | 2.13 | | | | | | | | | |
| 19 | 2.0 | | | | | | | | | |
| 20 | 1.83 | | | | | | | | | |
| 21 | 1.83 | 128.0 | 1,954 | 40.7 | 621 | | | | | |
| 22 | 1.8 | 145.0 | 2,177 | 80.8 | 1,213 | | | | | |
| 23 | 2.06 | | | | | | | | | |
| 24 | 2.71 | | | | | | | | | |
| 25 | 4.06 | | | | | | | | | |
| 26 | 5.92 | | | | | | | | | |
| 27 | 3.42 | | | | | | | | | |
| 28 | 7.0 | | | | | | | | | |
| 29 | 4.76 | 106.0 | 4,208 | 43.5 | 1,727 | | | | | |
| 30 | 3.71 | 553.0 | 17,111 | 526.0 | 16,275 | | | | | |
| 31 | 3.12 | | | | | | | | | |
| **Avg** | **3.003** | **172** | **3,919** | **128** | **3,003** | | | | | |
| **Max** | **7.0** | **553** | **17,111** | **526** | **16,275** | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: **Brian M Petronchak** License No.: **S22917**
Title: **Chief Operator** Date: **2/15/2024**

From: depgreenporthelpdesk@state.pa.us
Subject: Your eDMR Report Has Been Received For Permit No. PA0026883
Date: May 22, 2024 at 9:34:00 AM
To: brianpetronchak@yahoo.com, jsuasum@gmail.com, brianpetronchak@yahoo.com, bfstp@outlook.com

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This email is to confirm that the following report was received by DEP through the eDMR system:

**Facility Name**: CITY OF BEAVER FALLS STP
**Permit Number**: PA0026883
**Report Frequency**: Monthly
**Report Type**: DMR
**Reporting Period**: 04/01/2024-04/30/2024
**Report Due Date**: 05/28/2024

**Submitted By**: Brian Petronchak
**Submission Id**: 458727
**Submission Status**: Received
**Submission Type**: Original
To view the details of this report, access the eDMR system through DEP's GreenPort and select the link for View/Revise Submitted.

3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
## DISCHARGE MONITORING REPORT (DMR)

NAME: BEAVER FALLS CITY BEAVER CNTY
ADDRESS: 715 15TH ST, BEAVER FALLS PA, 15010-4124
FACILITY: CITY OF BEAVER FALLS STP
LOCATION: LOWER SEVENTH AVE, BEAVER FALLS PA, 15010
STAGE: Final Effluent

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | | | | | | |
|---|---|---|---|---|---|---|---|
| | YEAR | MO | DAY | | YEAR | MO | DAY |
| FROM | 2024 | 04 | 01 | TO | 2024 | 04 | 30 |

Reporting Frequency: Monthly
DMR Effective From: 04/01/2024
DMR Effective To: 04/30/2024
Permit Expires: 10/31/2023
Permit Application Due: 05/04/2023
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Dissolved Oxygen (00300) | Sample Measurement | *** | *** | *** | 6.35 | *** | *** | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | Monitor & Report Inst Min | *** | *** | | 2/week | Grab |
| pH (00400) | Sample Measurement | *** | *** | *** | 6.8 | *** | 7.11 | S.U. | 1/day | Grab |
| | Permit Requirement | *** | *** | | 6.0 Inst Min | *** | 9.0 IMAX | | 1/day | Grab |
| Total Suspended Solids (00530) | Sample Measurement | 904.0 | 1615.7 | lbs/day | *** | 32.0 | 33.0 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1201.7 Avg Mo | 1802.5 Wkly Avg | | *** | 30.0 Avg Mo | 45.0 Wkly Avg | | 2/week | 8-Hr Composite |
| Ammonia-Nitrogen (00610) | Sample Measurement | < 57.0 | *** | lbs/day | *** | < 2.19 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | *** | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Flow (50050) | Sample Measurement | 5.15 | 15.39 | MGD | *** | *** | *** | *** | Continuous | Recorded |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | *** | *** | | Continuous | Recorded |
| Total Residual Chlorine (TRC) (50060) | Sample Measurement | *** | *** | *** | *** | .30 | .41 | mg/L | 1/day | Grab |
| | Permit Requirement | *** | *** | | *** | .5 Avg Mo | 1.8 IMAX | | 1/day | Grab |
| Fecal Coliform (74055) (Oct-Apr) | Sample Measurement | *** | *** | *** | *** | > 144 | > 2420 | No./100 ml | 2/week | Grab |
| | Permit Requirement | *** | *** | | *** | 2000 Geo Mean | 10000 IMAX | | 2/week | Grab |
| Carbonaceous Biochemical Oxygen Demand (CBOD5) (80082) | Sample Measurement | < 317.0 | 408.1 | lbs/day | *** | < 11.0 | 10.3 | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | 1001.4 Avg Mo | 1502.1 Wkly Avg | | *** | 25.0 Avg Mo | 37.5 Wkly Avg | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

**COMMONWEALTH OF PENNSYLVANIA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**BUREAU OF CLEAN WATER**
**DISCHARGE MONITORING REPORT (DMR)**

NAME: **BEAVER FALLS CITY BEAVER CNTY**
ADDRESS: **715 15TH ST, BEAVER FALLS PA, 15010-4124**
FACILITY: **CITY OF BEAVER FALLS STP**
LOCATION: **LOWER SEVENTH AVE, BEAVER FALLS PA, 15010**
STAGE: **Raw Sewage Influent**

| PA0026883 | 101 |
|---|---|
| PERMIT NUMBER | OUTFALL NUMBER |

| MONITORING PERIOD | | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|---|
| | FROM | 2024 | 04 | 01 | TO | 2024 | 04 | 30 |

Reporting Frequency: **Monthly**
DMR Effective From: **04/01/2024**
DMR Effective To: **04/30/2024**
Permit Expires: **10/31/2023**
Permit Application Due: **05/04/2023**
No Discharge: ☐

**PARAMETERS REPORTED VALUES**

| PARAMETER | | QUANTITY OR LOADING | | | QUANTITY OR CONCENTRATION | | | | SAMPLING FREQUENCY | SAMPLING TYPE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | |
| Biochemical Oxygen Demand (BOD5) (00310) | Sample Measurement | 2362 | 6324 | lbs/day | *** | 97.0 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Total Suspended Solids (00530) | Sample Measurement | 1100 | 2688 | lbs/day | *** | 40.0 | *** | mg/L | 2/week | 8-Hr Composite |
| | Permit Requirement | Monitor & Report Avg Mo | Monitor & Report Daily Max | | *** | Monitor & Report Avg Mo | *** | | 2/week | 8-Hr Composite |
| Facility Sampling Point Comments | | | | | | | | | | |

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3800-FM-BCW0462 12/2016

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

# COMMONWEALTH OF PENNSYLVANIA
# DEPARTMENT OF ENVIRONMENTAL PROTECTION
# BUREAU OF CLEAN WATER
# DISCHARGE MONITORING REPORT (DMR)

## ATTACHMENT DETAILS

| File Name | Attachment Type | Uploaded Time | Attachment Comments |
|---|---|---|---|
| Hauled In Residual Waste APR 2024 MAHONING SHEET 5.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:29:49-04:00 | |
| Hauled In Residual Waste APR 2024 MAHONING SHEET 3.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:29:11-04:00 | |
| Hauled In Residual Waste APR 2024 MAHONING SHEET 2.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:28:52-04:00 | |
| Hauled In Residual Waste APR 2024 SHEET 1.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:30:13-04:00 | |
| Daily Influent APR 2024.xlsx | Influent and Process Control Form | 2024-05-22T09:27:53-04:00 | |
| Hauled In Municipal Waste APR 2024.xlsx | Hauled-In Municipal Waste Form | 2024-05-22T09:28:12-04:00 | |
| Hauled In Residual Waste APR 2024 MAHONING SHEET 4.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:29:30-04:00 | |
| Hauled In Residual Waste APR 2024 MAHONING SHEET 1.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:28:35-04:00 | |
| Hauled In Residual Waste APR 2024 SHEET 2.xlsx | Hauled-In Residual Waste Form | 2024-05-22T09:30:33-04:00 | |
| Sewage Sludge APR 2024.xlsx | Sewage Sludge / Biosolids Production and Disposal Form | 2024-05-22T09:30:52-04:00 | |
| Daily Effluent APR 2024.xlsx | Daily Effluent Monitoring Form | 2024-05-22T09:27:33-04:00 | |

## PERMIT VIOLATIONS

| Non-Compliance ID | Event Start Date | Event End Date | Parameter | Limit Type | Reported Value | Permit Limit | Unit | Sampling Point | Cause Of Non-Compliance | Corrective Action | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 214149 | 04/01/2024 | 04/30/2024 | Total Suspended Solids | Average Monthly | 32 | 30 | mg/L | Final Effluent (101) | Flooding conditions at plant | None taken | |
| 214150 | 04/01/2024 | 04/30/2024 | Fecal Coliform | Geometric Mean | >144 | 2000 | No./100 ml | Final Effluent (101) | Flooding conditions at plant | None taken | |
| 214151 | 04/01/2024 | 04/30/2024 | Fecal Coliform | Instantaneous Maximum | >2420 | 10000 | No./100 ml | Final Effluent (101) | Flooding conditions at plant | None taken | |

## UNAUTHORIZED DISCHARGES

| Non-Compliance ID | Event Start Date | Event End Date | Date and Time Discovered | Substance Discharged | Event Location | Volume (gal) | Duration (hrs) | Receiving Waters | Impact On Waters | Cause Of Discharge | Date and Time DEP Notified Orally | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

## OTHER PERMIT VIOLATIONS

| Non-Compliance ID | Non-Compliance Type | Sampling Point | Parameter | Reported Value | Permit Limit | Comments |
|---|---|---|---|---|---|---|

## COMMENT DETAILS

| Comments | Operator Name | Operator Certification Number | Operator Contact Number |
|---|---|---|---|
| Composite sampling of influent wastewater is performed at a location downstream of manhole #129 for the wastes. The influent BOD5 characterization for the Beaver Falls STP is representative of the hauled-in Hauled-In municipal wastes and hauled-in residual wastes enter the sanitary system at manhole #129. municipal wastes and hauled-in residual wastes. | Brian M. Petronchak | s22917 | (724)-513-6748 |

## SUBMISSION INFORMATION

*Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, effective January 15, 2002, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. You certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on your inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of your knowledge and belief, true, accurate and complete. You are aware that any false statement may be subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities).

| Brian Petronchak | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|
| | (724) | 513-6748 | 2024 | 05 | 22 |
| SUBMITTED BY FULL NAME | AREA CODE | NUMBER | YEAR | MO | DAY |

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pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

3800-FM-BCW0435 3/2012

# SUPPLEMENTAL REPORT
# DAILY EFFLUENT MONITORING

Facility Name: **Beaver Falls STP**
Municipality: **Beaver Falls City** County: **Beaver**
Watershed: **20-B**
Laboratories: **CMA Environmental Labs**

Month: **4** (select number) Year: **2024**
Permit No.: **PA0026883** Outfall: **101**
Renewal application due **180 days** prior to expiration.
This permit will expire on: **October 31, 2023**

| | | Parameter | Flow | Fecal Coliform | | pH | | Dissolved Oxygen | | TRC | | CBOD5 | | TSS | | NH3-N | | Total Nitrogen | | Total Phosphorus | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage | 1 | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | | | | | | | |
| Week | Day | Date | MGD | Q | CFU/100 ml | Q | S.U. | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | mg/L | Q | | Q | | Q | | Q | | Q | | | |
| 1 | Sun | 3/31/24 | 2.65 | | | | 6.88 | | 8.43 | | 0.32 | | 9.3 | | 22.0 | | 0.3 | | | | | | | | | | | | | | | | |
| | Mon | 4/1/24 | 3.47 | > | 2420.0 | | 6.92 | | 9.27 | | 0.28 | | 11.2 | | 20.0 | | 1.56 | | | | | | | | | | | | | | | | |
| | Tue | 4/2/24 | 11.25 | > | 2420.0 | | 6.67 | | 8.52 | | 0.07 | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 4/3/24 | 15.39 | | | | 6.92 | | 8.89 | | 0.09 | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 4/4/24 | 11.01 | | | | 7.11 | | 8.99 | | 0.1 | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 4/5/24 | 6.5 | | | | 7.02 | | 9.69 | | 0.23 | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 4/6/24 | 4.81 | | | | 6.98 | | 7.73 | | 0.3 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Sun | 4/7/24 | 4.03 | | | | 7.06 | | 8.42 | | 0.33 | | 7.0 | | 16.5 | < | 0.3 | | | | | | | | | | | | | | | | |
| | Mon | 4/8/24 | 3.68 | | 261.0 | | 6.99 | | 9.13 | | 0.32 | | 12.4 | | 18.0 | | 0.56 | | | | | | | | | | | | | | | | |
| | Tue | 4/9/24 | 3.19 | | 488.0 | | 6.7 | | 7.71 | | 0.18 | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 4/10/24 | 3.43 | | | | 6.68 | | 7.81 | | 0.22 | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 4/11/24 | 7.5 | | | | 6.6 | | 7.43 | | 0.18 | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 4/12/24 | 15.09 | | | | 6.83 | | 7.98 | | 0.23 | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 4/13/24 | 11.39 | | | | 7.06 | | 9.08 | | 0.09 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Sun | 4/14/24 | 6.49 | | | | 7.02 | | 8.47 | | 0.31 | | 9.3 | | 39.0 | | 0.33 | | | | | | | | | | | | | | | | |
| | Mon | 4/15/24 | 5.07 | | 249.0 | | 7.04 | | 8.66 | | 0.18 | | 7.4 | | 26.5 | | 4.14 | | | | | | | | | | | | | | | | |
| | Tue | 4/16/24 | 3.84 | | 152.0 | | 6.86 | | 8.79 | | 0.28 | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 4/17/24 | 3.93 | | | | 6.79 | | 7.74 | | 0.07 | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 4/18/24 | 3.6 | | | | 6.67 | | 7.6 | | 0.23 | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 4/19/24 | 3.25 | | | | 6.75 | | 8.29 | | 0.34 | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 4/20/24 | 2.91 | | | | 6.9 | | 7.53 | | 0.39 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Sun | 4/21/24 | 2.6 | | | | 6.88 | | 7.91 | | 0.41 | | 12.0 | | 9.0 | | 0.72 | | | | | | | | | | | | | | | | |
| | Mon | 4/22/24 | 2.57 | | 161.0 | | 6.84 | | 7.88 | | 0.4 | | 4.8 | | 6.0 | | 0.78 | | | | | | | | | | | | | | | | |
| | Tue | 4/23/24 | 2.62 | | 28.0 | | 6.9 | | 7.72 | | 0.39 | | | | | | | | | | | | | | | | | | | | | | |
| | Wed | 4/24/24 | 2.63 | | | | 6.9 | | 7.38 | | 0.34 | | | | | | | | | | | | | | | | | | | | | | |
| | Thu | 4/25/24 | 2.52 | | | | 6.92 | | 7.95 | | 0.3 | | | | | | | | | | | | | | | | | | | | | | |
| | Fri | 4/26/24 | 2.37 | | | | 6.89 | | 7.48 | | 0.39 | | | | | | | | | | | | | | | | | | | | | | |
| | Sat | 4/27/24 | 2.69 | | | | 6.94 | | 8.1 | | 0.18 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Sun | 4/28/24 | 2.28 | | | | 6.92 | | 7.67 | | 0.41 | | 14.9 | | 19.0 | | 5.31 | | | | | | | | | | | | | | | | |
| | Mon | 4/29/24 | 2.25 | | 15.0 | | 6.83 | | 7.01 | | 0.29 | < | 24.0 | | 135.0 | | 5.98 | | | | | | | | | | | | | | | | |
| | Tue | 4/30/24 | 2.25 | | 2.0 | | 6.86 | | 6.35 | | 0.35 | | | | | | | | | | | | | | | | | | | | | | |
| Statistics for DMR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily Minimum (Conc.): | | | | | 2 | | 6.6 | | 6.35 | | 0.07 | | 4.8 | | 6 | < | 0.3 | | | | | | | | | | | | | | | | |
| Daily Maximum (Conc): | | | | > | 2420 | | 7.11 | | 9.69 | | 0.41 | < | 24 | | 135 | | 5.98 | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Conc.): | | | | | | | | | 8.79 | | 0.3 | | 10.3 | | 33 | | 2.24 | | | | | | | | | | | | | | | | |
| Avg Monthly (Conc.): | | | | | | | | | 8.11 | | 0.3 | < | 11 | | 32 | < | 2.19 | | | | | | | | | | | | | | | | |
| Geometric Mean (Conc.): | | | | > | 144 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max Avg Weekly (Load): | | | 7.87 | | | | | | 579 | | 12 | | 408.1 | | 1615.7 | | 96 | | | | | | | | | | | | | | | | |
| Avg Monthly (Load): | | | 5.15 | | | | | | 358 | | 9 | < | 317.0 | | 904.0 | < | 57 | | | | | | | | | | | | | | | | |
| Total Monthly (Load): | | | 154.61 | | | | | | 10753 | | 273 | < | 9510.1 | | 27118.6 | < | 1703 | | | | | | | | | | | | | | | | |
| Daily Minimum (Load): | | | 2.25 | | | | | | 119 | | 2 | | 102.9 | | 128.6 | < | 10 | | | | | | | | | | | | | | | | |
| Daily Maximum (Load): | | | 15.39 | | | | | | 1141 | | 29 | | 503.4 | | 2533.3 | | 175 | | | | | | | | | | | | | | | | |

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Brian M Petronchak License No.: S22917
Title: Chief Operator Date: 7-May

# Aqua Exhibit MJB-2R

Respondent: Mark J. Bubel, Sr.
Date: 12/23/2024

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**BUREAU OF INVESTIGATION AND ENFORCEMENT**

**SET II INTERROGATORIES**

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**I&E-II-12** Reference Aqua Statement No. 2, p. 8:

A. Identify each of the projects that comprise the projected capital improvement cost or investment, by line item and by year, for the total capital improvement cost of $10,200,000 over the next ten years.

B. Explain the underlying basis/need for each of the projects referenced in response to Part A above.

**RESPONSE**

A. Please see Aqua Statement No. 2, Appendix A.

B The Company develops a capital plan to understand the needs of a particular system in connection with any acquisition, and that plan may change after the closing as Aqua gains a better understanding of the system through hands-on operation as well as more of a formal detailed audit of facility equipment. The following is planned which follows the numbering within Aqua Statement No. 2, Appendix A.

1. Safety measures – miscellaneous includes a full audit of the condition of electrical and mechanical equipment conditions which were not possible to fully assess during the due diligence period.
2. Manhole (“MH”) inspections and GIS Base Map Creation includes a physical mapping of manhole locations with GPS to develop an accurate collection system map. An assessment of MH conditions will also be conducted as part of this effort.
3. A temporary metering program will be conducted within the collection system to identify areas within the drainage basins exhibiting significant I&I and will prioritize this work to maximize reduction of I&I. This will have a positive impact on the City of Beaver Falls (“COBF” or the “City”) wastewater treatment plant (“WWTP”) from the perspective of reducing wet weather flow through the primary clarification system, the trickling filter system as well as the final clarification system including disinfection.

4. Aqua will conduct CCTV inspection of main line sewers guided by the results of the temporary flow metering program with the basins exhibiting the highest extraneous flow being targeted first.
5. MH rehabilitation will be conducted based on the results of MH inspections conducted under (2) above with prioritization determined as part of (3) above.
6. Prioritized main rehabilitation and replacement will be conducted with input from (3) and (4) above.
7. Metering of the municipalities will be conducted for the purposes of moving towards a billing system based on flow received from the contributing municipalities. Existing meters are aged and will be replaced with the latest metering technology.
8. Monies have been allocated for connection of new customers including repurposing existing buildings for new uses and / or, conversion of homes to multi-family dwellings.
9. It is known that older sewer laterals can be the source of infiltration and inflow of extraneous water to the collection system and monies have been allocated to address this condition if discovered.
10. Trickling Filter Tower #1 shows signs of aging with cracking on its exterior and replacement of the Trickling Filter has been identified for safety and compliance reasons.
11. The headworks is located below grade and as such is a confined space; it only has one entry / exit. HVAC upgrades are needed to address the required air exchanges in the space to address NFPA 820 issues.
12. Headwork room upgrades are required to address NFPA 820 issues which include addition of an alternate entry / exit as well as electrical concerns to address safety of operational staff when entering the space.
13. The existing headworks screen is aged and needs to be replaced with an updated screen including provision of a screening's conveyor up and out of the confined space to address safety and compliance issues. Screening is important for the protection of downstream mechanical equipment.
14. Electrical upgrades are required to address aged electrical and controls. An Arc Flash study will also be conducted to address operator safety and the risks of arc flash.
15. Conversion of chlorine gas disinfection to liquid sodium hypochlorite is scheduled due to safety concerns of using gas chlorine for operational staff as well as the general public in proximity to the treatment plant.
16. Not used.
17. The mechanical gear drives of the primary clarifier sludge collector are aged and will be replaced given their age and need to maintain this piece of equipment in operation to protect solids from being delivered into the biological treatment process of the trickling filter system. The primaries reduce the organic loading on the downstream treatment process so they are important to maintain in good working order.
18. A formal supervisory control and data acquisition ("SCADA") system will be installed so that operational staff can access the system when not on site to confirm the proper function of the plant and ancillary pumps and mechanical equipment. This will also allow operational staff to make pumping changes. Presently plant staff have no way of knowing whether anything has gone amiss at the plant until the next time they visit the facility.
19. Monies have been allocated for miscellaneous repairs which may be discovered in the original audit noted under (1). Provision of this allocation is based on experience in operating a new system.

20. Not used.
21. Monies allocated for Aqua's new computer system to link to our integrated IT system.
22. Recurring costs for maintaining Aqua's system and software maintenance.
23. Vehicle needed to conduct operations of the system.
24. Vehicle which may be needed to conduct operations of the system.
25. The City conducted a Phase I Environmental Site Assessment ("ESA") which concluded the presence of four (4) Recognized Environmental Conditions ("REC") and two (2) Historical Recognized Environmental Conditions ("HREC"). The subject Phase I ESA recommended a Phase II ESA and monies have been allocated for this purpose. It is important that the Phase II ESA be conducted to characterize the subsurface soil and whether the soil meets or exceeds applicable regulatory criteria. The Phase II ESA will also verify the presence or absence of hazardous building materials at the site.

**HIGHLY CONFIDENTIAL VERSION**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 3-R

# REBUTTAL TESTIMONY OF ZACH MARTIN

**With Regard To:**
**Operations**
**Customer Service**
**Public Benefits**

**February 24, 2025**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1
II. RESPONSE TO I&E WITNESS CLINE ..... 2
III. RESPONSE TO OCA WITNESS DEMARCO ..... 4
IV. CONCLUSION ..... 23

**HIGHLY CONFIDENTIAL VERSION**

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Are you the same Zach Martin who submitted direct testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Application filed with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 18, 2023 (Exhibit W, Aqua Statement No. 3). I also submitted supplemental direct testimony with the Amended Application filed with the Commission on March 28, 2024 (Supplemental Exhibit W, Aqua Statement No. 3 Supp.).

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to respond to the direct testimony submitted by the Commission's Bureau of Investigation and Enforcement ("I&E"), and the Office of Consumer Advocate ("OCA"), specifically: I&E Statement No. 2, the direct testimony of Ethan Cline; and OCA Statement No. 1, the direct testimony of Nicholas DeMarco. My rebuttal testimony addresses these witnesses' claims regarding the operational and

customer service benefits that will result from Aqua Pennsylvania Wastewater, Inc.'s ("Aqua" or the "Company") acquisition of the wastewater system (the "System") of the City of Beaver Falls ("Beaver Falls" or the "City"). In particular, my rebuttal testimony explains that the other parties either fail to address many of the operational issues that the System currently faces, which will be resolved by the acquisition, or argue, without support, that the City will be able to address and overcome these operational challenges in the future. The Commission should not adopt these arguments and, instead, should recognize that the acquisition will result in substantial affirmative public benefits for the customers of Beaver Falls because Aqua will implement substantial improvements to the System's assets and operations over the present day.

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. No.

## II. RESPONSE TO I&E WITNESS CLINE

**Q. Please summarize I&E witness Cline's position in his direct testimony that you wish to address.**

A. In addition to generally describing the System (I&E St. No. 2, at pp. 8-9), I&E witness Cline specifically recommends that Aqua's plan to incorporate the system into its Long-Term Infrastructure Improvement Plan ("LTIIP") and Distribution System Improvement Charge ("DSIC") in the future, after closing of the acquisition is "unreasonable." I&E St. No. 2, at pp. 9-10. Rather than "delay" including the system in the LTIIP and DSIC, I&E

witness Cline recommends that Aqua should file a revised LTIIP to include the System and request to include Beaver Falls in the DSIC within 90 days of closing on the acquisition. I&E St. No. 2, at p. 10.

**Q. Do you have any response to including the System in Aqua's LTIIP within 90 days of closing?**

A. The Company does not agree that this condition is required since Aqua is under no obligation to update its LTIIP within a certain time period following closing, and, moreover, the Commission agreed with Aqua's position regarding this same condition in Aqua's acquisition of the Greenville Sanitary Authority.[1] However, in this particular instance the Company will agree to update its LTIIP after closing on the Beaver Falls System, but would submit this update to occur within 180 days after closing so Aqua can integrate the Beaver Falls assets into Aqua's overall operations.

**Q. Do you have any response to I&E witness Cline's description of the System?**

A. I agree with I&E witness Cline's summary of the current status of the System set forth in Aqua witness Bubel's testimony. I&E St. No. 2, at pp. 8-9. However, I would remind the Commission that the System faces further challenges, in addition to those described by

[1] See *Application of Aqua Pennsylvania Wastewater, Inc. (Aqua), pursuant to 66 Pa.C.S. §§ 1102 and 1329 for: (1) approval of the acquisition by Aqua of the Greenville Sanitary Authority (GSA); (2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the Borough of Greenville, Hempfield Township, and West Salem Township, Mercer County, Pennsylvania; and (3) an order approving the acquisition that includes the ratemaking rate base of the GSA's wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code. Request for Approval of Contracts, including Assignment of Contracts, between Aqua and the GSA, Pursuant to Section 507 of the Public Utility Code*, Docket No. A-2023-3041695, Opinion and Order at pp. 88-89 (Order Entered Dec. 20, 2024) ("GSA Order").

Aqua witness Mr. Bubel. In particular, my supplemental direct testimony provides a comprehensive review of the System and its operations. I&E did not dispute the challenges I highlighted in my supplemental direct testimony. Moreover, as discussed in Mr. Bubel's rebuttal testimony (Aqua Statement No. 2-R), the Beaver Falls System has continued to face environmental compliance issues. Approving Aqua's acquisition of the System will permit these challenges to be addressed.

## III. RESPONSE TO OCA WITNESS DEMARCO

**Q. Does OCA witness DeMarco testify regarding the condition and operations of the Beaver Fall's System?**

A. Yes.

**Q. Please explain.**

A. OCA witness DeMarco summarily describes the environmental issues faced by the System, primarily responding to Aqua witness Bubel's testimony. OCA St. No. 1, at pp. 4-7. Despite acknowledging that the System is currently under a Corrective Action Plan ("CAP") with the Pennsylvania Department of Environmental Protection ("DEP") and that **[BEGIN HIGHLY CONFIDENTIAL]** the City does not have a chlorine gas risk management plan **[END HIGHLY CONFIDENTIAL]**, OCA witness DeMarco testifies that the System is not otherwise out of compliance with United States Environmental Protection Agency ("EPA") or DEP requirements. OCA St. No. 1, at pp. 5-7. He further asserts that the System does not require any immediate improvements to its assets or

operations, claiming that "[i]t is not apparent that any upgrades or improvements are urgent." OCA St. No. 1, at p. 7. OCA witness DeMarco also states that "there is no indication that Beaver Falls is not technically fit to complete any necessary upgrades or improvements." OCA St. No. 1, at pp. 9-10. He further concludes that the System is not "troubled," as recognized under Sections 529 and 1327 of the Public Utility Code, 66 Pa.C.S. §§ 529 and 1327. OCA St. No. 1, at pp. 10-11. I will respond to each of these issues in turn.

**Q. Before specifically responding to OCA witness DeMarco's testimony regarding the condition and operations of the System, do you have any general comments related to Mr. DeMarco's characterization of the System?**

A. Yes. As an initial matter, OCA witness DeMarco essentially ignores my supplemental direct testimony, which provided additional information regarding the conditions and operations of the System. The top three issues impacting this system are the hazardous gas non-compliance, safety and security deficiencies, and a lack of asset management. Without restating my discussion of the challenges facing the System's assets, infrastructure, and operations in the near-, mid- and long-term, it is important for the Commission to recognize that while OCA witness DeMarco attempts to claim the System is not "troubled," his testimony does not address a number of critical facts on the ground that demonstrate emergent needs facing the System.

It appears that Mr. DeMarco's attempt to discount the significant operational challenges the System faces is an attempt to bolster his claim that there is a significant rate

impact associated by the acquisition, which cannot be overcome by the benefits offered by Aqua's ownership. However, as explained in greater detail in the rebuttal testimony of Aqua witness Packer (Aqua Statement No. 1-R), the Commission should reject Mr. DeMarco's framing of the rate impact of a 165.61% increase ignores the fact that the percentage increase is due to the very low rates that the City is currently charging; the City's average bill is **$33.38 per month ($100.13 per quarter)**.

In summary, by taking a holistic review of the system and recognizing the challenges facing the System, the Commission can ensure that the necessary improvements are made to correct the System's safety, security, and operational deficiencies. These improvements will ultimately benefit customers by reducing the need for emergency repairs, improving operational efficiency, and extending the lifespan of the System's assets. This is in addition to the clear benefit to the community of handling extremely hazardous substances in compliance with state and federal regulations.

**Q. Do you agree with OCA witness DeMarco's testimony that the System does not need urgent or immediate improvements?**

A. No.

**Q. Please explain why not.**

A. The Beaver Falls System faces substantial infrastructure and operational challenges without an actionable plan to resolve them. As I explained in my supplemental direct

testimony, there are several key areas of concern and Aqua's has planned improvements to address those concerns, which are summarized here at a high level.

- **System Assessment and Current Operations**: My supplemental testimony provided a detailed assessment of the Beaver Falls wastewater system, identifying significant issues such as hazardous gas problems, safety and security deficiencies, and the lack of an asset management plan.
- **Hazardous Gas Issues**: **[BEGIN HIGHLY CONFIDENTIAL]** My supplemental testimony pointed out noncompliance with EPA regulations regarding chlorine gas storage and the absence of a Risk Management Plan ("RMP"). My supplemental testimony also emphasized the need for proper safety equipment to address potential chlorine gas leaks. **[END HIGHLY CONFIDENTIAL]**
- **Safety and Security Deficiencies**: **[BEGIN HIGHLY CONFIDENTIAL]** Various safety and security issues related to the System are highlighted in my supplemental testimony, including inadequate ventilation, improper handling of raw sewage, and the lack of security measures including no security systems installed at any of the buildings, access points that lack card swipe access, no cameras, and no proper lighting and signage. **[END HIGHLY CONFIDENTIAL]**
- **Asset Management**: Furthermore, my supplemental testimony noted the absence of an asset management plan and computerized maintenance management system ("CMMS") at Beaver Falls.

In contrast to these clear issues, the OCA attempts to downplay these facts by claiming that the system is not "troubled" per Sections 1327 and/or 529 of the Public Utility

Code, 66 Pa.C.S. §§ 529, 1327. I am advised that the Company is not seeking approval of the acquisition pursuant to either of these sections, and nothing in Section 1329 requires a finding that a system be "troubled" for an acquisition under this provision to be approved. However, this should not be taken to mean that I agree with OCA that the Beaver Falls System is not in a troubled state, both operationally and financially. My supplemental direct testimony identified deficiencies and the planned improvements by Aqua, which are largely not addressed by the OCA, and further demonstrate the need for a thorough and holistic review of Aqua's acquisition of the System by the Commission.

**Q. Please explain your response further.**

A. The City does not currently have an actionable plan to address these challenges in place and it does not appear that they will be able to implement such a plan if the acquisition is not approved given the status of the City's finances, as discussed by Ms. Wilkins in her supplemental direct and rebuttal testimony. I should repeat that the City has no capital plan – not a limited capital plan, not a plan for the next three years, nor a plan for the upcoming year. There is no document, memo or strategy to deal with replacing or maintaining wastewater infrastructure it is currently charged with overseeing and operating.

The Commission should recognize that Aqua, on the other hand, has an actionable plan to address the infrastructure and operational challenges facing the City if the acquisition is approved.

The planned capital improvements described in the proceeding, provides a clear path forward to resolve the issues faced by the system. The proposed solutions include:

- **Implementation of a CMMS**: Implementation of this system will help schedule and automate preventative maintenance of the System, which will in turn improve operational consistency. The City's witness Mr. Jones notes in his rebuttal testimony that the System should be operated in a proactive manner, rather than a reactive manner where the City tries to fix problems and, in the meantime, hopes that a crisis does not occur. A CMMS is a proactive tool to ensure facilities are properly maintained and to schedule repairs and replacements before major failures occur. Neither I&E nor OCA has suggested or shown that the City can implement a CMMS if the acquisition is denied.
- **Capital Improvements**: Aqua will implement planned capital improvements to address the identified safety, security, and infrastructure deficiencies faced by the System. Neither I&E nor OCA has suggested or shown that the City can implement these improvements if the acquisition is denied. Moreover, while OCA attempts to assert that these improvements are not required to address "imminent" issues, this assertion fails to acknowledge that the System is facing substantial issues that cannot be addressed without the acquisition.
- **Correction of Hazardous Gas Non-Compliance**: **[BEGIN HIGHLY CONFIDENTIAL]** No party has disputed that the System faces issues related to non-compliance with state and federal hazardous gas regulations. Aqua has shown that it will be able to address these issues, and bring the System into compliance with state and federal regulations to ensure the safety of the entire community of Beaver Falls. **[END HIGHLY CONFIDENTIAL]**

While OCA witness DeMarco attempts to claim these problems are not "urgent" or "imminent," it is important for the Commission to recognize that this claim acknowledges these issues exist and that they are serious. Indeed, in my opinion, the challenges present safety and reliability risks that are not a matter of "if" they will occur, but a matter of "when" they will occur. OCA witness DeMarco seems to recognize this fact.

Moreover, it is important to recognize that, regardless of their characterization, the primary issues facing the System must be resolved quickly due to their significant impact on health and safety. The hazardous gas non-compliance and safety deficiencies pose immediate risks to the entire community of Beaver Falls. It is clear that these issues require urgent attention because, after Aqua completed further site visits and inspections and noted certain issues, the City acted to address some of them. This demonstrates the critical nature of these problems and the need for prompt resolution by Aqua that can provide experienced management and operation of the System.

**Q. Please discuss the mid- and long-term issues that are facing the Beaver Falls System.**

A. Even if the Commission sets aside the near-term issues, there are mid- and long-term challenges facing the system that will impact its safety, reliability, and overall performance. These include:

- **Ongoing Deterioration of Assets**: Without proper asset management and preventative maintenance, the System's infrastructure will continue to deteriorate, leading to more frequent breakdowns and higher repair costs.

- **Sustained Operational Inconsistencies**: The lack of a CMMS will result in continued inefficiencies and inconsistencies in the System's operations, affecting its reliability and performance. These inefficiencies and inconsistencies will continue if the acquisition is not approved.
- **Long-Term Safety and Security Risks**: The absence of adequate safety and security measures will pose ongoing risks to employees and the public, potentially leading to accidents and health hazards. These risks will increase over time if they are left unaddressed, and it is clear that the City will not able to address them if the acquisition is not approved.

Again, as discussed above, it is crucial to approve the acquisition and, along with the planned capital improvements described in the proceeding, provides a clear path forward to resolve the issues faced by the System.

**Q. To be clear, will Aqua resolve the near-, mid- and long-term issues facing the System if Aqua acquires the System?**

A. Yes.

**Q. Why will the resolution of these issues under Aqua ownership provide public benefits?**

A. Resolving the issues under Aqua ownership will provide significant public benefits for both those who work on the System and those who receive service from it.

For those who work on the System, addressing the hazardous gas non-compliance and safety deficiencies will create a safer work environment. Implementing proper safety equipment, ventilation, and security measures will reduce the risk of accidents and health hazards, ensuring that employees can perform their duties without fear of injury or exposure to harmful substances. Additionally, the introduction of a CMMS will streamline operations, making it easier for workers to manage and maintain the System efficiently.

For those who receive service from the System, resolving these issues will enhance the reliability and quality of the wastewater services provided. Addressing the deteriorating assets and implementing preventative maintenance will reduce the frequency of breakdowns and service interruptions, ensuring a more consistent and dependable service. Moreover, correcting the hazardous gas non-compliance will protect the health and safety of the entire community of Beaver Falls, preventing potential environmental and public health crises. A chemical release, spill, or NPDES permit violation on the Beaver River in Western Pennsylvania could potentially impact the local population of approximately 251,747 people in Beaver and Lawrence counties, including communities such as Beaver Falls, New Brighton, and Rochester. The Beaver River flows into the Ohio River, which is a significant waterway that eventually joins the Mississippi River. This means that an incident could have broader implications, affecting communities along the Ohio River and further downstream in the Mississippi River watershed. The Ohio River watershed alone covers parts of 14 states and serves as a crucial water source for millions of people. Additionally, it's important to note that Beaver Falls is located about 14 miles from East Palestine, Ohio, where the recent train derailment occurred. This proximity could raise

concerns about compounded environmental impacts in the region that were recently experienced by the larger community.

**Q. Do you agree with OCA witness DeMarco's testimony that there is no indication that the City is not technically fit to make these improvements to the System?**

A. No. And, for similar reasons, I also disagree with his claim that Aqua's technical fitness does not provide affirmative public benefits related to this transaction. OCA St. No. 1, at pp. 29.

**Q. Please explain why not.**

A. While Mr. DeMarco claims there is no indication that the City is not technically fit to make need improvements to the condition and operations of the System, this testimony ignores both my direct and supplemental direct testimony, as well as the testimonies of the City's witnesses.

The City acknowledges that it is not currently in a position to recruit and retain the skilled employees necessary to operate and maintain the wastewater System effectively. While the City maintains the ability to operate the System, it recognizes the limitations in its capacity to address the near-, mid- and long-term issues facing the System. The City faces significant challenges in onboarding the additional resource types required to address these issues, and faces challenges at onboarding these resources at the scale needed. The City lacks the experience in addressing these issues, which will include difficulties in

training existing employees, accessing materials and equipment, and implementing advanced systems required for efficient operations.

**Q. Why can't the City just hire consultants to perform this work?**

A. Other parties have raised this before. I would say that if it was just as simple as "hire a consultant", the City would not be in this dire situation. Businesses, non-profits, and governmental agencies are not run by just "hiring a consultant" and the intervening parties should not use this "hire a consultant" excuse to buttress their arguments that the City is simply choosing not to do the work required to run and operate a wastewater system. Consulting firms require guidance and input for their deliverables, they required oversight, review and time. "Hiring a consultant" is not the answer for Beaver Falls in my opinion. Technically, could Beaver Falls do this, yes. But that would not be my recommendation if I was running and operating a system. Moreover, even if "hiring a consultant" was a solution, the City's dire financial situation, as described by the City's witnesses, precludes that.

**Q. Are there other reasons why Aqua is in a better position to resolve the issues facing the System than the City?**

A. Aqua has the advantage of an established infrastructure, experienced workforce, and advanced systems that the City currently does not have in place. This includes:

- **Skilled Employees**: Aqua can leverage its existing pool of skilled employees who are already trained and experienced in managing similar systems. This reduces the

time and cost associated with hiring and training new staff, which Aqua already has experience doing both with respect to the types of skills needed and the scale of staffing needed to address the issues facing the System. It also avoids the problem that the City is currently experiencing, where qualified personnel leave or retire. Moreover, Aqua will continue to leverage the City's knowledge of the System by retaining many of the individuals that currently operate the system but providing them with the additional resources and help required to improve the System's safety and reliability.

- **Advanced Systems**: Aqua's implementation of a CMMS and other advanced management systems ensures efficient scheduling and automation of maintenance tasks, leading to improved operational consistency and reduced downtime.
- **Access to Materials and Equipment**: Aqua's established supply chains and procurement processes allow for timely access to necessary materials and equipment, ensuring that maintenance and improvement projects can be carried out without delays.

**Q. Why will Aqua's technical expertise provide public benefits?**

A. It is important to note that onboarding skilled employees, training existing employees, and accessing materials and equipment are not simple tasks, especially when an operator is not already doing so. The City would need to onboard additional resource types and onboard those additional resources at a scale they have not experienced. Aqua, on the other hand, will utilize its existing experience and scalability due to its ongoing operations, making it

more efficient and effective in addressing these challenges. This is evidenced by the fact that the plant manager does not have DEP certification.

For these reasons, OCA witness DeMarco's claims regarding "regionalization" and "consolidation" should also be rejected. OCA St. No. 1, at p. 29. Regionalization under Aqua ownership brings additional benefits. Aqua's regional operations allow for the sharing of resources, expertise, and best practices across multiple systems. This regional approach provides several advantages, such as:

- **Resource Optimization**: By pooling resources across a region, Aqua can optimize the use of skilled employees, equipment, and materials, ensuring that they are deployed where they are needed most.
- **Scalability**: Aqua's regional operations enable it to scale up quickly to address issues, leveraging its existing infrastructure and workforce to respond to challenges efficiently.
- **Consistent Standards**: Regionalization ensures that consistent standards and practices are applied across all systems, leading to improved service quality and reliability.

In this specific case, it is clear that regionalization will further lead to a safer, more reliable, and cost-effective wastewater service for the Beaver Falls community and to the benefit of the customers served by this System.

**Q. Does OCA witness DeMarco testify regarding the customer service issues related to the Beaver Fall's System?**

A. Yes. OCA witness DeMarco argues that Aqua's bill payment systems do not offer any improvements of the City's current wastewater service bill payment systems. OCA St. No. 1, at p. 30.

**Q. Do you agree?**

A. No.

**Q. Please explain.**

A. I would simply note that Mr. DeMarco discounts entirely the benefits that will inure to Beaver Falls customers who have difficulty paying their bills. There are no payment plan options with Beaver Falls. With Aqua's ownership, Beaver Falls customers will have the option to enter into a deferred payment arrangement to help pay off unpaid balances, and for those that meet eligibility requirements, they may participate in Aqua's low-income programs as described in the rebuttal testimony of Rita F. Black (Aqua Statement No. 9-R).

Moreover, Aqua has improved its disruption notifications and mapping system to be real-time and initiated from our field personnel on site, at the disruption. With respect to the field work improvements noted above, when our technicians enter a work order and go "in route", a text notification is sent to the customer providing a notification with the technician's expected arrival time regardless of whether the work order is scheduled or unscheduled.

Aqua has also released a new and improved customer ePortal and Aqua App for mobile devices that provide customers with access to improved customer tools for account maintenance, notifications, viewing meter reads and trending consumption, as well as viewing and paying bills from anywhere in the world. In addition to payment through Aqua App, Aqua customers also have the benefit of expanded bill payment options including auto-payment and pay by text. For customers using an ACH payment method, all of these options are free. In addition to offering bill payment, Aqua's ePortal also provides electronic billing and the ability to view prior bills.

Accordingly, I believe that these customer-driven tools demonstrate that there are numerous functional differences in Aqua's billing and customer service, as compared to what GSA customers have today.

**Q. Does OCA witness DeMarco testify regarding information technology ("IT") and/or cybersecurity issues related to the Beaver Fall's System?**

A. Yes.

**Q. Please explain.**

A. OCA witness DeMarco argues that Aqua's "proposed improvements appear to be designed to make the Beaver Falls system consistent with Aqua's processes." OCA St. No. 1, at p. 31. He further asserts that "[t]hose proposed improvements do not necessarily confer a benefit where the current operator is not aware that there is anything wrong with the way Beaver Falls is currently operating its system" and specifically refers to the City's response

to OCA-III-33. OCA St. No. 1, at p. 31. He further appears to argue that such improvements would only be a benefit if they were necessary to comply with the law. OCA St. No. 1, at p. 31.

**Q. Do you agree with OCA witness DeMarco's assessment of the current state of the System's cybersecurity systems, polices and/or procedures?**

A. No.

**Q. Why not?**

A. As it relates to cyber security, the System currently faces several risks, including **[BEGIN HIGHLY CONFIDENTIAL]** potential vulnerabilities to cyber-attacks that could disrupt operations or compromise sensitive data. OCA witness DeMarco's assessment of the System does not adequately consider these risks and suggests the Commission should leave the System exposed to potential threats. Municipal utilities are often more susceptible to cyber-attacks compared to private utilities due to several factors. Many municipal utilities operate with outdated systems and infrastructure, making them more vulnerable to cyber threats. Additionally, they often have limited budgets and resources for cybersecurity measures, which can result in weaker defenses. In contrast, private utilities typically have more robust financial resources to invest in advanced cybersecurity technologies and personnel. This disparity in resources and infrastructure makes municipal utilities a more attractive target for cyber attackers. We have found evidence of all of these concerns in the system and have accounted for immediate corrections in our capital improvements plan.

Aqua, as a larger and more established utility company, is subject to overlapping regulatory standards and has more robust cyber security measures in place. This includes advanced monitoring systems, regular security audits, and comprehensive incident response plans that the City may not have the resources or expertise to implement. **[END HIGHLY CONFIDENTIAL]**

**Q. Do you agree that Aqua's improvements to the cybersecurity systems, polices and/or procedures are not beneficial to Beaver Fall's customers?**

A. No.

**Q. Why not?**

A. Improvements to cybersecurity under Aqua ownership are highly beneficial to customers for several reasons: **[BEGIN HIGHLY CONFIDENTIAL]**

- **Protection of Sensitive Information**: Aqua's advanced cybersecurity measures ensure that sensitive customer information, such as billing details and personal data, is protected from cyber threats. This reduces the risk of data breaches and identity theft, providing customers with peace of mind.
- **Operational Reliability**: Enhanced cybersecurity helps prevent cyber-attacks that could disrupt the operation of the System. By safeguarding the System against potential threats, Aqua ensures that customers receive consistent and reliable service without interruptions caused by cyber incidents.

- **Compliance with Regulatory Standards**: Aqua, as a larger and more established utility company, is subject to stricter regulatory standards for cybersecurity. This means that Aqua must adhere to comprehensive security protocols and undergo regular security audits, ensuring that the system is protected against evolving cyber threats. The City, on the other hand, may not have the same level of regulatory requirements or resources to implement such robust measures.
- **Rapid Response to Threats**: Aqua's established cybersecurity infrastructure includes advanced monitoring systems and incident response plans. In the event of a cyber-attack, Aqua can quickly detect and respond to the threat, minimizing potential damage and restoring normal operations swiftly. This rapid response capability is crucial in maintaining the safety and reliability of the wastewater service.
- **Cost Savings**: By preventing cyber-attacks and minimizing disruptions, Aqua's cybersecurity improvements can lead to cost savings for customers. Avoiding the financial impact of data breaches, service interruptions, and emergency repairs helps keep operational costs down, which can be reflected in more stable and affordable rates for customers. By securing the infrastructure against cyber threats, utilities can confidently implement modern technologies that improve operational efficiency and sustainability. Here are a few examples:
    - Predictive Analytics and AI: Enhanced cybersecurity allows for the safe use of AI-driven predictive analytics platforms. These platforms collect data to

offer real-time insights into flow rates, chemical concentrations, and equipment performance, optimizing operations and reducing downtime.

- Smart Monitoring Devices: With robust cybersecurity measures in place, utilities can deploy smart wastewater monitoring devices and external pressure sensors. These tools enable real-time monitoring of sewer conditions, facilitating early detection of issues and quick responses to minimize damage.
- Advanced Diagnostic Tools: Secure systems can support the use of advanced diagnostic methods for assessing pump health and other critical components. These tools help identify and address equipment issues early, leading to significant cost and labor savings.
- Internet of Things (IoT): Enhanced cybersecurity ensures the safe integration of IoT technologies, which can automate processes, monitor infrastructure remotely, and provide valuable data for improving system performance.

By protecting against cyber threats, utilities can leverage these advanced tools to enhance the efficiency, reliability, and sustainability of wastewater management systems. Overall, Aqua's technical expertise and advanced cybersecurity measures provide significant public benefits by protecting sensitive information, ensuring operational reliability, complying with regulatory standards, enabling rapid response to threats, and ultimately saving customers money. These improvements contribute to a safer, more secure, and dependable wastewater service for the community. **[END HIGHLY CONFIDENTIAL]**

**Q. Do you have any concluding remarks with respect to OCA witness DeMarco's testimony?**

A. Contrary to OCA witness DeMarco's testimony, authorizing Aqua's acquisition of the System brings several overarching operational and service benefits for the customers. These benefits include, enhanced safety and security, improved operational efficiency, more reliable and consistent service, cost savings, access to additional worker and material resources, and enhance cybersecurity protections. OCA witness DeMarco does not specifically address these benefits and, in some cases, does not deny that Aqua's acquisition of the system would result in these benefits. Therefore, the Commission should take a holistic review of the benefits of the acquisition and ultimately approve it.

## IV. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

**PUBLIC VERSION - HIGHLY CONFIDENTIAL INFORMATION REDACTED**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 3-R

# REBUTTAL TESTIMONY OF ZACH MARTIN

**With Regard To:**
**Operations**
**Customer Service**
**Public Benefits**

**February 24, 2025**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. RESPONSE TO I&E WITNESS CLINE ..... 2
III. RESPONSE TO OCA WITNESS DEMARCO ..... 4
IV. CONCLUSION ..... 23

**PUBLIC VERSION - HIGHLY CONFIDENTIAL INFORMATION REDACTED**

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as the Western Pennsylvania Area Manager.

**Q. Are you the same Zach Martin who submitted direct testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Application filed with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 18, 2023 (Exhibit W, Aqua Statement No. 3). I also submitted supplemental direct testimony with the Amended Application filed with the Commission on March 28, 2024 (Supplemental Exhibit W, Aqua Statement No. 3 Supp.).

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to respond to the direct testimony submitted by the Commission's Bureau of Investigation and Enforcement ("I&E"), and the Office of Consumer Advocate ("OCA"), specifically: I&E Statement No. 2, the direct testimony of Ethan Cline; and OCA Statement No. 1, the direct testimony of Nicholas DeMarco. My rebuttal testimony addresses these witnesses' claims regarding the operational and

customer service benefits that will result from Aqua Pennsylvania Wastewater, Inc.'s ("Aqua" or the "Company") acquisition of the wastewater system (the "System") of the City of Beaver Falls ("Beaver Falls" or the "City"). In particular, my rebuttal testimony explains that the other parties either fail to address many of the operational issues that the System currently faces, which will be resolved by the acquisition, or argue, without support, that the City will be able to address and overcome these operational challenges in the future. The Commission should not adopt these arguments and, instead, should recognize that the acquisition will result in substantial affirmative public benefits for the customers of Beaver Falls because Aqua will implement substantial improvements to the System's assets and operations over the present day.

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. No.

## II. RESPONSE TO I&E WITNESS CLINE

**Q. Please summarize I&E witness Cline's position in his direct testimony that you wish to address.**

A. In addition to generally describing the System (I&E St. No. 2, at pp. 8-9), I&E witness Cline specifically recommends that Aqua's plan to incorporate the system into its Long-Term Infrastructure Improvement Plan ("LTIIP") and Distribution System Improvement Charge ("DSIC") in the future, after closing of the acquisition is "unreasonable." I&E St. No. 2, at pp. 9-10. Rather than "delay" including the system in the LTIIP and DSIC, I&E

witness Cline recommends that Aqua should file a revised LTIIP to include the System and request to include Beaver Falls in the DSIC within 90 days of closing on the acquisition. I&E St. No. 2, at p. 10.

**Q. Do you have any response to including the System in Aqua's LTIIP within 90 days of closing?**

A. The Company does not agree that this condition is required since Aqua is under no obligation to update its LTIIP within a certain time period following closing, and, moreover, the Commission agreed with Aqua's position regarding this same condition in Aqua's acquisition of the Greenville Sanitary Authority.[1] However, in this particular instance the Company will agree to update its LTIIP after closing on the Beaver Falls System, but would submit this update to occur within 180 days after closing so Aqua can integrate the Beaver Falls assets into Aqua's overall operations.

**Q. Do you have any response to I&E witness Cline's description of the System?**

A. I agree with I&E witness Cline's summary of the current status of the System set forth in Aqua witness Bubel's testimony. I&E St. No. 2, at pp. 8-9. However, I would remind the Commission that the System faces further challenges, in addition to those described by

[1] See *Application of Aqua Pennsylvania Wastewater, Inc. (Aqua), pursuant to 66 Pa.C.S. §§ 1102 and 1329 for: (1) approval of the acquisition by Aqua of the Greenville Sanitary Authority (GSA); (2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the Borough of Greenville, Hempfield Township, and West Salem Township, Mercer County, Pennsylvania; and (3) an order approving the acquisition that includes the ratemaking rate base of the GSA's wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code. Request for Approval of Contracts, including Assignment of Contracts, between Aqua and the GSA, Pursuant to Section 507 of the Public Utility Code*, Docket No. A-2023-3041695, Opinion and Order at pp. 88-89 (Order Entered Dec. 20, 2024) ("GSA Order").

Aqua witness Mr. Bubel. In particular, my supplemental direct testimony provides a comprehensive review of the System and its operations. I&E did not dispute the challenges I highlighted in my supplemental direct testimony. Moreover, as discussed in Mr. Bubel's rebuttal testimony (Aqua Statement No. 2-R), the Beaver Falls System has continued to face environmental compliance issues. Approving Aqua's acquisition of the System will permit these challenges to be addressed.

## III. RESPONSE TO OCA WITNESS DEMARCO

**Q. Does OCA witness DeMarco testify regarding the condition and operations of the Beaver Fall's System?**

A. Yes.

**Q. Please explain.**

A. OCA witness DeMarco summarily describes the environmental issues faced by the System, primarily responding to Aqua witness Bubel's testimony. OCA St. No. 1, at pp. 4-7. Despite acknowledging that the System is currently under a Corrective Action Plan ("CAP") with the Pennsylvania Department of Environmental Protection ("DEP") and that **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**, OCA witness DeMarco testifies that the System is not otherwise out of compliance with United States Environmental Protection Agency ("EPA") or DEP requirements. OCA St. No. 1, at pp. 5-7. He further asserts that the System does not require any immediate improvements to its assets or

operations, claiming that "[i]t is not apparent that any upgrades or improvements are urgent." OCA St. No. 1, at p. 7. OCA witness DeMarco also states that "there is no indication that Beaver Falls is not technically fit to complete any necessary upgrades or improvements." OCA St. No. 1, at pp. 9-10. He further concludes that the System is not "troubled," as recognized under Sections 529 and 1327 of the Public Utility Code, 66 Pa.C.S. §§ 529 and 1327. OCA St. No. 1, at pp. 10-11. I will respond to each of these issues in turn.

**Q. Before specifically responding to OCA witness DeMarco's testimony regarding the condition and operations of the System, do you have any general comments related to Mr. DeMarco's characterization of the System?**

A. Yes. As an initial matter, OCA witness DeMarco essentially ignores my supplemental direct testimony, which provided additional information regarding the conditions and operations of the System. The top three issues impacting this system are the hazardous gas non-compliance, safety and security deficiencies, and a lack of asset management. Without restating my discussion of the challenges facing the System's assets, infrastructure, and operations in the near-, mid- and long-term, it is important for the Commission to recognize that while OCA witness DeMarco attempts to claim the System is not "troubled," his testimony does not address a number of critical facts on the ground that demonstrate emergent needs facing the System.

It appears that Mr. DeMarco's attempt to discount the significant operational challenges the System faces is an attempt to bolster his claim that there is a significant rate

impact associated by the acquisition, which cannot be overcome by the benefits offered by Aqua's ownership. However, as explained in greater detail in the rebuttal testimony of Aqua witness Packer (Aqua Statement No. 1-R), the Commission should reject Mr. DeMarco's framing of the rate impact of a 165.61% increase ignores the fact that the percentage increase is due to the very low rates that the City is currently charging; the City's average bill is **$33.38 per month ($100.13 per quarter)**.

In summary, by taking a holistic review of the system and recognizing the challenges facing the System, the Commission can ensure that the necessary improvements are made to correct the System's safety, security, and operational deficiencies. These improvements will ultimately benefit customers by reducing the need for emergency repairs, improving operational efficiency, and extending the lifespan of the System's assets. This is in addition to the clear benefit to the community of handling extremely hazardous substances in compliance with state and federal regulations.

**Q. Do you agree with OCA witness DeMarco's testimony that the System does not need urgent or immediate improvements?**

A. No.

**Q. Please explain why not.**

A. The Beaver Falls System faces substantial infrastructure and operational challenges without an actionable plan to resolve them. As I explained in my supplemental direct

testimony, there are several key areas of concern and Aqua's has planned improvements to address those concerns, which are summarized here at a high level.

- **System Assessment and Current Operations**: My supplemental testimony provided a detailed assessment of the Beaver Falls wastewater system, identifying significant issues such as hazardous gas problems, safety and security deficiencies, and the lack of an asset management plan.
- **Hazardous Gas Issues**: **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**
- **Safety and Security Deficiencies**: **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**
- **Asset Management**: Furthermore, my supplemental testimony noted the absence of an asset management plan and computerized maintenance management system ("CMMS") at Beaver Falls.

In contrast to these clear issues, the OCA attempts to downplay these facts by claiming that the system is not "troubled" per Sections 1327 and/or 529 of the Public Utility

Code, 66 Pa.C.S. §§ 529, 1327. I am advised that the Company is not seeking approval of the acquisition pursuant to either of these sections, and nothing in Section 1329 requires a finding that a system be "troubled" for an acquisition under this provision to be approved. However, this should not be taken to mean that I agree with OCA that the Beaver Falls System is not in a troubled state, both operationally and financially. My supplemental direct testimony identified deficiencies and the planned improvements by Aqua, which are largely not addressed by the OCA, and further demonstrate the need for a thorough and holistic review of Aqua's acquisition of the System by the Commission.

**Q. Please explain your response further.**

A. The City does not currently have an actionable plan to address these challenges in place and it does not appear that they will be able to implement such a plan if the acquisition is not approved given the status of the City's finances, as discussed by Ms. Wilkins in her supplemental direct and rebuttal testimony. I should repeat that the City has no capital plan – not a limited capital plan, not a plan for the next three years, nor a plan for the upcoming year. There is no document, memo or strategy to deal with replacing or maintaining wastewater infrastructure it is currently charged with overseeing and operating.

The Commission should recognize that Aqua, on the other hand, has an actionable plan to address the infrastructure and operational challenges facing the City if the acquisition is approved.

The planned capital improvements described in the proceeding, provides a clear path forward to resolve the issues faced by the system. The proposed solutions include:

- **Implementation of a CMMS**: Implementation of this system will help schedule and automate preventative maintenance of the System, which will in turn improve operational consistency. The City's witness Mr. Jones notes in his rebuttal testimony that the System should be operated in a proactive manner, rather than a reactive manner where the City tries to fix problems and, in the meantime, hopes that a crisis does not occur. A CMMS is a proactive tool to ensure facilities are properly maintained and to schedule repairs and replacements before major failures occur. Neither I&E nor OCA has suggested or shown that the City can implement a CMMS if the acquisition is denied.
- **Capital Improvements**: Aqua will implement planned capital improvements to address the identified safety, security, and infrastructure deficiencies faced by the System. Neither I&E nor OCA has suggested or shown that the City can implement these improvements if the acquisition is denied. Moreover, while OCA attempts to assert that these improvements are not required to address "imminent" issues, this assertion fails to acknowledge that the System is facing substantial issues that cannot be addressed without the acquisition.
- **Correction of Hazardous Gas Non-Compliance**: **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**

While OCA witness DeMarco attempts to claim these problems are not "urgent" or "imminent," it is important for the Commission to recognize that this claim acknowledges these issues exist and that they are serious. Indeed, in my opinion, the challenges present safety and reliability risks that are not a matter of "if" they will occur, but a matter of "when" they will occur. OCA witness DeMarco seems to recognize this fact.

Moreover, it is important to recognize that, regardless of their characterization, the primary issues facing the System must be resolved quickly due to their significant impact on health and safety. The hazardous gas non-compliance and safety deficiencies pose immediate risks to the entire community of Beaver Falls. It is clear that these issues require urgent attention because, after Aqua completed further site visits and inspections and noted certain issues, the City acted to address some of them. This demonstrates the critical nature of these problems and the need for prompt resolution by Aqua that can provide experienced management and operation of the System.

**Q. Please discuss the mid- and long-term issues that are facing the Beaver Falls System.**

A. Even if the Commission sets aside the near-term issues, there are mid- and long-term challenges facing the system that will impact its safety, reliability, and overall performance. These include:

- **Ongoing Deterioration of Assets**: Without proper asset management and preventative maintenance, the System's infrastructure will continue to deteriorate, leading to more frequent breakdowns and higher repair costs.

- **Sustained Operational Inconsistencies**: The lack of a CMMS will result in continued inefficiencies and inconsistencies in the System's operations, affecting its reliability and performance. These inefficiencies and inconsistencies will continue if the acquisition is not approved.
- **Long-Term Safety and Security Risks**: The absence of adequate safety and security measures will pose ongoing risks to employees and the public, potentially leading to accidents and health hazards. These risks will increase over time if they are left unaddressed, and it is clear that the City will not able to address them if the acquisition is not approved.

Again, as discussed above, it is crucial to approve the acquisition and, along with the planned capital improvements described in the proceeding, provides a clear path forward to resolve the issues faced by the System.

**Q. To be clear, will Aqua resolve the near-, mid- and long-term issues facing the System if Aqua acquires the System?**

A. Yes.

**Q. Why will the resolution of these issues under Aqua ownership provide public benefits?**

A. Resolving the issues under Aqua ownership will provide significant public benefits for both those who work on the System and those who receive service from it.

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For those who work on the System, addressing the hazardous gas non-compliance and safety deficiencies will create a safer work environment. Implementing proper safety equipment, ventilation, and security measures will reduce the risk of accidents and health hazards, ensuring that employees can perform their duties without fear of injury or exposure to harmful substances. Additionally, the introduction of a CMMS will streamline operations, making it easier for workers to manage and maintain the System efficiently.

For those who receive service from the System, resolving these issues will enhance the reliability and quality of the wastewater services provided. Addressing the deteriorating assets and implementing preventative maintenance will reduce the frequency of breakdowns and service interruptions, ensuring a more consistent and dependable service. Moreover, correcting the hazardous gas non-compliance will protect the health and safety of the entire community of Beaver Falls, preventing potential environmental and public health crises. A chemical release, spill, or NPDES permit violation on the Beaver River in Western Pennsylvania could potentially impact the local population of approximately 251,747 people in Beaver and Lawrence counties, including communities such as Beaver Falls, New Brighton, and Rochester. The Beaver River flows into the Ohio River, which is a significant waterway that eventually joins the Mississippi River. This means that an incident could have broader implications, affecting communities along the Ohio River and further downstream in the Mississippi River watershed. The Ohio River watershed alone covers parts of 14 states and serves as a crucial water source for millions of people. Additionally, it's important to note that Beaver Falls is located about 14 miles from East Palestine, Ohio, where the recent train derailment occurred. This proximity could raise

concerns about compounded environmental impacts in the region that were recently experienced by the larger community.

**Q. Do you agree with OCA witness DeMarco's testimony that there is no indication that the City is not technically fit to make these improvements to the System?**

A. No. And, for similar reasons, I also disagree with his claim that Aqua's technical fitness does not provide affirmative public benefits related to this transaction. OCA St. No. 1, at pp. 29.

**Q. Please explain why not.**

A. While Mr. DeMarco claims there is no indication that the City is not technically fit to make need improvements to the condition and operations of the System, this testimony ignores both my direct and supplemental direct testimony, as well as the testimonies of the City's witnesses.

The City acknowledges that it is not currently in a position to recruit and retain the skilled employees necessary to operate and maintain the wastewater System effectively. While the City maintains the ability to operate the System, it recognizes the limitations in its capacity to address the near-, mid- and long-term issues facing the System. The City faces significant challenges in onboarding the additional resource types required to address these issues, and faces challenges at onboarding these resources at the scale needed. The City lacks the experience in addressing these issues, which will include difficulties in

training existing employees, accessing materials and equipment, and implementing advanced systems required for efficient operations.

**Q. Why can't the City just hire consultants to perform this work?**

A. Other parties have raised this before. I would say that if it was just as simple as "hire a consultant", the City would not be in this dire situation. Businesses, non-profits, and governmental agencies are not run by just "hiring a consultant" and the intervening parties should not use this "hire a consultant" excuse to buttress their arguments that the City is simply choosing not to do the work required to run and operate a wastewater system. Consulting firms require guidance and input for their deliverables, they required oversight, review and time. "Hiring a consultant" is not the answer for Beaver Falls in my opinion. Technically, could Beaver Falls do this, yes. But that would not be my recommendation if I was running and operating a system. Moreover, even if "hiring a consultant" was a solution, the City's dire financial situation, as described by the City's witnesses, precludes that.

**Q. Are there other reasons why Aqua is in a better position to resolve the issues facing the System than the City?**

A. Aqua has the advantage of an established infrastructure, experienced workforce, and advanced systems that the City currently does not have in place. This includes:

- **Skilled Employees**: Aqua can leverage its existing pool of skilled employees who are already trained and experienced in managing similar systems. This reduces the

time and cost associated with hiring and training new staff, which Aqua already has experience doing both with respect to the types of skills needed and the scale of staffing needed to address the issues facing the System. It also avoids the problem that the City is currently experiencing, where qualified personnel leave or retire. Moreover, Aqua will continue to leverage the City's knowledge of the System by retaining many of the individuals that currently operate the system but providing them with the additional resources and help required to improve the System's safety and reliability.

- **Advanced Systems**: Aqua's implementation of a CMMS and other advanced management systems ensures efficient scheduling and automation of maintenance tasks, leading to improved operational consistency and reduced downtime.
- **Access to Materials and Equipment**: Aqua's established supply chains and procurement processes allow for timely access to necessary materials and equipment, ensuring that maintenance and improvement projects can be carried out without delays.

**Q. Why will Aqua's technical expertise provide public benefits?**

A. It is important to note that onboarding skilled employees, training existing employees, and accessing materials and equipment are not simple tasks, especially when an operator is not already doing so. The City would need to onboard additional resource types and onboard those additional resources at a scale they have not experienced. Aqua, on the other hand, will utilize its existing experience and scalability due to its ongoing operations, making it

more efficient and effective in addressing these challenges. This is evidenced by the fact that the plant manager does not have DEP certification.

For these reasons, OCA witness DeMarco's claims regarding "regionalization" and "consolidation" should also be rejected. OCA St. No. 1, at p. 29. Regionalization under Aqua ownership brings additional benefits. Aqua's regional operations allow for the sharing of resources, expertise, and best practices across multiple systems. This regional approach provides several advantages, such as:

- **Resource Optimization**: By pooling resources across a region, Aqua can optimize the use of skilled employees, equipment, and materials, ensuring that they are deployed where they are needed most.
- **Scalability**: Aqua's regional operations enable it to scale up quickly to address issues, leveraging its existing infrastructure and workforce to respond to challenges efficiently.
- **Consistent Standards**: Regionalization ensures that consistent standards and practices are applied across all systems, leading to improved service quality and reliability.

In this specific case, it is clear that regionalization will further lead to a safer, more reliable, and cost-effective wastewater service for the Beaver Falls community and to the benefit of the customers served by this System.

**Q. Does OCA witness DeMarco testify regarding the customer service issues related to the Beaver Fall's System?**

A. Yes. OCA witness DeMarco argues that Aqua's bill payment systems do not offer any improvements of the City's current wastewater service bill payment systems. OCA St. No. 1, at p. 30.

**Q. Do you agree?**

A. No.

**Q. Please explain.**

A. I would simply note that Mr. DeMarco discounts entirely the benefits that will inure to Beaver Falls customers who have difficulty paying their bills. There are no payment plan options with Beaver Falls. With Aqua's ownership, Beaver Falls customers will have the option to enter into a deferred payment arrangement to help pay off unpaid balances, and for those that meet eligibility requirements, they may participate in Aqua's low-income programs as described in the rebuttal testimony of Rita F. Black (Aqua Statement No. 9-R).

Moreover, Aqua has improved its disruption notifications and mapping system to be real-time and initiated from our field personnel on site, at the disruption. With respect to the field work improvements noted above, when our technicians enter a work order and go "in route", a text notification is sent to the customer providing a notification with the technician's expected arrival time regardless of whether the work order is scheduled or unscheduled.

Aqua has also released a new and improved customer ePortal and Aqua App for mobile devices that provide customers with access to improved customer tools for account maintenance, notifications, viewing meter reads and trending consumption, as well as viewing and paying bills from anywhere in the world. In addition to payment through Aqua App, Aqua customers also have the benefit of expanded bill payment options including auto-payment and pay by text. For customers using an ACH payment method, all of these options are free. In addition to offering bill payment, Aqua's ePortal also provides electronic billing and the ability to view prior bills.

Accordingly, I believe that these customer-driven tools demonstrate that there are numerous functional differences in Aqua's billing and customer service, as compared to what GSA customers have today.

**Q. Does OCA witness DeMarco testify regarding information technology ("IT") and/or cybersecurity issues related to the Beaver Fall's System?**

A. Yes.

**Q. Please explain.**

A. OCA witness DeMarco argues that Aqua's "proposed improvements appear to be designed to make the Beaver Falls system consistent with Aqua's processes." OCA St. No. 1, at p. 31. He further asserts that "[t]hose proposed improvements do not necessarily confer a benefit where the current operator is not aware that there is anything wrong with the way Beaver Falls is currently operating its system" and specifically refers to the City's response

to OCA-III-33. OCA St. No. 1, at p. 31. He further appears to argue that such improvements would only be a benefit if they were necessary to comply with the law. OCA St. No. 1, at p. 31.

**Q. Do you agree with OCA witness DeMarco's assessment of the current state of the System's cybersecurity systems, polices and/or procedures?**

A. No.

**Q. Why not?**

A. As it relates to cyber security, the System currently faces several risks, including **[BEGIN HIGHLY CONFIDENTIAL]** [redacted]

[redacted] **[END HIGHLY CONFIDENTIAL]**

**Q. Do you agree that Aqua's improvements to the cybersecurity systems, polices and/or procedures are not beneficial to Beaver Fall's customers?**

A. No.

**Q. Why not?**

A. Improvements to cybersecurity under Aqua ownership are highly beneficial to customers for several reasons: **[BEGIN HIGHLY CONFIDENTIAL]**

[redacted]

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[redacted]

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[redacted]

[redacted] **[END HIGHLY CONFIDENTIAL]**

**Q. Do you have any concluding remarks with respect to OCA witness DeMarco's testimony?**

A. Contrary to OCA witness DeMarco's testimony, authorizing Aqua's acquisition of the System brings several overarching operational and service benefits for the customers. These benefits include, enhanced safety and security, improved operational efficiency, more reliable and consistent service, cost savings, access to additional worker and material resources, and enhance cybersecurity protections. OCA witness DeMarco does not specifically address these benefits and, in some cases, does not deny that Aqua's acquisition of the system would result in these benefits. Therefore, the Commission should take a holistic review of the benefits of the acquisition and ultimately approve it.

## IV. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO 4-R

# REBUTTAL TESTIMONY

**ON BEHALF OF THE CITY OF BEAVER FALLS**

**OF**

**CHARLES R. JONES, JR.**

**CITY MANAGER**

**CITY OF BEAVER FALLS**

**February 24, 2025**

CITY OF BEAVER FALLS, BEAVER COUNTY
REBUTTAL TESTIMONY OF CHARLES R. JONES, JR.

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1

II. RESPONSE TO MR. DEMARCO ..... 2

III. CONCLUSION ..... 5

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Charles R. Jones, Jr. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the appointed City Manager for the City of Beaver Falls ("City" or "Beaver Falls"). My duties as defined by the City's Home Rule Charter are to manage day-to-day operations and oversee administrative functions of all City departments. I report directly to the Mayor of the City and City Council.

**Q. Have you testified before the Pennsylvania Public Utility Commission ("Commission") before?**

A. Yes. I previously submitted Direct Testimony with Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") initial Application on February 17, 2023 and Supplemental Direct Testimony with Aqua's Amended Application on March 28, 2024, in this proceeding.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua's Application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purpose of your rebuttal testimony and summarize the key points it will address.**

A. The purpose of my testimony is to respond to the Office of Consumer Advocate ("OCA") Statement No. 1, Direct Testimony of Nicholas A. DeMarco, with regard to (1) whether or not the System is troubled and the City is technically fit to operate the System; and (2) the harm to customers of the City if the System is sold to Aqua versus if the sale is not approved and the City continues to run the System.

## II. RESPONSE TO MR. DEMARCO

**Q. Do you agree with Mr. DeMarco's testimony indicating that the System is not troubled and that Beaver Falls is technically fit to run the System?**

A. I do not. Mr. DeMarco refers to Sections 1327 and 529 of the Public Utility Code to claim that the Beaver Falls system is not troubled. I will not speak to any legal standards under those provisions, although I am advised that Aqua did not file for approval of the Application under those provisions. However, the Supplemental Direct Testimony of Zach Martin explains that there are serious issues with the City's 80 year-old wastewater treatment plant ("WWTP"). I am concerned about the condition of the WWTP and the aging collection system as well as the seepage of raw sewage into the Beaver River from the System as described in Zach Martin's Supplemental Direct Testimony. Just because the Environmental Protection Agency has not issued a violation notice to the City, does not mean that the System is not troubled. In addition to the issues raised by Mr. Martin in his

Direct Testimony and Supplemental Direct Testimony, there are significant operational issues of concern to the City.

Despite working diligently to retain experienced operators that the System requires, the City has been unsuccessful. This lack of expertise combined with the lack of funds and the City's overwhelming burdens to try to provide other basic services to its citizens, many of whom are impoverished, have led to the untenable situation the City is in at this time. Mr. DeMarco views the operation of the System as wholly separate from the City's overall operations and he should not. The City has substantial problems that impede its ability to run the System now, and those problems will continue to grow if an experienced and financially capable entity is prevented from taking over the System. Furthermore, Mr. DeMarco is asking the City to have a reactive system. I do not feel comfortable with that. The City wants to be proactive to ensure that the System is well run rather than attempting to fix problems as they arise and hoping there isn't a crisis - which is where we are now. We urgently need Aqua to take over the System to ensure the health and safety of our customers, now and into the future.

**Q. Do you agree with Mr. DeMarco that the rate impact of the sale to Aqua is more harmful to the customers of Beaver Falls than having the City continue to run the System?**

A. No. The City has historically experienced significant financial difficulties. We are struggling to make payroll and provide basic services to our citizens. We are on the verge of being named by the Commonwealth Department of Community and Economic

Development a distressed community or Act 47 status, which indicates severe financial difficulties and could lead to the City being placed in receivership. The City urgently needs the sale proceeds to even meet the basic needs of our citizens. Quite frankly, our citizens, who are predominantly low income and minorities, deserve better and that is why the City agreed to sell the System to Aqua. Although I am concerned about the impact the rate increases will have on our customers if the System is sold to Aqua, I am more concerned about the fact that the City does not have the necessary finances to provide the kind of fundamental services (not just wastewater) to the community that the citizens deserve and we do not have the time or resources to run the System adequately. And I am confident that Aqua will run the System much better than we have been able to in a safe and efficient manner over the long term while the City uses the funds to stabilize its finances for the long term.

We have spent years working on this sale and have spent tens of thousands of dollars to cover expenses related to the sale of the System. If the sale is not approved and the City does not have the proceeds from the sale and instead has to refund the $2,000,000 deposit to Aqua and pay the remaining expenses related to this transaction, it will be devastating for the City. Even with significant rate and tax increases, the City will likely be unable to provide essential services for our citizens - who are the very same people Mr. DeMarco claims will be harmed if Aqua acquires the System and raises rates. In that situation, where the City would be forced to decide how to spend inadequate resources to address multiple critical problems, needed repairs and improvements to the System identified by Mr. Martin will likely be unaddressed and we cannot guarantee that

the System will be efficiently and safely run. Mr. DeMarco's focus on the wastewater rate hikes on the citizens of Beaver Falls presents a skewed picture of the economic and operational impact of the denial of Aqua's application to purchase the System.

## III. CONCLUSION

**Q. Does this conclude your testimony?**

A. Yes, it does. However, I reserve the right to file additional testimony at a later date as may be necessary or appropriate.

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 5-R

# REBUTTAL TESTIMONY OF DYLAN W. D'ASCENDIS

**With Regard To:**
**Fair Market Value Appraisal Adjustments**

**February 24, 2025**

**TABLE OF CONTENTS**

I. INTRODUCTION, PURPOSE, AND SUMMARY ..... 1
II. RESPONSE TO OCA WITNESS GARRETT ..... 2
III. RESPONSE TO OSBA WITNESS FORBES ..... 9
IV. CONCLUSION ..... 11

## I. INTRODUCTION, PURPOSE, AND SUMMARY

**Q. Please state your name and business address.**

A. My name is Dylan W. D'Ascendis. My business address is My business address is 1820 Chapel Avenue W., Suite 300, Cherry Hill, NJ 08003.

**Q. By whom are you employed and in what capacity?**

A. I am employed by ScottMadden, Inc. as a Partner.

**Q. Are you the same Dylan W. D'Ascendis who submitted direct testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Application filed with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 18, 2023 (Exhibit Y, Aqua Statement No. 5).

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to respond to the direct testimonies of Mr. David J. Garrett, witness for the Pennsylvania Office of Consumer Advocate ("OCA"), and Ms. Rebecca K. Forbes, witness for the Pennsylvania Office of Small Business Advocate ("OSBA"), as it relates to my determination of the Fair Market Value ("FMV") for the City of Beaver Falls' ("Beaver Falls") wastewater system (the "System").

**Q. Please summarize your conclusions.**

A. Mr. Garrett's adjustments to my valuation approaches are unfounded and inconsistent with basic valuation principles. Further, Mr. Garrett's recommendation to equally weight the Cost, Market and Income Approaches ignores the fact that approximately half of Beaver Falls' current and expected revenues are derived from outside the System's asset base. Finally, Mr. Garrett's return on common equity calculation ignores recent guidance from the Commission and, all else equal, substantially increases the indicated value using the Income Approach. Regarding Ms. Forbes' testimony, I will discuss how her reliance on the Reasonableness Review Ratio ("RRR") is misplaced.

## II. RESPONSE TO OCA WITNESS GARRETT

**Q. Please summarize the arguments and positions made by Mr. Garrett in his direct testimony.**

A. Mr. Garrett recommends a FMV of $19,628,354 based on adjustments to my Market and Income Approaches and evenly weighting my three approaches.[1]

**Q. Do you have any concerns with Mr. Garrett's analysis and conclusions?**

A. Yes, I do. I have concerns with Mr. Garrett's consideration of the following: (1) "capital statistics" in favor of "demographic statistics" in his comparable sales method; (2) a capitalized earnings approach instead of a traditional discounted cash flow model approach for his Income Approach; (3) his recommended cost of capital; and (4) equal weightings of each of his valuation approaches.

[1] OCA St. No. 2, at p. 5.

**Q. Do you agree that "capital statistics" are superior to "demographic statistics" as claimed by Mr. Garrett?**

A. No, I do not. When performing a comparable transaction analysis, one must attempt to use metrics that are standardized and available to all transactions. Price per connection is one of the most readily accessible methods of market comparison for water and wastewater transactions. As shown in a recent industry report of water and wastewater transactions, the only multiple shown is the purchase price and number of connections:

**Table 1: Regulatory Research Associates ("RRA") List of Water and Wastewater Transactions[2]**

**Selected pending water/wastewater utility acquisitions over $10M**

| Date announced | Seller/municipality | State | Buyer | Utility type | Transaction value ($M) | Connection count |
|---|---|---|---|---|---|---|
| 06/21/24 | Ansonia | CT | Eversource Energy | Wastewater | 41.0 | 5,600 |
| 01/10/24 | Jefferson Utilities Inc., Cave Road Utilities, Valley Water & Sewer Services Inc., East Jefferson Sewer Services LLC, Shenandoah Junction Public Sewer Services Inc. | WV | American Water | Water/wastewater | 27.0 | 3,885 |
| 12/30/23 | North Versailles | PA | Essential Utilities | Wastewater | 30.0 | 4,400 |
| 11/03/23 | Silver Creek Water Corp. | IN | American Water | Water | 45.0 | 8,000 |
| 10/04/23 | Greenville Municipal Water Authority | PA | Essential Utilities | Water | 18.0 | 3,000 |
| 05/01/23 | Greenville Sanitation Authority | PA | Essential Utilities | Wastewater | 18.0 | 4,000 |
| 03/24/23 | Towamencin Township | PA | American Water | Wastewater | 104.0 | 6,300 |
| 01/24/23 | Elizabeth Borough Municipal Authority | PA | American Water | Wastewater | 28.0 | 2,200 |
| 10/11/22 | Butler Area Sewer Authority | PA | American Water | Wastewater | 230.0 | 14,700 |
| 10/12/21 | Beaver Falls | PA | Essential Utilities | Wastewater | 41.3 | 7,600 |
| 12/08/20 | Brentwood Borough | PA | American Water | Wastewater | 19.0 | 4,000 |
| 09/26/19 | Delaware County Regional Water Quality Control Authority | PA | Essential Utilities | Wastewater | 276.5 | 165,000 |
| | | | | | **877.8** | **228,685** |

As of July 31, 2024.
Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.
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[2] RRA Regulatory Focus, Intro to Water Utilities – Current Trends and Growth Drivers, August 5, 2024.

Similarly, American Water Works Company, Inc. reported the estimated customer connections for its recent transactions in its most recently available investor presentation, with no mention of "financial metrics":

**Table 2: Transaction Overview from American Water Works Company, Inc's. Investor Presentation[3]**



## Closed Acquisitions

AMERICAN WATER

**September 30, 2024**

| STATE | NUMBER OF SYSTEMS | WATER CUSTOMER CONNECTIONS | WASTEWATER CUSTOMER CONNECTIONS | TOTAL CUSTOMER CONNECTIONS |
|---|---|---|---|---|
| New Jersey | 2 | 2,300 | 2,300 | 4,600 |
| Virginia | 2 | 1,400 | 1,400 | 2,800 |
| Illinois | 1 | - | 26,000 | 26,000 |
| Total | 5 | 3,700 | 29,700 | 33,400 |

**Oct. 1 – Oct. 30, 2024**

| STATE | NUMBER OF SYSTEMS | WATER CUSTOMER CONNECTIONS | WASTEWATER CUSTOMER CONNECTIONS | TOTAL CUSTOMER CONNECTIONS |
|---|---|---|---|---|
| Pennsylvania | 1 | - | 15,000 | 15,000 |
| Total | 1 | - | 15,000 | 15,000 |

35

Conversely, as shown in Figure 6 of Mr. Garrett's direct testimony, roughly half of the transactions listed had "capital statistics." As price per connection is more readily available and measured consistently, it is a superior measure to the infrequent and accounting-based "capital statistics" put forth by Mr. Garrett.

[3] American Water Works Company, Inc., 2024 Third Quarter Earnings & 2025 Outlook Conference Call Presentation, October 31, 2024, at 35.

**Q. Is there published literature supporting your position?**

A. Yes, there is. Hayward discusses acceptable multiples for use in the Guideline Merged and Acquired Company ("M&A") method:

> The M&A method uses various benchmarks *e.g.*, number of customers, multiples of book value, purchase price/rate base from "comparable" transactions, capital/EBITDA, sales/EBITDA, and capital/EBIT.[4]

Please note that the first two benchmarks mentioned by Hayward are number of customers and multiples of book value, both of which are used in my Market Approach. Although as will be discussed below, there are issues in relying heavily on measures using book value.

**Q. Do you agree with Mr. Garrett's assertion that the discounted cash flow method only considers financial metrics?[5]**

A. No, I do not. The discounted cash flow method is an Income Approach method which discounts the free cash flows, or operating income less capital expenditures, for a specified period. The free cash flows are directly affected by customers, as operating revenues are received from customers and operating expenses and capital expenditures are incurred to serve customers. As customers drive all aspects of free cash flows for water utilities, I urge the Commission to dismiss Mr. Garrett's assertion.

[4] David L. Hayward, Valuing a Water Utility, Revised and Updated Third Edition, Infinity Publishing, 2017, at 177.
[5] OCA St. No. 2, at pp. 10-11.

**Q. Mr. Garrett claims that investors would consider metrics such as property, plant and equipment ("PP&E"), as they are tangible assets that generate profit, as a valid multiple to consider in a comparable sales analysis.[6] Is a PP&E multiple applicable for Beaver Falls?**

A. No, it is not. As noted earlier, and discussed in my Valuation Report, half of Beaver Falls' current and future flow and revenue come from the Contributing Municipalities. Because of this, their assets would not reflect the value of their operations.

**Q. Please summarize Mr. Garrett's application of the Income Approach?**

A. Mr. Garrett uses the capitalized earnings method for his indicated value for the Income Approach. His capitalized earnings method uses cash-flows for year zero as assumed by Mr. Walker in his Exhibit 13 and then capitalizes that value using his indicated cost of capital and projected Gross Domestic Product ("GDP") growth rate, holding both steady into perpetuity, resulting in an indicated value of $23,354,612 for Beaver Falls.[7]

**Q. Do you have any concerns with Mr. Garrett's Income Approach?**

A. Yes, I do. I disagree with: (1) his use of the capitalized earnings method for utilities; and (2) Mr. Garrett's estimated cost of capital.

[6] OCA St. No. 2, at p. 12.
[7] OCA St. No. 2, at p. 21.

**Q. Why is it incorrect to use the capitalized earnings method for Beaver Falls?**

A. Generally, capitalized earnings models are used when benefits streams (i.e., cash flows) are linear and discounted cash flow models are used when benefit streams are not linear. The National Association of Certified Valuators and Analysts ("NACVA") and the Consultants' Training Institute offer the following guidance as it relates to determining the benefit stream of an entity:

> **Linear vs. non-linear benefit stream**. A linear benefit stream is a stream of future benefits that is expected to remain constant or grow/decline at a constant rate. A non-linear benefit stream is a stream of future benefits that is expected to grow or decline at a variable rate. Historical economic income is used when estimated future benefits are expected to be linear. Projected economic income is used when estimated future benefits are expected to be non-linear (subject to any restrictions based on the purpose of the engagement).
>
> Ultimately, the analyst will use his or her financial analysis, management inquires and economic/industry research to ascertain whether the historical data is the best indication of the future benefit stream or whether projections are required to estimate future benefits.[8]

Due to the varying capital expenditures in the short-to-medium term as shown in my Income Approach, the benefit stream for Beaver Falls is non-linear. Mr. Garrett's choice of using the capitalized earnings method to determine a value for Beaver Falls in his Income Approach leads to an inaccurate value that does not reflect the projected operations of the system.

**Q. Please comment on Mr. Garrett's cost of capital discussion.**

A. While the cost of capital is a required element of the Income Approach, Mr. Garrett's discussion and analysis on this point is inconsequential, as it ignores the Commission's

[8] Consultants' Training Institute, Business Valuations: Fundamentals, Techniques, and Theory, Chapter Four, page 8 (2018).

2024 Final Supplemental Implementation Order, Appendix C, that states that a valuation must:

> Use the Commission's quarterly earnings report for capital structure, cost of debt, cost of equity and weighted average cost of capital. The quarterly earnings report used must be contemporaneous with the production of the valuation.

Contemporaneous with the production of my Report, the Commission's quarterly earnings report indicated an ROE of 9.75%. All else being equal, applying a 9.75% ROE in my Income Approach would increase my indicated result under that approach to $42,632,858. Using Mr. Garrett's recommended cost of capital would further raise the result to $57,819,567.

**Q. Do you agree with Mr. Garrett's equal weighting across all three approaches?**

A. No, I do not. As discussed above, the value of the system as represented by the Cost Approach does not reflect the value of Beaver Falls system as approximately half of its current and future revenues are not derived from its assets. Applying an equal weight to the results of the Cost Approach as advocated by Mr. Garrett would therefore significantly understate the value derived by the system. This is apparent by reviewing the indicated values of my valuation approaches.

## III. RESPONSE TO OSBA WITNESS FORBES

**Q. Please summarize the arguments and positions made by Ms. Forbes in her direct testimony.**

A. Ms. Forbes argues that if the Commission approves the transaction, it should set the amount allowed in rate base at $8,454,113, which she calculates as the net book value multiplied by the Commissions RRR.

**Q. Does the Commission provide guidance as to the use of the RRR?**

A. Yes, it does. The Commission states:

> Regarding the nature of the RRR, we clarify, as PAWC suggests, that the RRR is not intended to redefine the FMV under Section 1329. Additionally, as Aqua suggests, we clarify that the RRR does not impact purchase price. Also, we agree with the OCA that the RRR is not a test of presumptive reasonableness or a determination that an acquisition is in the public interest, but rather one factor among many. Lastly, we agree with the OSBA that the RRR should not be presumed to be the floor for acquisition cost, but rather a benchmark for evaluating it. In sum, it should be understood that the RRR does not replace the Commission's current analysis in Section 1329 proceedings.
>
> Likewise, the RRR is not binding, but is an additional factor and point of reference that the Commission may consider in Section 1329 proceedings. We reiterate that the 2024 FSIO should not be construed to create binding norms. See Chapter 14 Implementation at 12-13. Moreover, in considering the RRR in a particular proceeding, we clarify that we will look to the RRR that was in place at the time the selling utility and acquiring utility executed an APA.[9]

As the Commission states, the RRR should not be used in lieu of the standards for valuing an enterprise.

[9] Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation, Docket No M-2016-354313, Final Supplemental Implementation Order, at p. 106 (Order entered July 2, 2024).

**Q. Has Ms. Forbes presented any FMV calculation?**

A. No, she has not.

**Q. Is Ms. Forbes' calculation to establish the ratemaking rate base correct?**

A. No. While I disagree with Ms. Forbes use of the RRR to set the ratemaking rate base as discussed above, her application of the Commission's order is also incorrect. The Commission stated that it would use the average of the two UVEs' depreciated original cost ("DOC") from their appraisals.[10] The DOC from ScottMadden's appraisal is $5,003,844.[11] The DOC from Gannett Fleming's appraisal is $7,850,687.[12] The average of these two DOCs is $6,427,266 multiplied by the RRR of 1.68 is $10,797,806.

**Q. Does the RRR produce a reasonable indicated value for Beaver Falls?**

A. No, it does not. Ms. Forbes applies the RRR to Beaver Falls' DOC. As I discussed in response to Mr. Garrett, valuation measures derived from Beaver Falls' assets understate the value of the system as it does not reflect the large proportion of revenues derived from outside its jurisdiction.

[10] Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation, Docket No M-2016-354313, Final Supplemental Implementation Order, at p. 106 (Order entered July 2, 2024).
[11] Aqua Application, Exhibit Q, Schedule 1, p. 2 of 25.
[12] Aqua Application, Exhibit R, Exhibit 7, p. 1 of 3.

## IV. CONCLUSION

**Q. Should any or all the arguments made by Mr. Garrett or Ms. Forbes persuade the Commission to lower the approved purchase price below your indicated value of $40,199,347?**

A. No, they should not. My recommended FMV for Beaver Falls accurately reflects its operations, including its significant flow coming from outside its jurisdictional boundaries. Mr. Garnett and Ms. Forbes ignore that fact, which significantly distorts their recommendations in this proceeding.

**Q. Does this conclude your rebuttal testimony?**

A. Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

# CITY OF BEAVER FALLS
# BEAVER FALLS, PENNSYLVANIA

REBUTTAL TESTIMONY
OF
HAROLD WALKER, III

FAIR MARKET VALUE APPRAISAL

CITY OF BEAVER FALLS
WASTEWATER SYSTEM ASSETS

February 24, 2025

Prepared by:

GANNETT FLEMING

# TABLE OF CONTENTS


I. INTRODUCTION ..... 1

II. SCOPE OF TESTIMONY ..... 1

III. RESPONSE TO OCA WITNESS GARRETT ..... 1

IV. COST APPROACH ..... 3

V. INCOME APPROACH ..... 9

VI. MARKET APPROACH ..... 17

VII. MARKET MULTIPLES METHOD ..... 20

VIII. SELECTED TRANSACTION METHOD ..... 22

IX. RECOMMENDED WEIGHTING ..... 28

X. CONCLUSION ..... 29

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Harold Walker, III my business address is 1010 Adams Avenue, Audubon, Pennsylvania.

**Q. ARE YOU THE SAME HAROLD WALKER WHO PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?**

A. Yes.

## II. SCOPE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

A. Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") was engaged by the City of Beaver Falls ("City") to perform a fair market value appraisal ("FMV") of their wastewater system assets ("Wastewater System"). The purpose of my rebuttal testimony is to respond to and comment on the direct testimony submitted by the Office of Consumer Advocate's ("OCA") witness David J. Garrett, OCA Statement No. 2. My rebuttal testimony includes Aqua Exhibit HW-1R.

## III. RESPONSE TO OCA WITNESS GARRETT

**Q. DID MR. GARRETT PERFORM AN APPRAISAL OF THE TOWNSHIP WASTEWATER SYSTEM ASSETS?**

A. No.

**Q. WOULD YOU PLEASE SUMMARIZE MR. GARRETT'S ADJUSTMENTS OF THE GANNETT FLEMING FMV APPRAISAL AND IDENTIFY THE TOPICS THAT YOU WILL ADDRESS IN YOUR REBUTTAL TESTIMONY?**

A. Yes. In his direct testimony, Mr. Garrett proposed a new Cost Approach to valuation. Mr. Garrett also proposed a new Income Approach to valuation. Mr. Garrett proposed adjustments to the Gannett Fleming Market Approach, including the market multiples method and the selected transaction method. All of Mr. Garrett's proposed adjustments/changes are downward, or negative, adjustments to Gannett Fleming's appraisal report. My rebuttal testimony addresses Mr. Garrett's changes and recommended adjustments to Gannett Fleming's appraisal report.

**Q. DO MR. GARRETT'S RECOMMENDATIONS MEET A STANDARD OF VALUE OF FMV?**

A. No. Mr. Garrett's recommendations do not meet a standard of value of FMV and are in direct violation of Section 1329 of the Public Utility Code, 66 Pa. C.S. § 1329.

**Q. HAS MR. GARRETT EVER PERFORMED AN FMV APPRAISAL OF OTHER WASTEWATER SYSTEM ASSETS?**

A. No. (See Aqua Exhibit HW-1R, page 2 for Mr. Garrett's response to the City's Interrogatories, Set I, question 2d.)

**Q. HAS MR. GARRETT EVER VALUED UTILITY PROPERTY?**

A. No. (See Aqua Exhibit HW-1R, page 2 for Mr. Garrett's response to the City's Interrogatories, Set I, question 2c.)

**Q. DID MR. GARRETT INSPECT OR REVIEW THE WASTEWATER SYSTEM?**

A. No. (See Aqua Exhibit HW-1R, page 1 for Mr. Garrett's response to the City's Interrogatories, Set I, question 1.)

**Q. HAS MR. GARRETT EVER INSPECT OR REVIEWED A WASTEWATER SYSTEM?**

A. No. (See Aqua Exhibit HW-1R, page 3 for Mr. Garrett's response to the City's Interrogatories, Set I, question 3.)

**Q. DID YOU INSPECT OR REVIEW CITY OF BEAVER FALLS' WASTEWATER SYSTEM?**

A. Yes, Wastewater engineers from our parent company viewed or observed the Wastewater System's facilities on February 26, 2021, August 20, 2021, and January 28, 2022. We also relied on the engineering assessment of the Wastewater System's facilities report, "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets" prepared by Gannett Fleming, Inc., the Wastewater System's Chapter 94 reports, the Wastewater System's 537 Plan, the Asset Purchase Agreement ("APA"), and the Wastewater System's asset replacement history, to confirm the condition of the Wastewater System's property and equipment.

## IV. COST APPROACH

**Q. HOW DID MR. GARRETT DETERMINE HIS COST APPROACH RECOMMENDATION?**

A. Mr. Garrett recommends the Cost Approach recommendation prepared by Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") Utility Valuation Expert ("UVE") Dylan W. D'Ascendis of ScottMadden, Inc. ("ScottMadden")

**Q. DOES MR. GARRETT RECOMMEND ADJUSTING YOUR COST APPROACH RECOMMENDATION?**

A. Yes, on page 19 of Mr. Garrett's direct testimony, he states his "proposed adjustment of $21.5 million to Mr. Walker's cost approach valuation is simply the difference between his and Mr. D'Ascendis's cost approach valuations."

**Q. HAVE YOU REVIEWED THE SOURCE OF MR. GARRETT'S COST APPROACH RECOMMENDATION?**

A. Yes.

**Q. PLEASE EXPLAIN HOW MR. GARRETT'S COST APPROACH RECOMMENDATION REFLECTS A DIFFERENT VALUATION METHOD THAN HE HAS RECOMMENDED IN THE PAST.**

A. Mr. Garrett's Cost Approach recommendation reflects an age/life ratio ("ALR") method to determine the balance of accumulated depreciation that is subtracted from the reproduction cost new ("RPCN") value of the fixed assets (i.e., property, plant, and equipment) in order to produce the reproduction cost new less depreciation ("RPCNLD") value. The RPCNLD method is ultimately used as the basis of Mr. Garrett's Cost Approach recommendation. Mr. Garrett's new ALR method is the simplest method of calculating accumulated depreciation based on the age/life ratio reflecting the assumed useful life of the asset. The underlying assumption in this method is that physical deterioration of an asset occurs at a constant average annual rate, **something that is generally not true for utility property**.

However, Mr. Garrett has been involved in several Section 1329 proceedings as a witness for the OCA[1], and he has also submitted testimony before the Pennsylvania Public Utility Commission ("PUC" or the "Commission") regarding depreciation.[2] In these

[1] *See*: East Norriton Township (Docket No. A-2019-3009052), East Whiteland Municipal Authority (Docket No. A-2021-3026132), Borough of Shenandoah (Docket No. A-2022-3034143), Royersford Borough Authority (Docket No. A-2020-3019634), and Willistown Township (Docket No. A-2021-3027268).

[2] *See*: Duquesne Light Company (Docket No. R-2024-3046523), FirstEnergy Pennsylvania Electric Company (Docket No. R-2024-3047068), and Veolia Water Pennsylvania, Inc. (Docket Nos. R-2024-3045192 and R-2024-3045193).

testimonies Mr. Garrett determined the balance of accumulated depreciation, and hence ultimately the value of the asset, using a survivor curves method.

The survivor curves method accrued depreciation calculation is based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The survivor curves method is recognized by most public utility commissions, including the Commission, in determining value of property devoted to public service for rate making purposes. The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized "survivor curves" known as the Iowa type curves. The average service life procedure is used to apply the methods of depreciation to group properties for which a survivor curve is used to recognize the existence of life dispersion. The accrued depreciation ratio from a survivor curve is a concept that is used to estimate the consumed service capacity of plant at a point in time. The survivor curve is used to find the applicable accrued depreciation factors of the assets to result in the total accumulated depreciation and hence ultimately the value of the asset (e.g., RPCNLD).

**Q. DO SURVIVOR CURVES PROVIDE A SUPERIOR INDICATION OF THE CURRENT VALUE OF THE UNDERLYING ASSETS?**

A. Yes. The determination of depreciation expense for utility assets is a complex process. Utility assets are classified or grouped in accordance with the National Association of Regulatory Utility Commissioners' ("NARUC") uniform system of accounts. This system of accounts defines the capital accounts to be used and the type of assets to be included in each account. This process results in homogeneous assets being grouped into

respective accounts based on the function and nature of the assets. For example, mains are accounted for in one account, pumps in another account, structures in another, etc.

Despite the fact that homogeneous assets are grouped into separate accounts, the life span of each asset comprising an account is dispersed over a wide range. "Generalized survivor curves are used to describe the dispersion of lives over time."[3] Survivor curves are assigned based on statistical analysis of the dispersion of retirements experienced by the property populating each account. "The results of the statistical analyses are similar to those obtained by an actuary analyzing the mortality of human beings."[4]

Depreciation studies required by regulators determine changes in probable average service lives of the assets comprising each account by comparing the depreciation reserve (balance of accumulated depreciation) calculated from the survivor curves to the account's book reserve. Differences between these two reserves are remedied through changes to authorized service lives which, over time, moves the account's book reserve to being closer to the reserve calculated from the survivor curves. The reason regulators move the book reserve towards the reserve calculated from the survivor curves is to produce the outcome where the assets' economic life match their service life. Since survivor curves best depict average service lives and provide a more accurate balance of accumulated depreciation, their use provides the best measure to determine the current value of the underlying assets.

It appears that Mr. Garrett may have switched from using his previously preferred survivor curve method of determining the total accumulated depreciation to the ALR method because doing so effectively shortened the remaining service lives of assets,

[3] Stout, William M. "A Comparison of Component and Group Depreciation for Large Homogeneous Groups of Network Assets." Presentation to the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants, August 28, 2002. https://www.sec.gov/comments/4-600/4600-97.pdf
[4] Id.

increased the balance of accumulated depreciation, and ultimately reduced the value of Wastewater System assets.

**Q. CAN YOU GIVE AN EXAMPLE OF HOW THE SURVIVOR CURVES METHOD IS A SUPERIOR METHOD TO THE AGE/LIFE RATIO METHOD FOR DETERMINING THE CURRENT VALUE OF THE UNDERLYING ASSETS?**

A. Yes. Both accounts 363 (Services to Customers) and 382 (Outfall Sewer) are shown to have no value ($0) under the age/life ratio method.[5] However the assets which comprise both accounts 363 (Services to Customers) and 382 (Outfall Sewer) currently provide service, are essential in the provision of service, and are used to generate revenues. Therefore, the assets which comprise both accounts 363 (Services to Customers) and 382 (Outfall Sewer) have value and are essential parts of the Wastewater System and should have value under FMV. Accounts 363 (Services to Customers) and 382 (Outfall Sewer) have a combined value of $2.1 million under the survivor curves method used in our Cost Approach.[6]

**Q. HAS THE COMMISSION ACCEPTED MR. GARRETT'S PROPOSED COST APPROACH IN LIEU OF GANNETT FLEMING'S COST APPROACH IN PRIOR SECTION 1329 PROCEEDINGS?**

A. No. The Commission has previously rejected the use of Mr. Garrett's proposed Cost Approach as the basis of FMV in prior decisions:

> Mr. Garrett proposed the use of shorter service lives for five separate accounts. **We note that Mr. Garrett chose the shortest service lives available** – whether based on the *Indiana Study*, the AUS appraisal or the Gannett Fleming appraisal for each of his five recommended adjustments to the Gannett Fleming Cost Approach. Mr. Garrett selected the *Indiana Study* values for Accounts 360.10 and 361.10 but for the other accounts he

[5] *See* Application, Exhibit Q, Schedule 1, pp. 1 and 2 of the ScottMadden Valuation Report.
[6] *See* Application, Exhibit R, Exhibit 9, p. 1 of the Gannett Fleming Appraisal.

> chose whatever value was lowest. Mr. Garrett recommended using longer service lives for Account No. 354.30 and Account No. 354.40 in the *Indiana Study* than the values he recommended here for the Township system assets. Instead, he used values from the AUS appraisal for these two accounts. Aqua St. 4-R at 8-9. We must agree with Aqua that **Mr. Garrett's approach is unreasonable** here. If Mr. Garrett believed the *Indiana Study* results to be appropriate for use for EWT's assets, it would be more reasonable to expect him to use the values from the study for all five accounts in question. Accordingly, we are not persuaded to accept the OCA's recommendations to adjust (downward) the service lives in the Gannett Fleming Cost Approach.[7]

**Q. MR. GARRETT RELIES UPON THE SCOTTMADDEN COST APPROACH. DOES THE SCOTTMADDEN VALUATION REPORT STATE THEIR COST APPROACH IS A GOOD MEASURE OF THE WASTEWATER SYSTEM'S FMV?**

A. No. ScottMadden states:

> As stated above, the value derived from the Cost Approach is based solely on the underlying assets of the Subject Interest, which means it does not take into account the expected cash flows of these assets. For Beaver Falls, this difference is significant. Since Beaver Falls does not own assets of the Joint Sewer Users but derives approximately half of its historical and expected revenues from them, **the Cost Approach significantly understates Beaver Falls' fair market value**.[8]
>
> In **ScottMadden's opinion**, the Income and Market Approaches should each receive 45% weight and **the Cost Approach 10% weight**. The reason for this is **the Cost Approach does not accurately represent Beaver Falls' value** as it cannot reflect the revenues from the Joint Sewer Users. In this instance, the value of Beaver Falls is not only reflected in its physical assets, but its flow volumes with the Joint Sewer Users. The indicated result based on the Cost Approach would remain the same regardless of whether Beaver Falls' assets continue to serve the Joint Sewer Users or not. **In lieu of valuing Beaver Falls' contracts with the Joint Sewer Users as intangible assets, ScottMadden has simply assigned less weight to the results of the Cost Approach**.[9]

[7] *Application of Aqua Pennsylvania Wastewater, Inc. – East Whiteland Township*, Docket No. A-2021-3026132, Opinion and Order entered July 29, 2022, p. 60. (Emphasis added).
[8] *See* Application, Exhibit Q, ScottMadden Valuation Report, p. 1. (Emphasis added).
[9] *See* Application, Exhibit Q, ScottMadden Valuation Report, pp. 6-7. (Emphasis added).

## V. INCOME APPROACH

**Q. ON PAGES 19 TO 39 OF MR. GARRETT'S DIRECT TESTIMONY, HE EXPLAINS HIS INCOME APPROACH. WOULD YOU PLEASE SUMMARIZE MR. GARRETT'S ADJUSTMENTS TO THE GANNETT FLEMING INCOME APPROACH AND IDENTIFY THE TOPICS THAT YOU WILL ADDRESS IN YOUR REBUTTAL TESTIMONY?**

A. Yes. Mr. Garrett's adjustments to the Gannett Fleming Income Approach to valuation include using a different model and different cash flows to value. He also disagrees with the discount rates used in the model and presents what he believes is a more appropriate discount rate.

**Q. DO MR. GARRETT'S RECOMMENDED ADJUSTMENTS TO THE INCOME APPROACH MEET A STANDARD OF VALUE OF FMV?**

A. No. For the reasons discussed later in my rebuttal testimony, Mr. Garrett's recommendations do not meet a standard of value of FMV and are in direct violation of Section 1329 of the Code.

**Q. WHAT MODEL OR METHOD IS MR. GARRETT'S INCOME APPROACH TO VALUATION RECOMMENDATION BASED ON?**

A. On page 21 of his direct testimony, Mr. Garrett explained that he applied a capitalization of earning or cash flow method model. The capitalization of earning method converts a single base economic income number to a value by dividing it by a capitalization rate. As explained on page 33 of Gannett Fleming's appraisal, "[t]he capitalization of earnings is best suited when the future earnings, or cash flow, can be predicted. The implicit assumption in the capitalization of earning method is that the cash flow is a perpetuity, and

the capitalization rate is a constant." Mr. Garrett's recommended model is shown on OCA Exhibit DJG-4.

Conversely, the Income Approach to valuation used in Gannett Fleming's appraisal is based on the discounted cash flow ("DCF") method which values the potential for profit in an investment and reflects future events. Gannett Fleming used the DCF method to be consistent with the required standard of value of FMV.[10] FMV is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a **hypothetical** willing and able **buyer** and a **hypothetical** willing and able **seller**, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."[11] The DCF method "is based on the principle of anticipation – i.e., value is created by the anticipation of future benefits. DCF analysis reflects investment criteria and requires the appraiser to make rational and supportable assumptions."[12]

The capitalization of earnings method used by Mr. Garrett uses the income or cash flow producing capabilities for a **single year, reflecting current ownership and operations**, as shown on OCA Exhibits DJG-4 and DJG-5. Although Mr. Garrett states, on page 21 of his direct testimony, that the single cash flow that he utilized is from the Gannett Fleming appraisal, he fails to disclose that the single cash flow was not used in the Income Approach to valuation used in Gannett Fleming's appraisal. Specifically, the Income Approach to valuation used in Gannett Fleming's appraisal is based on **projected**

[10] Pratt, Shannon P. "Defining Standards of Value." Valuation 34, no. 2, June 1989. http://www.appraisers.org/docs/default-source/college-of-fellows-articles/defining-standards-of-value.pdf.
[11] National Association of Certified Valuators and Analysts, s.v. "Fair Market Value," *The International Glossary of Business Valuation Terms*. (Emphasis added).
[12] Appraisal Standards Board, "First Exposure Draft of proposed new Advisory Opinions and Advisory Opinion Revisions in conjunction with the 2016-17 edition of the Uniform Standards of Professional Appraisal Practice" p. 6.

cash flows beginning in 2022 and thereafter, while Mr. Garrett relied on information for the year 2021. Therefore, the Income Approach to valuation used in Gannett Fleming's appraisal did not use the single year's cash flow utilized by Mr. Garrett.

Page 36 of Gannett Fleming's appraisal states, "[a]s noted previously, the Wastewater System's financial statements and their rates did not include taxes nor a fair rate of return. Accordingly, on Exhibits 13 through 16, we adjusted the Wastewater System's post-2020 financial information for pro forma expenses and returns to be reflective of a MUNI or IOU ownership." I do not believe it is appropriate, nor reasonable, to use a single year cash flow as recommended by Mr. Garrett in his Income Approach to valuation.

**Q. YOU PREVIOUSLY STATED THAT THE INCOME APPROACH TO VALUATION USED IN THE GANNETT FLEMING APPRAISAL IS BASED ON THE DCF METHOD. HAS THE COMMISSION EXPRESSED MISGIVINGS OR CONCERNS REGARDING THE USEFULNESS OF APPLYING GANNETT FLEMING'S INCOME APPROACH TO VALUATION UTILIZING THE DCF METHOD IN A 1329 PROCEEDING IN WHICH GANNETT FLEMING HAS BEEN INVOLVED?**

A. No. Gannett Fleming has applied the DCF method as its Income Approach to valuation as part of its fair market value appraisal in 19 Section 1329 FMV proceedings that have been reviewed by the Commission. In fact, the Commission has not adjusted Gannett Fleming's DCF method recommendation in any prior proceeding. Conversely, the Commission has never accepted the recommended use of the capitalization of earnings method recommended by Mr. Garrett in a Section 1329 FMV proceeding.

**Q. ON OCA EXHIBIT DJG-5 OF MR. GARRETT'S DIRECT TESTIMONY, HE SHOWS THE DEVELOPMENT OF HIS SINGLE YEAR'S "FREE CASH FLOW FROM OPERATIONS" USED IN HIS RECOMMENDED CAPITALIZATION OF EARNINGS METHOD MODEL. WHAT CONCERNS DO YOU HAVE WITH MR. GARRETT'S DETERMINATION OF "FREE CASH FLOW FROM OPERATIONS" FOR VALUING THE WASTEWATER SYSTEM?**

A. I have several concerns. I discuss my concerns and/or observations referencing information shown on Exhibit DJG-5 below reference the information shown on OCA Exhibit DJG-5. First, the revenues ($3,025,415) and the EBIT ($532,936) amounts reflect current ownership, current rates, and current operations, none of which reflect the anticipation of future benefits of a hypothetical buyer's ownership. Second, the revenues and earnings before interest and taxes ("EBIT") used in the exhibit do not include income taxes nor a fair rate of return. Third, the depreciation expense ($154,351) is based on the original cost of the assets, not a current value of the assets.[13] Fourth, the subtraction of income taxes ($153,965) is not consistent with Mr. Garrett's current ownership approach, as the City is a non-income tax paying entity (i.e., municipality). Finally, the EBIT ($532,936) amount used by Mr. Garrett is equivalent to a before income tax overall rate of return of only 1.2% to 1.6% on the value of net plant, based on Gannett Fleming's Cost Approach ($32,994,154) or Gannett Fleming's Fair Market Value ($44,292,000), and is clearly below the zone of reasonable returns for public utility assets.

[13] For example, Exhibit 1 from Aqua Exhibit R, shows the net original cost of the City's property, plant equipment was recorded as being $6,026,108 on their financial statements for 2020 while their value is shown to be $32,994,154 in Gannett Fleming's Cost Approach, and $44,292,000 in Gannett Fleming's Fair Market Value.

Therefore, I believe Mr. Garrett's "Annual Cash Flow" of $378,971, shown on OCA Exhibit DJG-4 and developed on OCA Exhibit DJG-5, is unreasonable, is not appropriate to use to determine the value of the Wastewater System and should not be adopted by the Commission.

**Q. HAS THE COMMISSION EXPRESSED MANY OF THE SAME CONCERNS YOU JUST DISCUSSED REGARDING MR. GARRETT'S CAPITALIZATION OF EARNINGS METHOD?**

A. Yes. The Commission has expressed many of the same concerns I just discussed regarding Mr. Garrett's capitalization of earnings method in a prior decision:

> We must agree with Aqua that the OCA did not establish that its proposed adjustments to the Gannett Fleming and AUS Income Approach results, based on Mr. Garrett's use of a single year cash flow utilizing an average of the Township's 2018 through 2020 financials, are appropriate in this proceeding. We agree with Aqua's reasoning that the OCA's formulation of the income from operations and the resultant value erroneously assumes that revenues and expenses as reported in EWT's financials will be the operating results of the buyer. As the ownership and operation migrates to the buyer, Aqua in this case, several changes will occur; namely there will be a new rate base determined by the Commission based on their findings in this Application and the buyer, Aqua, will be allowed to earn a Commission authorized return on rate base. Operating expense, including taxes, will be incorporated along with the allowed return on rate base in determining the ongoing EWT revenue requirement. Mr. Garrett's model does not factor in these changes to the Township's operations as a rate-regulated wastewater utility.[14]

**Q. IS MR. GARRETT'S RECOMMENDED USE OF THE ORIGINAL COST PLANT VALUE AS THE BASIS FOR HIS INCOME APPROACH A REASONABLE APPROACH?**

[14] *Application of Aqua Pennsylvania Wastewater, Inc. – East Whiteland Township*, Docket No. A-2021-3026132, Opinion and Order entered July 29, 2022, p. 71.

A. No. The circularity of this recommendation defeats or eliminates the need to appraise plant assets since the indicated value of net cost of the plant assets is simply the net original cost of the plant assets under Mr. Garrett's recommendation. If this was the appropriate or correct method to value assets, then an original cost less depreciation analysis would be the only method needed to value assets. However, the value of the investment in plant and equipment for the City's wastewater system assets is being determined in these proceedings based upon a standard of value of FMV, not a standard of value of original cost.[15]

The Commission has previously rejected the use of original cost as the basis of FMV in prior decisions:

> We note that the original cost study, which is reviewed to determine the reasonableness of a utility's acquisition adjustment claim in a future base rate proceeding, consistent with Section 1327(a) of the Code, 66 Pa. C.S. § 1327(a), and the Commission's policy statement at 52 Pa. Code § 69.721, regarding acquisitions of viable water and wastewater systems, is not applicable in a Section 1329 proceeding.[16]
>
> Historically, regulated utilities under the Commission's jurisdiction have predominantly followed a standard and practice of using depreciated original cost value (with various adjustments) as the rate base in which they may recover their capital investment and earn a rate of return on the unrecouped asset value or rate base. However, Section 1329 establishes fair market value, not original cost, as the ratemaking rate base for municipal transactions. Under Section 1329, it is fair value, ratemaking rate base that, ultimately, will be used for ratemaking purposes, rather than being constrained by depreciated original cost value. As indicated by Aqua, "[t]he OCA's proposed adjustments to the Income Approach are also contrary to the language in McCloskey where the Commonwealth Court clearly stated that 'Section 1329 allows a private utility to acquire a government utility's assets at its fair market value rather than at the original

[15] Pratt, Shannon P. "Defining Standards of Value." Valuation 34, no. 2, June 1989. http://www.appraisers.org/docs/default-source/college-of-fellows-articles/defining-standards-of-value.pdf .

[16] *Application of Aqua Pennsylvania Wastewater, Inc. – Limerick Township*, Docket No. A-2017-2605434, Opinion and Order entered November 8, 2017, p. 30.

cost of assets minus the accumulated depreciation and then add that amount to rate base.'" Aqua R.B. at 6 (citing McCloskey, 195 A.3d at 1055).[17]

**Q. IS MR. GARRETT'S DISCOUNT RATE SHOWN ON OCA EXHIBIT DJG-4 OF HIS DIRECT TESTIMONY AN APPROPRIATE DISCOUNT RATE TO USE FOR FAIR MARKET VALUATION PURPOSES?**

A. No. Mr. Garrett's 5.48% discount rate (cost of capital) shown on OCA Exhibit DJG-4 and developed on OCA Exhibit DJG-6 is not appropriate and is not determined in accordance with accepted valuation practice for five reasons. First, Mr. Garrett developed his 5.48% discount rate based on methods used by witnesses who provide testimony before the Commission concerning fair rate of return on original cost rate base; whereas discount rates used in the Income Approach to valuation under a standard of value of FMV are not calculated in this manner (as discussed above). Second, Mr. Garrett's capitalization of earnings method (OCA Exhibit DJG-4) incorporates actual revenues and EBIT reflecting current ownership, current rates, and current operations as a municipality. Accordingly, Mr. Garrett's discount rate should similarly be based on a municipality's discount rate, not an investor-owned discount rate, so that the cash flows and discount rates are coordinated. This mixing and matching by Mr. Garrett is inappropriate and inconsistent.

Third, Mr. Garrett used book capitalization ratios (i.e., 47% debt and 53% equity ratios) calculated from a balance sheet. Book capitalization ratios are only used in rate proceedings, whereas the use of market value capitalization ratios at the valuation date (i.e., December 31, 2021) are in accordance with accepted valuation practice and used for fair

[17] *Application of Aqua Pennsylvania Wastewater, Inc. – Lower Makefield Township*, Docket No. A-2021-3024267, Opinion and Order entered January 13, 2022, p. 69.

market valuation purposes.[18] For a municipality, the appropriate capitalization ratio is always 100% debt because debt is the only major source of capital available to finance an acquisition. Although a municipality likely carries equity on its books (balance sheet), all existing equity is already invested in other assets and, therefore, cannot be used to finance an acquisition.[19]

Fourth, Mr. Garrett used an embedded cost of debt of 4.0% or the historical cost of all debt issuances outstanding (OCA Exhibit DJG-7) of his comparison companies. An embedded cost of debt is only used in rate proceedings, whereas the use of the marginal cost of debt at the valuation date (*i.e.*, December 31, 2021) is in accordance with accepted valuation practice and used for FMV purposes.[20] For a municipality, the appropriate debt cost rate is the current municipal revenue bond rate at the valuation date.

Fifth, Mr. Garrett's equity cost rate was not determined at the valuation date (i.e., December 31, 2021) in accordance with accepted valuation practice and used for FMV purposes. Rather, Mr. Garrett's equity cost rate was calculated over a period from November 26, 2024, to January 10, 2025 (OCA Exhibits DJG-8 and DJG-10), which does not comport with the requirements of 66 Pa. C.S. § 1329 nor comply with the Uniform Standards of Professional Appraisal Practice. A FMV appraisal is determined on a stated

[18] Both the American Society of Appraisers, ASA Business Valuation Standards, 2009, and the National Association of Certified Valuation Analysts, Professional Standards, 2007, use the same definition: "Weighted Average Cost of Capital (WACC). The cost of capital (discount rate) determined by the weighted average, at market values, of the cost of all financing sources in the business enterprise's capital structure."

[19] For example, when a municipal or government entity, such as the Commonwealth of Pennsylvania, finances construction of a road or bridge, it only considers the marginal debt cost despite having "equity" reflected on its books (balance sheet).

[20] For example, see http://www.investinganswers.com/financial-dictionary/financial-statement-analysis/weighted-average-cost-capital-wacc-2905. *Also see* http://www.wallstreetmojo.com/weighted-average-cost-capital-wacc/ , or http://accountingexplained.com/misc/corporate-finance/wacc .

valuation date, not for a period of time. Gannett Fleming's stated valuation date was December 31, 2021.

Therefore, based on the aforesaid, I believe Mr. Garrett's 5.48% discount rate (cost of capital) shown on OCA Exhibit DJG-4 and developed on OCA Exhibit DJG-6 is unreasonable, not appropriate to use to determine the value of the Wastewater System and should not be adopted by the Commission.

## VI. MARKET APPROACH

**Q. ON PAGES 6 TO 16 OF MR. GARRETT'S DIRECT TESTIMONY, HE EXPLAINS HIS ADJUSTMENTS TO THE MARKET APPROACH. PLEASE DESCRIBE GANNETT FLEMING'S MARKET APPROACH.**

A. Gannet Fleming's Market Approach is explained on pages 41 to 51 of the appraisal.[21] The Market Approach is defined as, "a general way of determining a value indication of a business, business ownership interest, security or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities or intangible assets that have been sold."[22] There are two methods of doing the Market Approach to valuation: the market multiples method; and the selected transaction method. First, Gannett Fleming determined the value of the Wastewater System's 3,259 domestic customers using the market multiples method and the selected transaction method. Second, Gannett Fleming determined the value of the Wastewater System's 3,760 ultimate wholesale customers using the selected transaction method. Finally, Gannett Fleming added the value of the Wastewater System's 3,259 domestic customers to the

[21] *See* Application, Exhibit R, Gannett Fleming Appraisal.
[22] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, BVS-V Market Approach to Business Valuation, p. 12.

value of the Wastewater System's 3,760 ultimate wholesale customers in reaching our Market Approach conclusion.

**Q. DID MR. GARRETT FOLLOW A SIMILAR PROCEDURE TO ADJUST GANNETT FLEMING'S MARKET APPROACH?**

A. No.

**Q. PLEASE EXPLAIN THE DIFFERENCES BETWEEN MR. GARRETT'S MARKET APPROACH AND GANNETT FLEMING'S MARKET APPROACH.**

A. First, Mr. Garrett did not use the market multiple method in reaching his Market Approach recommendation. He discusses the market multiple method on pages 12 to 16, but he did not use its results, while Gannett Fleming determined the value of the Wastewater System's 3,259 domestic customers using the market multiples method and the selected transaction method.[23] Second, Mr. Garrett used different transactions in his application of the selected transaction method than were used by Gannett Fleming. Gannett Fleming relied primarily on the integrated systems (excluding wholesale) transactions[24], while Mr. Garrett used the collection/distribution assets selected transactions, the integrated systems (excluding wholesale) transactions, and the integrated systems with wholesale transactions.

Third, Mr. Garrett only used *ex-ante* data, taken from page 2 of Exhibit 18 of the Gannett Fleming appraisal, in his application of the selected transaction method, while Gannett Fleming used both *ex-ante* data and *ex-post* data (pages 2 and 3 of Exhibit 18).[25] The Commission agreed with Gannett Fleming's use of both *ex-ante* and *ex-post* data in

[23] *See* Application, Exhibit R, Gannett Fleming Appraisal, pp. 44 and 48.
[24] *See* page 1 of Exhibit 18 from the Application, Exhibit R, Gannett Fleming Appraisal.
[25] *See* Application, Exhibit R, Gannett Fleming Appraisal, p. 47.

the selected transaction method in its decision in East Whiteland[26] and rejected Mr. Garrett's proposed adjustments. Gannett Fleming used *ex-ante* data supplemented by *ex-post* data in those instances where limited ex-ante data existed, whereas Mr. Garrett relied exclusively on *ex-anti* data. In this case, the *ex-ante* data for the Asset Items only exists for 50% of the transactions used by Mr. Garrett, which is why Gannett Fleming used both *ex-ante* and *ex-post* data.

Fourth, Mr. Garrett used <u>averages</u> of the values suggested by Capital Items and Demographics Items in his application of the selected transaction method, while Gannett Fleming used the <u>midpoint and medians</u> of the values suggested by Asset Items and Demographics Items.[27] Averages are typically not used in appraisals. Appraisal practitioners use almost exclusively measures of central tendency such as medians and midpoints.

Fifth, Mr. Garrett gave 60% weight to the values suggested by Capital Items and 40% weight to his Demographics Items in his application of the selected transaction method, while Gannett Fleming gave 25% weight to the values suggested by Asset Items and 75% weight to the Demographics Items.[28] Sixth, **Mr. Garrett only calculated the value of the Wastewater System's 3,259 domestic customers** in his application of the selected transaction method which is the basis for his Market Approach conclusion, while Gannett Fleming separately determined the value of the Wastewater System's 3,259

[26] *Application of Aqua Pennsylvania Wastewater, Inc. – East Whiteland Township*, Docket No. A-2021-3026132, Opinion and Order entered July 29, 2022, pp. 78-80.
[27] *See* page 1 of Exhibit 18 from the Application, Exhibit R, Gannett Fleming Appraisal.
[28] *See* pages 6-7, 31-33, 44 and 52 of the Application, Exhibit R, Gannett Fleming Appraisal, which explain our concerns regarding the values suggested by the Asset Items (i.e., original cost new ("OCN") and original cost new less depreciation ("OCNLD")). Also see page 24 of this testimony for a summary of the concerns.

domestic customers and then separately determined the value of the Wastewater System's 3,760 ultimate wholesale customers in reaching our Market Approach conclusion.[29]

It should be noted that Mr. Garrett only mentioned the first two differences listed above in his Direct Testimony. The other four differences listed above were made without mention or justification by Mr. Garrett.

**Q. DO MR. GARRETT'S RECOMMENDED ADJUSTMENTS TO THE MARKET APPROACH MEET A STANDARD OF VALUE OF FMV?**

A. No. For the reasons discussed previously in my rebuttal testimony, Mr. Garrett's recommendations are unreasonable, do not meet a standard of value of FMV and are in direct violation of Section 1329 of the Public Utility Code. Further, Mr. Garrett's Market Approach recommendation does not include the value of the Wastewater System's 3,760 ultimate wholesale customers. Therefore, Mr. Garrett's Market Approach recommendation cannot be relied upon in these proceedings.

## VII. MARKET MULTIPLES METHOD

**Q. ON PAGE 13 OF MR. GARRETT'S DIRECT TESTIMONY, HE STATES, "THE ADJUSTMENTS MR. WALKER MAKES TO HIS RESULTS UNDER THE MARKET MULTIPLES METHOD ARE BASED IN PART ON HIS CONCLUSORY AND UNSUPPORTED ASSUMPTIONS THAT THE BEAVER FALLS SYSTEM IS RISKIER THAN THE PROXY GROUP SIMPLY BECAUSE OF ITS RELATIVELY SMALL SIZE." IS MR. GARRETT'S ASSERTION TRUE?**

[29] *See* Application, Exhibit R, Gannett Fleming Appraisal, pp. 50-51.

A. No. The size of the Wastewater System is only one of several reasons that the Wastewater System is riskier than the proxy group.[30] The downward adjustment (i.e., lower value) of the financial multiples applicable to the Wastewater System under the market multiple method is based on the evidence found, and consistent with the application of the market multiple method:

> Several valuation ratios may be selected for application to the subject company. These ratios may **require adjustment for differences in qualitative and quantitative factors between the guideline public companies and the subject**. . . .
>
> **Adjustment may be necessary to the ratios or values for factors relating to the subject interest** that may not have been considered earlier in the appraisal, such as: . . .
>
> **Size**, depth of management, **diversification of markets**, products and services, and **relative growth and risk**.[31]

On page 15 of Mr. Garrett's direct testimony he concludes, "[f]or all of these reasons, Mr. Walker's claims that the Beaver Falls system is risker than the proxy group and should thus somehow receive an upward adjustment in valuation, is unwarranted and should be rejected." However, what Mr. Garrett fails to understand is by **downward adjusting the financial multiples applicable to the Wastewater System** under the market multiple method due to risk differences, **the Gannett Fleming appraisal lowered the appraised value of the Wastewater System assets**. Accordingly, Mr. Garrett's statement on page 15 is misleading at its core.

[30] *See* Application, Exhibit R, Gannett Fleming Appraisal, pp. 9, 16, and 18-22. The Wastewater System is riskier than the proxy group due to its: low population growth projection; low employment growth projection; rates have not considered a fair rate of return nor taxes; older plant; small size; low capital investment; low revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") growth; and low profit margins.

[31] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, SBVS-1 Guideline Public Company Method, p. 34. (Emphasis added). The guideline public company method is a different name for the market multiples method.

**Q. ON PAGES 15 AND 16 OF MR. GARRETT'S DIRECT TESTIMONY, HE QUESTIONS THE REASONABLENESS OF THE WEIGHTINGS APPLIED TO THE INDICATIONS OF VALUE FOUND IN THE MARKET MULTIPLES METHOD. ARE THE WEIGHTINGS GANNETT FLEMING APPLIED TO THE INDICATIONS OF VALUE FOUND IN THE MARKET MULTIPLES METHOD REASONABLE?**

A. Yes. Gannet Fleming explained our concerns regarding the values suggested by the Capital Items on pages 6-7, 31-33, 44 and 52 of its appraisal.[32] Using different weightings is consistent with the evidence found, and consistent with the application of the market multiple method,

> One or more indications of value may result from the use of the Guideline Public Company Method. The **appraiser must consider the relative importance or weight accorded to each of the indications of value** used in arriving at the opinion or conclusion of value.[33]

## VIII. SELECTED TRANSACTION METHOD

**Q. EARLIER YOU SAID MR. GARRETT USED DIFFERENT TRANSACTIONS IN HIS APPLICATION OF THE SELECTED TRANSACTION METHOD THAN WERE USED BY GANNETT FLEMING. PLEASE EXPLAIN THE DIFFERENCES IN THE TRANSACTIONS USED.**

A. The Wastewater System serves both 3,259 domestic and 3,760 ultimate wholesale customers. The Wastewater System's provides 3,259 domestic customers both collection and treatment service and 3,760 ultimate wholesale customers treatment service.

[32] *See* Application, Exhibit R, Gannett Fleming Appraisal. Also see page 24 of this testimony for a summary of the concerns.

[33] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, SBVS-1 Guideline Public Company Method, p. 34. (Emphasis added). The guideline public company method is a different name for the market multiples method.

Accordingly, the system which provides the Wastewater System's 3,259 domestic customers is referred to as an integrated system, excluding wholesale. Therefore, Gannett Fleming's selection transaction method primarily used the Integrated, Excluding Wholesale Selected Transactions companies to determine the value of the Wastewater System's 3,259 domestic customers.[34] Mr. Garrett used all of the selected transactions, which included the collection/distribution selected transactions, the integrated systems (excluding wholesale) transactions, and the integrated systems with wholesale transactions. Since Mr. Garrett used an average of his selected transactions, his recommendation gave 60% weight to collection/distribution selected transactions, 30% weight to the integrated systems (excluding wholesale) transactions, and 10% weight to the integrated systems with wholesale transactions. Accordingly, Mr. Garrett's selected transactions recommendation, and Market Approach conclusion, is based primarily on transactions of entities that did not provide wastewater treatment (i.e., collection/distribution selected transactions).

**Q. ON PAGE 7 OF MR. GARRETT'S DIRECT TESTIMONY, HE STATES, "WITHOUT A RATIONAL EXPLANATION, MR. WALKER SIMPLY APPLIES A 75% WEIGHTING TO THE HIGHER DEMOGRAPHIC STATISTICS, AND ONLY A 25% WEIGHTING TO THE CAPITAL STATISTICS. MR. WALKER'S APPLICATION OF THESE WEIGHTINGS IS ARBITRARY AND LACKS ANY**

[34] Gannett Fleming first determined the value of the Wastewater System's 3,259 domestic customers using the market multiples method and the selected transaction method. Then Gannett Fleming determined the value of the Wastewater System's 3,760 ultimate wholesale customers using the selected transaction method. At that point, Gannett Fleming added the value of the Wastewater System's 3,259 domestic customers to the value of the Wastewater System's 3,760 ultimate wholesale customers in reaching their Market Approach conclusion for the Wastewater System's 7,019 customers (3,259 + 3,760 = 7,019).

**MEANINGFUL SUPPORT, AS FURTHER DISCUSSED BELOW." IS MR. GARRETT'S ASSERTION TRUE?**

A. No. First, Gannett Fleming documented what the results would be if equal weighting was given to the Asset Items and Demographics Items on page 44 (market multiples method) and on page 48 (selected transaction method) of our appraisal.[35] Second, Gannett Fleming explained our concerns regarding using the Asset Items on pages 6-7, 31-33, 44 and 52 of our appraisal.[36] Our concerns include: plant accounts with 84-year old assets which reflect little to no retirements (pages 6-7); measures of the Wastewater System's OCN, OCNLD, RCN and replacement cost new less depreciation ("RCNLD") on a per customer basis being below norm (pages 31-33); measures of the Wastewater System's OCN, OCNLD on a per customer basis being below norm (page 44); and Asset Items not accounting for the intangible value of ultimate wholesale customers because the Asset Items have the same value regardless of whether or not treatment service is provided to the 3,760 ultimate wholesale customers (page 52). To remedy our concerns regarding the Asset Items we simply gave the Asset Items less weight (i.e., 25%) in reaching our conclusion. Our weighting given Asset Items and Demographic Items reflects our concerns regarding the Asset Items, and are consistent with the application of the selected transaction method:

> The computation of the valuation ratios, which may be derived by relating prices in guideline transactions **to the appropriate underlying** financial, **operating, or physical data** of the respective companies (or interests) involved in the transactions . . .
>
> One or more indications of value may result from the use of the Guideline Transactions Method. The **appraiser must consider the relative**

[35] *See* Application, Exhibit R, Gannett Fleming Appraisal.
[36] *See* Application, Exhibit R, Gannett Fleming Appraisal.

**importance or weight accorded to each of the indications of value used in arriving at the opinion or conclusion of value**.[37]

**Q. ON PAGE 8 OF MR. GARRETT'S DIRECT TESTIMONY, HE STATES, "IF ALL OF THESE TRANSACTIONS ARE CONSIDERED, AND AN EQUAL WEIGHTING IS APPLIED TO EACH TRANSACTION WITHOUT ANY UPWARDLY BIASED DECISIONS OR ASSUMPTIONS, THE INDICATED VALUATION USING MR. WALKER'S OWN TRANSACTIONS AND METRICS IS SIGNIFICANTLY LESS THAN HIS ULTIMATE PROPOSED VALUATION UNDER THE MARKET APPROACH." IS MR. GARRETT'S ASSERTION TRUE?**

A. No. If we followed Mr. Garrett's recommendation of using all the transactions in reaching our conclusion, our conclusion would have been based primarily on transactions of the entities that did not provide wastewater treatment (i.e., collection/distribution selected transactions) since the collection/distribution selected transactions represent 60% of all transactions used by Mr. Garrett. However, since our initial application of the selection transaction method was intended to determine the value of the Wastewater System's 3,259 domestic customers which receive both collection and treatment service, we primarily used the Integrated, Excluding Wholesale Selected Transactions companies to determine the value of the Wastewater System's 3,259 domestic customers. Our selection of the Integrated, Excluding Wholesale Selected Transactions companies to determine the value of the Wastewater System's 3,259 domestic customers is based on its purpose, and consistent with the application of the selected transaction method:

[37] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, SBVS-2 Guideline Transactions Method, p. 36. (Emphasis added). The guideline transaction method is a different name for the selected transactions method.

> When using the Guideline Transactions Method, a thorough, **objective search for transactions of interests in companies similar to the company being valued is required** to establish the credibility of the valuation analysis.[38]

**Q. ON PAGE 11 OF MR. GARRETT'S DIRECT TESTIMONY, HE SUGGESTS, "INSTEAD OF USING THE NEGOTIATED PURCHASE PRICE FOR THE RATIO CALCULATION OF EACH METRIC, THE COMMISSION-APPROVED RATE BASE COULD HAVE BEEN USED INSTEAD." IS MR. GARRETT'S SUGGESTION REASONABLE?**

A. No. Mr. Garrett's suggestion of substituting the purchase price paid with the fair market value rate base approved by the Commission was recommended by OCA in both Cheltenham[39] and in East Whiteland[40] and it was rejected by the Commission. As recognized by the Commission in Cheltenham, the correct purchase price for Limerick of $75 million should be used in the selected transaction method in lieu of the Commission-determined ratemaking rate base value, because $75 million was the amount bid and paid by the buyer. A Commission-determined ratemaking rate base value for an entity does not change the price bid and paid by a buyer.

The purchase prices used in the selected transaction method are based on the purchase price determined by buyer and seller, not the Commission-determined ratemaking rate base value. The valuation approach is the Market Approach based on market values, not the "PUC ratemaking rate base value approach." There is no authoritative source, nor

[38] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, SBVS-2 Guideline Transactions Method, p. 35. (Emphasis added). The guideline transaction method is a different name for the selected transactions method.
[39] *Application of Aqua Pennsylvania Wastewater, Inc. – Cheltenham Township*, Docket No. A-2019-3008491, Opinion and Order entered November 5, 2019, pp. 60-61.
[40] *Application of Aqua Pennsylvania Wastewater, Inc. – East Whiteland Township*, Docket No. A-2021-3026132, Opinion and Order entered July 29, 2022, pp. 81-83.

Commission precedent, which supports use of Commission-determined ratemaking rate base value in the Market Approach.

**Q. ON PAGE 11 OF MR. GARRETT'S DIRECT TESTIMONY, HE CLAIMS, "ARGUABLY, CAPITAL STATISTICS ARE MORE DIRECTLY LINKED TO INDICATED VALUATIONS THAN STATISTICS SUCH AS POPULATION AND CUSTOMERS. IN FACT, VALUATION METHODS SUCH AS THE DISCOUNTED CASH FLOW ("DCF") METHOD (DISCUSSED LATER IN MY TESTIMONY) ONLY CONSIDER FINANCIAL METRICS, AND DO NOT ACCOUNT FOR ANY DEMOGRAPHIC METRICS." IS MR. GARRETT'S CLAIM TRUE?**

A. No. Mr. Garrett's direct testimony only discusses the DCF method in the context of the cost of capital. The DCF method, in the context of the cost of capital, is also used primarily in rate proceedings. The variables used in the DCF method, in the context of the cost of capital, are growth of earnings or dividends per share, dividends per share and stock price. Accordingly, there no "capital statistics" reflected in the DCF method, in the context of the cost of capital.

Similarly, if Mr. Garrett's direct testimony is referring to the Income Approach as the "DCF," then his argument is just as faulty since Mr. Garrett's Income Approach (OCA Exhibit DJG-5) only involves revenues, EBIT, income taxes, depreciation expense, and capital expenditures. Accordingly, there are no "capital statistics" reflected in the DCF method, in the context of the Income Approach. Accordingly, Mr. Garrett's direct testimony does not support the notion that "capital statistics are more directly linked to indicated valuations than statistics such as population and customers."

## IX. RECOMMENDED WEIGHTING

**Q. ON PAGE 39 OF MR. GARRETT'S DIRECT TESTIMONY, HE STATES, "THE UVES' DECISION TO USE A SIGNIFICANTLY LOWER WEIGHTING FOR THE LOWEST OF THEIR THREE INDICATED VALUATIONS APPEARS TO BE A DECISION THAT IS INFLUENCED BY BIAS, RATHER THAN ONE THAT IS DESIGNED TO PRODUCE THE FAIREST OVERALL VALUATION." IS MR. GARRETT'S ASSERTION TRUE?**

A. No. First, Mr. Garrett and I were involved in the Borough of Shenandoah (Docket No. A-2022-3034143) Section 1329 proceeding. As such, Mr. Garrett should be aware that Gannett Fleming applied identical weightings in that proceeding to the three approaches to valuation in arriving at our estimate of the FMV conclusion as we recommend for the Wastewater System. However, in the Borough of Shenandoah Section 1329 proceeding, the Cost Approach produced the highest indication of value yet was given the least weighting (25%).

Second, Gannett Fleming explained our concerns regarding using the Cost Approach throughout our appraisal[41] and we summarize them on page 24 of this testimony. To remedy our concerns regarding the Cost Approach we simply gave the Cost Approach less weight (i.e., 25%) in reaching our conclusion. Our weighing given the Cost Approach reflects our concerns regarding the Cost Approach, and are consistent with the application of conclusion of value;

> The selection of and **reliance on appropriate methods and procedures depends on the judgment of the appraiser and not on any prescribed formula**. . .

[41] *See* Application, Exhibit R, Gannett Fleming Appraisal. Also see page 24 of this testimony for a summary of the concerns.

> The appraiser must **use informed judgment when determining the relative weight to be accorded to indications of value reached** . . .[42]

**Q. WOULD YOU RECOMMEND USING THE WEIGHTINGS MR. GARRETT APPLIED TO HIS RESULT OF THE VALUATION APPROACHES SHOWN?**

A. No. Mr. Garrett did not conduct an appraisal. Mr. Garrett recommended substantial changes to each valuation approach. Mr. Garrett does not justify the weightings he applied to the valuation approaches shown. An appraisal is an opinion of FMV and is not a "mechanical" process. When information changes, opinions, weightings, methodologies, and techniques change as well.

By attempting to analyze and adjust Gannett Fleming's appraisal, Mr. Garrett is doing no more than selectively choosing the parts of the appraisal that are to his liking (i.e., lowest value available) while jettisoning those parts that are not. Depending on the quantity and quality of the results, weights applied under FMV differ, but Mr. Garrett did not do this.

## X. CONCLUSION

**Q. IS THERE ANYTHING PRESENTED IN MR. GARRETT'S DIRECT TESTIMONY THAT WOULD RESULT IN YOU ALTERING YOUR FMV APPRAISAL OF THE WASTEWATER SYSTEM'S ASSETS?**

A. No, there was nothing presented in Mr. Garrett's direct testimony which would result in our changing our FMV appraisal of the Wastewater System.

[42] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, BVS-VI Reaching a Conclusion of Value, p. 14. (Emphasis added).

**Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues arise during this proceeding.

# Aqua Exhibit HW-1R

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**
**DOCKET NO. A-2022-3033138**
**THE OFFICE OF CONSUMER ADVOCATE'S RESPONSES TO**
**THE INTERROGATORIES OF AQUA PENNSYLVANIA WASTEWATER**
**SET I**

**1.** Please provide the date of Mr. Garrett's inspection or review of the Wastewater System Assets of the City of Beaver Falls.

**Response:**

Mr. Garrett has not physically inspected the Wastewater System Assets of the City of Beaver Falls.

Sponsoring Witness: David J. Garrett

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**
**DOCKET NO. A-2022-3033138**
**THE OFFICE OF CONSUMER ADVOCATE'S RESPONSES TO**
**THE INTERROGATORIES OF AQUA PENNSYLVANIA WASTEWATER**
**SET I**

**2.** Please provide the following, if not already provided:

(a) A list of valuations of utility property performed by Mr. Garrett;
(b) A list of fair market value appraisals of utility property performed by Mr. Garrett;
(c) A list of valuations of wastewater utility property performed by Mr. Garrett; and
(d) A list of fair market value appraisals of wastewater utility property performed by Mr. Garrett.

**Response:**

Mr. Garrett has not performed any valuations or appraisals in this regard. Mr. Garrett has participated as a witness on behalf of the OCA in several Section 1329 proceedings, in which he has reviewed valuations and appraisals of utility assets.

Sponsoring Witness: David J. Garrett

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**
**DOCKET NO. A-2022-3033138**
**THE OFFICE OF CONSUMER ADVOCATE'S RESPONSES TO**
**THE INTERROGATORIES OF AQUA PENNSYLVANIA WASTEWATER**
**SET I**

**3.** Has Mr. Garrett ever inspected or reviewed the assets of a wastewater system? If so, please identify the name and year of each wastewater system inspected or reviewed.

**Response:**

Mr. Garrett has physically reviewed wastewater system assets in the City of Oklahoma City, but not in conjunction with a regulatory proceeding. Mr. Garrett has reviewed numerous data regarding the valuation and retirement of wastewater system assets.

Sponsoring Witness: David J. Garrett

**BEFORE THE**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 8-R

# REBUTTAL TESTIMONY

**ON BEHALF OF THE CITY OF BEAVER FALLS**

**OF**

**SANDRA WILKINS**

**CHIEF FINANCIAL OFFICER OF BEAVER FALLS**

**CITY OF BEAVER FALLS**

**February 24, 2025**

CITY OF BEAVER FALLS, BEAVER COUNTY
REBUTTAL TESTIMONY OF SANDRA WILKINS, CFO

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. ABILITY OF THE CITY TO AFFORD TO RUN THE SYSTEM ..... 2

III. CONCLUSION ..... 4

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Sandra Wilkins. My business address is 715 15th Street, Beaver Falls, PA 15010.

**Q. In what capacity are you affiliated with the City of Beaver Falls?**

A. I am the Chief Financial Officer ("CFO") of the City of Beaver Falls ("City" or "Beaver Falls"). I also serve as the certified tax collector in my role as CFO.

**Q. Have you submitted any other testimony in this proceeding?**

A. Yes. I submitted Direct Testimony in this proceeding with Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") updated Application on December 23, 2024.

.

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the City, and in cooperation and support of Aqua Pennsylvania Wastewater, Inc.'s ("Aqua") application to purchase the City's wastewater collection, conveyance, and treatment system (the "System").

**Q. Please describe the purpose of your rebuttal testimony.**

A. The purpose of my testimony is to respond to the testimony provided by the Office of Consumer Advocate ("OCA") Statement No. 1, Direct Testimony of Nicholas A. DeMarco with regard to the ability of the City to afford to run the System in an adequate manner.

## II. ABILITY OF THE CITY TO AFFORD TO RUN THE SYSTEM

**Q. Mr. DeMarco argues that the City can afford to run the System citing that it has completed projects without funding from grants and loans and implying it can continue to do so (OCA St. No. 1 at 8). Is this accurate?**

A. No. There has not been any significant work done on the System in years. The City does not have money to do any capital projects at this time nor does it anticipate having any money to do any projects in the future without a dramatic and unforeseen change in the finances of the City. In the past, the City financed capital projects for the System through the use of bond proceeds. Those bonds are still outstanding and the City is barely able to make the debt payments on those bonds. The City is operating on a month-to-month basis financially and owes money to many vendors. If this sale is not approved and the City does not receive the sale proceeds, even if the City raises rates significantly, it will be unable to pay all of its bills, let alone take on new capital projects for the System. As I already testified, the City had to use the $2,000,000 deposit monies from Aqua as provided under the APA to balance our budget. Without those monies we would not have been able to even make payroll.

**Q. Mr. DeMarco implies that the City can adequately operate the System if it raises rates and uses Pennsylvania Infrastructure Investment Authority ("PENNVEST") grants and loans. Is that accurate?**

A. No. The City is financially distressed and has other dire problems it is contending with in addition to the operation of the System. The City's ability to operate the System should not be viewed in a vacuum. City management is so consumed with the basics that we do

not even know how to begin to obtain PENNVEST financing. The City would have to hire a financial advisor to assist with the applications and the City has no money to do that. Furthermore, obtaining a PENNVEST grant would only be a band-aid on a much bigger problem, which is that the City does not have the financial resources to address its many problems and continue to properly operate its wastewater system for the customers in the City and surrounding communities that rely upon it. A PENNVEST loan would be another band-aid, but those debt payments would have to be passed onto the customers through rate increases much higher than the 3% we have budgeted for. The annual 3% increases were never intended to cover new debt or capital improvements. Mr. DeMarco spends much of his testimony objecting to the rate increases our customers would have to pay if Aqua owns the System, but suggests incurring debt which would cause rate increases that could be avoided if Aqua ran the System. As I stated in my direct testimony, the overall financial analysis of the impact on the City and thus the City's customers as described in Exhibit A to my direct testimony shows that there is a net public financial benefit if the System is sold to Aqua.

**Q. Do you have any other feedback to Mr. DeMarco's testimony?**

A. Mr. DeMarco's testimony fails to address the City's long-standing financial difficulties, which are a critical reason behind the City agreeing to sell the System. He also overlooks the significant managerial challenges that accompany these financial pressures. These challenges can be ameliorated if the City receives the proceeds from the sale and if Aqua takes over the operations of the System.

Additionally, Mr. DeMarco does not acknowledge the severe financial consequences the City will face if the sale is not approved. The City will be required to repay the $2,000,000 deposit to Aqua and will be burdened with hundreds of thousands of dollars in professional fees and expenses. Even if the City is able to obtain PENNVEST financing and drastically increase rates to cover all of those costs and to maintain the System at its current (unacceptable) level, the City still won't have the necessary funds to provide essential services to our residents or meet payroll. Furthermore, raising rates doesn't solve the problem of not being able to find expert operators to efficiently and safely run the System, nor will it provide those of us working hard to manage the City with the time or expertise required to run the System properly. Our citizens deserve a well-managed, safe wastewater system, which increased rates and PENNVEST loans and grants alone cannot deliver.

## III. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes, it does. However, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 9-R

# REBUTTAL TESTIMONY OF RITA F. BLACK

**With Regard To:**
**Low-Income Programs**

**February 24, 2025**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1
II. RESPONSE TO OCA WITNESS DEMARCO ..... 2
III. CONCLUSION ..... 7

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Rita F. Black, and my business address is located at 375 North Shore Drive, Pittsburgh, Pennsylvania 15212.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Essential Utilities, Inc. ("Essential") as the Director of Community Assistance Programs. In this role, I lead assistance programs for Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. (collectively "Aqua" or the "Company"), and Peoples Natural Gas Company LLC ("Peoples"), as well as the regulated utilities of Essential operating in other states.

**Q. Have you previously provided testimony in this proceeding?**

A. No.

**Q. What is the purpose of your rebuttal testimony?**

A. I would like to respond to the direct Ttestimony of Mr. Nicholas A. DeMarco, on behalf of the Office of Consumer Advocate ("OCA"). Specifically, I will respond to OCA witness DeMarco's testimony regarding Aqua's low-income assistance programs and the benefits that would be afford to the customers of the City of Beaver Falls ("City" or "Beaver Falls") if the Pennsylvania Public Utility Commission ("Commission") approves Aqua's contemplated acquisition of the wastewater system of the City (the "System").

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. Yes. Attached to my Rebuttal Testimony is Aqua Exhibit RFB-1R.

## II. RESPONSE TO OCA WITNESS DEMARCO

**Q. Does OCA witness DeMarco testify regarding the benefits of Aqua's low-income programs to Beaver Falls customers?**

A. Yes, he does. In his direct testimony, Mr. DeMarco responded to the supplemental direct testimony of City Manager, Charles R. Jones, Jr. regarding the benefit of Aqua's low-income program to Beaver Falls customers. Mr. DeMarco also provided a table of calculated savings for various income levels.[1]

**Q. Do you have a response to OCA witness DeMarco's testimony on this topic?**

A. Yes. The information used by Mr. DeMarco regarding Aqua's current discount structure for the income-based Customer Assistance Program ("CAP") has recently changed. As a part of its 2024 Base Rate Case,[2] Aqua received approval to enhance its CAP discounts to further delineate its benefit tiers in order to provide greater benefits to those with the lowest income as delineated by tiers of income by Federal Poverty Level ("FPL").[3] And, the new discounts are applicable to the full usage bill, rather than the first 2,000 gallons. The discounts are as follows:

[1] DeMarco, Page 12, beginning on line 6.
[2] *See* Docket Nos. R-2024-3047822 and R-2024—3047823.
[3] *See Pa. PUC et. al. v. Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc.*, Docket Nos. R-2024-3047822 and R-2024-3047823 (Order entered Feb. 7, 2025) (approving Joint Petition for Settlement and, in particular, paragraphs 61-68 of the same).

| | **Wastewater** | **Wastewater** |
|---|---|---|
| | **Fixed Charge** | **Volumetric** |
| **Tier 1 (0 - 50% FPL)** | 85% | 85% |
| **Tier 2 (51 - 100% FPL)** | 75% | 75% |
| **Tier 3 (101 - 150% FPL)** | 65% | 50% |
| **Tier 4 (151 - 200% FPL)** | 50% | 25% |

With these enhanced discounts in place, Mr. DeMarco's Table Two should be revised as such:

| **Utility** | **Without Discount** | **0-50% FPL** | **51-100% FPL** | **101-150% FPL** | **151-200% FPL** |
|---|---|---|---|---|---|
| Aqua | $103.37 | $15.51 | $25.84 | $44.27 | $65.18 |
| Beaver Falls Current | $41.00 | $41.00 | $41.00 | $41.00 | $41.00 |
| Beaver Falls Projected 2025 | $55.00 | $55.00 | $55.00 | $55.00 | $55.00 |
| Beaver Falls Projected 2026-32 | $60.00 | $60.00 | $60.00 | $60.00 | $60.00 |
| Beaver Falls Projected 2033-34 | $63.00 | $63.00 | $63.00 | $63.00 | $63.00 |

As reflected in the table, customers below 100% FPL will be paying much less under Aqua's CAP than they pay under the current rates of Beaver Falls. Further, those customers with incomes between 101 and 150% will pay less under Aqua than Beaver Falls' future projected rates.

**Q. Are there other benefits to low-income households beyond monthly discounts, as those discounts have been updated as a part of the 2024 Base Rate Case?**

A. Yes. I would like to note that Aqua's bill discounts for low-income customers are not the only support provided to this population. In addition to bill discounts, Aqua also offers its Aqua Aid hardship fund to customers with incomes at or below 200% of the FPL. The hardship fund provides an important safety net to income-eligible households that find themselves in arrears due to difficult financial circumstances or perhaps a higher wastewater bill due to a water leak in their home. Income limits for participation in Aqua Aid are also 200% of the FPL. To my knowledge, the City does not have such a hardship fund for its customers.

Additionally, if an income-eligible Beaver Falls customer does not enroll in Aqua's CAP soon after becoming an Aqua customer, but later finds they have fallen behind on bills and need support, they can enroll in CAP at any time. When a customer enrolls, any balance owed at the time of enrollment is frozen. Customers earn a $40 credit towards that frozen balance each time they pay their monthly bill, allowing them to eliminate the debt through arrearage forgiveness over time. This further improves affordability for low-income households and provides a benefit to those households in Beaver Falls that they do not have today.

Aqua also can provide conservation kits to low-income households that are interested in reducing their water usage, which ultimately benefits their wastewater bills as well. These kits include items such as low flow shower heads, faucet aerators and dye tabs which can be helpful in identifying common minor household leaks.

**Q. Does OCA witness DeMarco advance any recommendations related to Aqua's low-income programs as a condition for approval of Aqua's acquisition of the System?**

A. Yes.

**Q. Please describe his recommendations regarding outreach to customers about Aqua's low-income programs.**

A. Mr. DeMarco correctly notes that unless Beaver Falls customers are aware about and enroll in the Aqua's low-income programs, they will not benefit.[4] He recommends that within 30 days after closing Aqua should be required to provide a letter to acquired customers about Aqua's low-income programs which would include eligibility requirements, a description of benefits and information on how to apply. He further recommends including this information within bills to Beaver Falls customers within 90 days of closing.

**Q. Do you agree with Mr. DeMarco's recommendations?**

A. Yes, I agree with these recommendations. Direct outreach to acquired system customer bases is an important component of any outreach plan as increasing awareness is the first step to encouraging participation.

[4] OCA St. No. 1, at 31.

**Q. Please describe OCA witness DeMarco's recommendation on tracking low-income eligible customers.**

A. Mr. DeMarco recommends that Aqua should report the number of eligible customers from the Beaver Falls service area who are enrolled in Aqua's CAP, and that the report should be provided to parties every six months until the conclusion of Aqua's next base rate case.

**Q. Do you agree with Mr. DeMarco's recommendation?**

A. This is a reasonable reporting recommendation. I would also note that Aqua has an advisory group, the Aqua Assistance Collaborative ("AAC"), of which OCA, Pennsylvania Utility Law Project ("PULP") and the Commission's Bureaus of Consumer Service and Communications are part. These participation reports should be included in the agenda for the next quarterly meeting of the AAC following the 90 day bill insert after closing is sent to discuss any trends or outreach opportunities for Beaver Falls' customers in particular that could be beneficial to pursue. This effort would not only focus on eligible Beaver Falls household enrollment, which is an important goal, but would also provide an opportunity as a case-study in outreach methods for Aqua's customers, to determine which approaches may be most beneficial.

**Q. Please describe OCA witness DeMarco's recommendation concerning contributions to Aqua's hardship fund.**

A. Mr. DeMarco recommends that if the Commission approves the transaction, it should be conditioned on Aqua making a contribution of $100,000 per year for the next five years after closing. He states that these contributions should not be recovered in rates and all

unspent funds at the end of the program year shall be rolled over and added to the budget for the hardship grant program in the following year(s).

**Q. Do you agree with Mr. DeMarco's recommendation.**

A. Ensuring adequate funding of the hardship fund is important and I understand the recommendation to increase the annual contribution in consideration of the Beaver Falls customers joining Aqua. While applications to Aqua Aid have increased with the Company's recent relaunch of the program under its new name, grant levels are within the margins of current funding levels. I believe a more appropriate increase to funding would be $30,000 per year for three years, starting where year 1 contribution amount will be within 60 days following closing. I do agree that any unused funds from this amount at the end of the program year should be rolled over an added to the budget of the hardship grant program in the following year(s). I also think monitoring funding levels is important to the sustainability of Aqua Aid and would support an annual review and discussion opportunity through the AAC, which would allow parties to provide input into future funding levels to ensure they are keeping pace with need.

## III. CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

Yes, it does; however, I reserve the right to supplement my rebuttal testimony as additional issues and facts arise during the course of this proceeding.

# Aqua Exhibit RFB-1R

| | Usage rate 4,000 gallons a month | Usage rate 4,000 gallons a month | | | |
|---|---|---|---|---|---|
| Utility | Rate no discount | 0-50% FPL | 51-100% FPL | 101-150% FPL | 151-200% FPL |
| Aqua wastewater rates | $ 103.37 | $ 15.51 | $ 25.84 | $ 44.27 | $ 65.18 |
| Bever Falls Current | $ 41.00 | $ 41.00 | $ 41.00 | $ 41.00 | $ 41.00 |
| Beaver Falls Projected 2025 | $ 55.00 | $ 55.00 | $ 55.00 | $ 55.00 | $ 55.00 |
| Beaver Falls Projected 2026-2032 | $ 60.00 | $ 60.00 | $ 60.00 | $ 60.00 | $ 60.00 |
| Beaver Falls Projected 2033-34 | $ 63.00 | $ 63.00 | $ 63.00 | $ 63.00 | $ 63.00 |

| | | |
|---|---|---|
| Aqua Customer charge | $ | 49.41 |
| consumption charge per 1,000 gallons | | $13.49 |
| Gallons a month - 4000 | | 4 |
| thousands of gallons a month discounted | | 4 |
| thousands gallons a month not discounted | | 0 |

| Aqua low-income discount | 0-50% FPL | 51-100% FPL | 101-150% FPL | 151-200% |
|---|---|---|---|---|
| customer charge | 85% | 75% | 65% | 50% |
| All consumption | 85% | 75% | 50% | 25% |
| customer charge discount | $ 42.00 | $ 37.06 | $ 32.12 | $ 24.71 |
| customer charge after discount | $ 7.41 | $ 12.35 | $ 17.29 | $ 24.71 |
| Usage Discount | $ 45.87 | $ 40.47 | $ 26.98 | $ 13.49 |
| Usage Charge After Discount | $8.09 | $13.49 | $26.98 | $40.47 |
| | | | | |
| Total Bill | $ 15.51 | $ 25.84 | $ 44.27 | $ 65.18 |

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 1-RJ

# REJOINDER TESTIMONY OF WILLIAM C. PACKER

**With Regard To:**
**Affirmative Public Benefits**
**Cost of Service Study**

**March 7, 2025**

**TABLE OF CONTENTS**


I. INTRODUCTION ..... 1
II. RESPONSE TO SURREBUTTAL TESTIMONY OF OCA WITNESS DEMARCO ..... 2
III. RESPONSE TO SURREBUTTAL TESTIMONY OF I&E WITNESS CLINE ..... 4
IV. RESPONSE TO SURREBUTTAL TESTIMONY OF OSBA WITNESS FORBES ..... 4
V. CONCLUSION ..... 8

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

**Q. Have you previously submitted testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Aqua Pennsylvania Wastewater, Inc.'s ("Aqua or the "Company") Application with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 17, 2023. I also submitted supplemental direct testimony with Aqua's Amended Application filed with the Commission on March 28, 2024. In addition, I submitted rebuttal testimony on behalf of Aqua on February 24, 2025.

**Q. What is the purpose of your rejoinder testimony?**

A. My rejoinder testimony addresses portions of the surrebuttal testimonies of the Office of Consumer Advocate ("OCA") witness Nicholas A. DeMarco, the Commission's Bureau of Investigation and Enforcement ("I&E") witness Ethan H. Cline, and Office of Small Business Advocate ("OSBA") witness Rebecca K. Forbes, with respect to the proposed acquisition of the wastewater assets (the "System") of the City of Beaver Falls ("City" or "Beaver Falls") by Aqua. Much of the other parties' surrebuttal testimony repeats or restates arguments raised in their direct testimony, and the Company's rebuttal testimony fully responded to those arguments. My silence on a topic should not be understood to mean I am agreeing with the surrebuttal testimony of other witnesses.

**Q. Are you sponsoring any exhibits with your rejoinder testimony?**

A. No.

## II. RESPONSE TO SURREBUTTAL TESTIMONY OF OCA WITNESS DEMARCO

**Q. Mr. DeMarco continues to emphasize the resulting rate impacts to Beaver Falls' customers and to Aqua's existing customers if the acquisition is approved.[1] Please comment.**

A. Rate impacts are one component of the transaction. The potential impacts are known to all parties in this Application, and the customers of the City of Beaver Falls ("City" or "Beaver Falls") have been noticed accordingly. While emphasizing the potential rate impacts, Mr. DeMarco's testimony does not address all of the facts and circumstances presented as evidence in this proceeding. Notably, Mr. DeMarco's assessment of the evidence does not recognize the significant financial offsets that will be afforded to the City customers post sale, whether directly or indirectly. The bottom line is that their community is in a better fiscal position with a sale than without. That better fiscal position will enable the City's leadership to use those proceeds to the benefit of all tax-paying residents of the City. Furthermore, the Commission has all of the necessary authority to deal with any rate impacts being shifted to existing customers of the Company, or keep those impacts at the System alone. Clearly, as the Commission has done with prior systems that the Company has brought before it during base rate proceedings, the Commission will be able to look at the separate cost of service study ("COSS") that will be prepared for the System and make

[1] OCA St. No. 1SR, at pp. 3, 9-10.

informed decisions about the costs and rates to be charged, weighed against any benefits. These financial benefits, in addition to the operational and managerial betterments provided by Aqua, support this acquisition being found to provide substantial affirmative benefits. Moreover, the service provided by Aqua differs in a substantial and beneficial way from the service currently being provided by the City. In addition, as explained by other witnesses for the Company and the City, the System is in need of repairs and improvements, and the City's difficult financial situation will not allow it to address those needs. All told, Mr. DeMarco's limited rate impact analysis falls short of assessing whether affirmative public benefits will be achieved, and should be rejected.

**Q. Mr. DeMarco challenges your characterization of OCA's position regarding Section 1329 acquisitions and asserts that his direct testimony only addressed the specific transaction presented in this case.[2] Would you like to respond?**

A. The OCA's primary presentation of evidence on the rate impacts of the acquisition is completely one sided. The differences in the cost of service between an investor-owned utility versus a municipal enterprise are well known. Those cost differences exist whether a transaction is consummated under Section 1329 or a standard Section 1102 proceeding. While it is easy to suggest that the Company and City should or could negotiate a different deal, as Mr. DeMarco does in his surrebuttal testimony, the City chose to pursue selling the System at a competitive fair market value ("FMV") according to the law. Such is their fiduciary responsibility to their constituents. The reality is that this transaction has no

[2] OCA St. No. 1SR, at pp. 4-5.

tenable alternative to a Section 1329 transaction, for both the buyer and seller. Both have complied with the regulations and supported the purchase price, rate base, and substantial affirmative public benefits with evidence for the Commission to review and approve the transaction.

## III. RESPONSE TO SURREBUTTAL TESTIMONY OF I&E WITNESS CLINE

**Q. I&E witness Cline continues to assert that the separate COSS to be submitted in the first Aqua base rate case following an acquisition of the Beaver Falls System should show the Contributing Municipalities as a separate rate class.[3] Please respond.**

A. The Company agrees that the COSS that Aqua will present in the first base rate case that includes the Beaver Falls System would show the Contributing Municipalities as a separate rate class. My response to Mr. Cline in my rebuttal testimony was to indicate that while Aqua will present the Contributing Municipalities as a separate rate class in the COSS, the Company may propose something different than what the COSS indicates.

## IV. RESPONSE TO SURREBUTTAL TESTIMONY OF OSBA WITNESS FORBES

**Q. OSBA witness Forbes continues to argue that the Commission should either reject the proposed acquisition, or cap the ratemaking rate base, based upon the application of the Reasonableness Review Ratio ("RRR").[4] Please respond.**

A. Ms. Forbes' recommendation does not consider the financial, engineering, and operational benefits that come from this transaction which was discussed in Aqua's direct,

[3] I&E St. No. 2-SR, at pp. 3-4.
[4] OSBA St. No. 1-SR, at p. 2.

supplemental direct, and rebuttal testimony. I am also advised that Ms. Forbes' recommendation also violates the Public Utility Code. Ms. Forbes did not present an appraisal in this transaction, nor did she present any recommended adjustments to the appraisals. Ms. Forbes' recommendation is contrary to Section 1329 in that the ratemaking rate base per Section 1329(c)(2) "shall be the lesser of the purchase price negotiated by the acquiring public utility or entity and selling utility or the fair market value of the selling utility." The FMV of the System as set forth in Section 1329(g) is the "average of the two utility valuation expert appraisals conducted under subsection (a)(2)." Therefore, Ms. Forbes' recommended ratemaking rate base does not comply with the requirements of Section 1329.

**Q. Do you agree with Ms. Forbes' characterization of the purchase price in this transaction as an "excessive premium" because it exceeds her RRR calculation?[5]**

A. No. The Company disagrees with Ms. Forbes characterization of an "excessive premium." The purpose of FMV was to allow municipal entities to receive a fair value for their assets. This will undoubtedly create differences between the depreciated original cost ("DOC") amount and the FMV. The RRR guideline is a guide for the Commission in assessing transactions, however, as I have described previously in my rebuttal testimony, there are several factors that the Commission should consider in determining whether to apply the RRR to this transaction as discussed in its Final Supplemental Implementation Order.

[5] OSBA St. No. 1-SR, at pp. 2-3.

**Q. Please respond to Ms. Forbes' assertion that rejecting the proposed transaction "may ultimately leave these customers in a better position than if they were burdened with such a premium."[6]**

A. Ms. Forbes' unsupported assertion fails to even consider the substantial operational and financial concerns facing Beaver Falls and its residents. Ms. Forbes also fails to acknowledge or consider the financial public benefits that will accrue to the residents of Beaver Falls through this transaction described in the direct testimony of Sandra Wilkins through interest income from the proceeds, repayment of existing debt, and property tax reduction, among others. As described in the rebuttal testimonies of Sandra Wilkins and Charles Jones, Jr., the City is in serious financial distress and is struggling to ensure basic services are available. Ms. Forbes makes no mention of the impact that if this transaction is rejected, the detriments that will befall the City. Finally, in addition to the financial benefits that will come from this transaction, Ms. Forbes makes no mention of the operational deficiencies that are present in the System as described by Aqua witness Zach Martin in his direct, supplemental direct, and rebuttal testimonies.

**Q. Ms. Forbes asserts that Aqua has presented two different DOC calculations, which she views as "problematic."[7] Please respond.**

A. First, it is incorrect to claim that Aqua has presented two DOC calculations. Consistent with the provisions of Section 1329, Aqua and the City separately presented FMV calculations that each relied, in part, on separately determined cost calculations. Second,

[6] OSBA St. No. 1-SR, at p. 4.
[7] OSBA St. No. 1-SR, at pp. 4-5.

there is nothing surprising about the fact that these two independent UVE calculations derived different cost values. It is important to recognize that municipally-owned systems are not subject to the Uniform Systems of Account that govern public utility accounting of assets and accrued depreciation. Often, municipalities do not retain original cost records, nor do they engage the services of professionals to determine service lives and annual depreciation accruals. As a result, it is quite common that original cost and depreciation estimates will need to be recreated from available documentation, estimated plant ages and estimates of depreciation that should have been accrued. There are multiple accepted methods to derive those estimates.

**Q. Ms. Forbes recomputes a ratemaking rate base amount of approximately $10.8 million by applying the RRR multiple to the average of the two UVEs DOC results.[8] Do you agree that this should be the ratemaking rate base amount?**

A. I do not. For reasons I explained in my rebuttal testimony, this is not how the FMV of a system is determined as provided in Section 1329. I am advised by counsel that Section 1329(a)(3) specifically directs that: "Each utility valuation expert shall determine fair market value in compliance with the Uniform Standards of Professional Appraisal Practice employing the cost, market and income approaches." Ms. Forbes offers no market or income calculations to determine FMV. Ms. Forbes offers no adjustments to the appraisals or any reasoning specific adjustments as described in my rejoinder testimony, above. Moreover, even though Ms. Forbes recognizes the correct calculation in applying the RRR

[8] OSBA St. No. 1-SR, at p. 5.

multiple **as described by the PUC in its Final Supplemental Implementation Order**, Ms. Forbes continues to recommend that the ratemaking rate base should be limited to $8,454,113.[9] Not only does Ms. Forbes' recommendation not comply with Section 1329, but her recommendation also continues to misapply how the PUC has said the RRR multiple should be calculated.

## V. CONCLUSION

**Q. Does this conclude your rejoinder testimony?**

A. Yes, it does.

[9] OSBA St. No. 1-SR, at p. 2.

**PUBLIC VERSION - HIGHLY CONFIDENTIAL INFORMATION REDACTED**

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

**AQUA STATEMENT NO. 3-RJ**

# REJOINDER TESTIMONY OF ZACH MARTIN

**With Regard To:**
**Wastewater System Conditions and Operations**

**March 7, 2025**

## TABLE OF CONTENTS

I. INTRODUCTION ..... 1
II. RESPONSE TO SURREBUTTAL TESTIMONY OF OCA WITNESS DEMARCO ..... 2
III. CONCLUSION ..... 8

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF ZACH MARTIN

## I. INTRODUCTION

**Q. Please state your name and business address.**

A. My name is Zach Martin. My business address is 665 South Dock Street, Sharon, PA 16146.

**Q. Have you previously submitted testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Aqua Pennsylvania Wastewater, Inc.'s ("Aqua" or the "Company") Application with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 17, 2023 (Exhibit W, Aqua Statement No. 3). I also submitted supplemental direct testimony with Aqua's Amended Application filed with the Commission on March 28, 2024 (Supplemental Exhibit W, Aqua Statement No. 3). In addition, I also submitted rebuttal testimony on behalf of Aqua on February 24, 2025 (Aqua Statement No. 3-R).

**Q. What is the purpose of your rejoinder testimony?**

A. The purpose of my rejoinder testimony is to respond to the surrebuttal testimony of the Office of Consumer Advocate ("OCA"), with respect to the current condition and operation of the wastewater assets (the "System") of the City of Beaver Falls ("City" or "Beaver Falls") and how Aqua's acquisition of the system will improve the condition and operation of the System.

**Q. Are you sponsoring any exhibits with your rejoinder testimony?**

A. No.

**Q. Please briefly summarize the positions of the other parties that you will address in your rejoinder testimony.**

A. I will respond to OCA Statement No. 1SR, the surrebuttal testimony of OCA witness Nicholas A. DeMarco. Despite being provided with clear evidence regarding the deteriorated and deteriorating conditions and operation of the System, which will worsen if the acquisition is not approved, OCA witness DeMarco continues to argue that there are not affirmative benefits to Aqua's acquisition of the System.

As an initial matter, however, I want to make clear that the scope of my rejoinder testimony is limited to responding to new issues or arguments raised by the other parties in their surrebuttal testimony. Much of the other parties' surrebuttal testimony repeats or restates the same arguments they raised in their direct testimony, and the Company's rebuttal testimony fully responded to those arguments. So, unless explicitly stated otherwise, my silence on a topic should not be understood to mean I am agreeing with the surrebuttal testimony of other witnesses.

## II. <u>RESPONSE TO SURREBUTTAL TESTIMONY OF OCA WITNESS DEMARCO</u>

**Q. Did OCA witness DeMarco address the condition and operations of the System as a part of his surrebuttal testimony?**

A. Yes.

**Q. Please summarize the arguments and positions made by OCA witness DeMarco in his surrebuttal testimony that you believe warrant an additional response.**

A. OCA witness DeMarco states that while the City's and Aqua's witnesses "seem to lean towards concluding that the system is 'troubled'…neither witness outright claims that the system is troubled." OCA St. 1SR, at p. 6. Mr. DeMarco then attempts to point to the Gannett Flemming Engineering Report, submitted as Exhibit D to the Application, to attempt to assert it demonstrates only one asset is in poor to fair condition. OCA St. 1SR, at pp. 6-7. He then insinuates that if the System is in poor condition, as the evidence presented in Aqua's supplemental direct and rebuttal testimony demonstrates, the utility valuation experts ("UVEs") should have made a downward adjustment to the valuation of the System or the proposed ratemaking rate base." OCA St. 1SR, at p. 7. OCA witness DeMarco then acknowledges the System's current operations "are not perfect" and that the City "does not do everything at the same level or to the same extent as…Aqua," but continues to dispute that Aqua's proposals to improve the System do not meet the legal standard required of the transaction. OCA St. 1SR, at p. 7. Finally, he continues attempt to diminish the benefits of Aqua's proposed cybersecurity improvements. OCA St. 1SR, at p. 8.

**Q. Do you agree with OCA witness DeMarco that the System is not troubled?**

A. No.

**Q. Please explain.**

A. OCA witness DeMarco is trying to draw a distinction between a "troubled" system and a system that faces significant and undisputed challenges and risks. He appears to believe that a wastewater system can only benefit from improvements made by an acquiring utility if it is "troubled" as this term is used in the context of an acquisition pursuant to 66 Pa.C.S. §§ 529 and/or 1327. OCA St. 1, at pp. 10-11; *see also* OCA St. 1SR, at p. 6. I am advised by counsel that Aqua is not acquiring this System pursuant to either of those statutory provisions and, therefore, whether the System is "troubled" under those provisions does not matter.

What does matter is that there are a number of specific conditions that either currently present, or will in the mid- to long-term present, significant risks to the safety and reliability of the service provided on the System. What does matter is that OCA witness DeMarco has not addressed, let alone rebutted, any of the specific System conditions that currently present risks to its operations and, if left unaddressed, will increase risks to the System's operations and the public in the future. What does matter is that the City has clearly indicated it cannot and will not be able to address these issues if the acquisition is not approved. And, what does matter is that Aqua has a clear, proactive plan to reduce or remove these risks if the acquisition is approved, which improve the safety and reliability of the service provided by the System.

Mr. DeMarco similarly does not take into consideration that the City has explained that they do not have the expertise or resources to address the deficiencies within the system. I disagree strongly with the testimony of Mr. DeMarco that the lack of "troubled"

status limits the severity of the needs of the System. While Mr. DeMarco challenges the costs of the acquisition and proactive plan that Aqua has submitted, he fails to quantify the costs that will be incurred by the customers if this acquisition is denied, and the System continues to fall into "troubled" status. I believe there is zero public benefit to the denial of the acquisition, and that such denial would have negative impacts for customers in the City and the Contributing Municipalities, both related to cost and safety, reliability and quality of service.

**Q. Why is it not appropriate to simply rely upon the Gannett Flemming Engineering Report, as OCA witness DeMarco suggests, to conclude the System does not face significant challenges?**

A. I have supplied testimony to document the continued disrepair of the System with specific equipment failures, deterioration of facilities, and continued operational shortfalls that continue to remain unaddressed. Mr. DeMarco's opinions, which ignore these conditions, are dangerous with respect to the operation of utilities as such opinions suggest that entire systems should be allowed to fall into complete and total disrepair before he would support an acquisition. Such reactive management and operation will actually require a significant capital investment in a short period of time to remedy the issues. What Mr. DeMarco should consider is that Aqua's testimony makes clear that the Company is prepared to start addressing this growing list of issues now, while they are still manageable. Such proactive management and operation will be more cost effective than waiting until the adverse conditions become more severe.

Early, proactive intervention allows for preventive maintenance, which can extend the System's lifespan, improve efficiency, and reduce long-term operational costs. By investing in improvements now, we can prevent minor problems from escalating into major failures that would require significantly more resources to fix. Moreover, addressing these deficiencies promptly mitigates the risk of catastrophic failures, which could lead to service interruptions, regulatory penalties, and higher costs for emergency repairs. Acting now minimizes these risks and ensures the continued safety and reliability of the System.

Timely, proactive improvements will also enhance service quality and reliability for customers, leading to higher satisfaction and potentially lower costs in the long run. This proactive approach aligns with industry best practices and expert recommendations, further supporting the case for early intervention.

**Q. What do you take from OCA witness DeMarco's statement that the System is "not perfect" and "does not do everything at the same level or to the same extent as…Aqua"?**

A. Again, OCA witness DeMarco appears to acknowledge the challenges faced by the System. While he attempts to downplay their significance, he recognizes that they exist. Furthermore, by stating that the City "does not do everything at the same level or to the same extent as…Aqua" OCA witness DeMarco appears to acknowledge that improvements to the System's condition and operations will occur under Aqua's ownership. Mr. DeMarco states that Aqua witnesses "highlight 'deficiencies' and label the system as 'reactive' if a smaller system like Beaver Falls does not do everything at the

same level or to the same extent as a large company like Aqua." Mr. DeMarco though is ignoring the fact that the reason Aqua labeled the System as 'reactive' is because it is exactly that. The City did not have a proactive capital plan to review and address the problems within the System, or plan for major capital repairs and replacements that would need to occur in the future. This is further supported by the rebuttal testimony of the City itself which indicated that the City only addresses issues within the System as the arise.

**Q. Do you agree with observations made by Mr. DeMarco that improvements to the System's condition and operations will occur under Aqua's ownership?**

A. Yes, and quickly. I feel strongly that this is a significant and positive benefit to all customers of the System, the City, and the surrounding communities that this System services.

**Q. Do you have any further response to OCA witness DeMarco's claims regarding the cybersecurity improvements that would occur under Aqua ownership?**

A. I stand by my supplemental direct and rebuttal testimony on the importance of the improvements to cybersecurity that Aqua will make in this system. **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**

However, I note that OCA witness DeMarco attempts to frame this issue as merely a decision by the city "not to avail itself of available tools." OCA St. No. 1SR, at p. 8. This comment is troubling. Mr. DeMarco misunderstands that the City cannot avail itself of these tools because, as explained in its rebuttal testimony, it lacks the resources (financial and otherwise) to do so. The City simply does not have the expertise or funding to implement the necessary cybersecurity measures to protect the system and customers of the system effectively. By contrast, Aqua has a clear and proactive plan to enhance the cybersecurity of the system, leveraging its resources and expertise to address these vulnerabilities. This will significantly reduce the risk of cyberattacks and improve the overall safety and reliability of the service provided to the public.

## III. CONCLUSION

**Q. Does this conclude your rejoinder testimony?**

A. Yes, it does.

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. A-2022-3033138**

# AQUA STATEMENT NO. 5-RJ

# REJOINDER TESTIMONY OF DYLAN W. D'ASCENDIS

**With Regard To:**
**Fair Market Value Appraisal Adjustments**

**March 7, 2025**

**TABLE OF CONTENTS**

I. INTRODUCTION, PURPOSE, AND SUMMARY ..... 1
II. CONCLUSION..... 3

## I. INTRODUCTION, PURPOSE, AND SUMMARY

**Q. Please state your name and business address.**

A. My name is Dylan W. D'Ascendis. My business address is My business address is 1820 Chapel Avenue W., Suite 300, Cherry Hill, NJ 08003.

**Q. By whom are you employed and in what capacity?**

A. I am employed by ScottMadden, Inc. as a Partner.

**Q. Are you the same Dylan W. D'Ascendis who submitted direct and rebuttal testimony in this proceeding?**

A. Yes. I submitted direct testimony with the Application filed with the Pennsylvania Public Utility Commission ("PUC" or the "Commission") on February 18, 2023 (Exhibit Y, Aqua Statement No. 5) and rebuttal testimony on February 24, 2025 (Aqua Statement No. 5-R).

**Q. What is the purpose of your rejoinder testimony?**

A. The purpose of my rejoinder testimony is to respond to substantive statements in the surrebuttal testimonies of Mr. David J. Garrett, witness for the Pennsylvania Office of Consumer Advocate ("OCA"), and Ms. Rebecca K. Forbes, witness for the Pennsylvania Office of Small Business Advocate ("OSBA"), as it relates to my determination of the Fair Market Value ("FMV") for the City of Beaver Falls' ("Beaver Falls") wastewater system (the "System"). I will only address statements that are new relative to Mr. Garrett's and Ms. Forbes' surrebuttal testimonies.

**Q. Please summarize your conclusions.**

A. In their surrebuttal testimonies, Mr. Garrett and Ms. Forbes do not provide any new evidence or support for their adjustments to my indicated value for Beaver Falls, nor do they respond to my critiques of their analysis. Most notably, neither Mr. Garrett nor Ms. Forbes refute the fact that approximately half of Beaver Falls' current and expected revenues are derived from outside the System's asset base and therefore, the indicated value of Beaver Falls using the Cost Approach would be significantly understated. Given the above, my rebuttal testimony stands as written.

**Q. Mr. Garrett claims that he has not seen an instance where an appraiser used an unequal weighting to the three valuation approaches that did not result in a higher overall valuation than had equal weightings been applied.[1] Please respond.**

A. In Docket No. A-2019-3015713 regarding the FMV of the Delaware County Regional Water Quality Control Authority ("DELCORA"), I applied unequal weightings to my three valuation methodologies which resulted in a lower implied value than if I weighted each approach equally as shown on Table 1, below:[2]

[1] OCA St. No. 2SR, at p. 4.
[2] Docket No. A-2019-3015713, Exhibit Y, Direct Testimony of Dylan W. D'Ascendis, at p. 13.

**Table 1: Conclusion of Value – DELCORA in Docket No. A-2019-3015713**[3]

| Valuation Approach | Indicated Value | Weight | Weighted Value |
|---|---|---|---|
| Cost | $292,413,993 | 45% | $131,586,297 |
| Market | $613,520,480 | 5% | $30,676,024 |
| Income | $291,863,370 | 50% | $145,931,685 |
| **Indicated Value** | | **100%** | **$308,194,006** |

If I applied equal weights to each approach, my indicated value for DELCORA would have been $399,265,648. Mr. Garrett's insinuation that the relative weighting of valuation methods only serves to increase the indicated value, is misplaced.

## II. CONCLUSION

**Q. Does this conclude your rejoinder testimony?**

A. Yes, it does.

[3] Docket No. A-2019-3015713, Exhibit Y, Direct Testimony of Dylan W. D'Ascendis, at 13.

# CITY OF BEAVER FALLS
# BEAVER FALLS, PENNSYLVANIA

REJOINDER TESTIMONY
OF
HAROLD WALKER, III

FAIR MARKET VALUE APPRAISAL

CITY OF BEAVER FALLS
WASTEWATER SYSTEM ASSETS

March 7, 2025

Prepared by:

GANNETT FLEMING

# TABLE OF CONTENTS


I. INTRODUCTION ..... 1

II. SCOPE OF TESTIMONY ..... 1

III. RESPONSE TO OCA WITNESS GARRETT ..... 1

IV. INCOME APPROACH ..... 2

V. SELECTED TRANSACTION METHOD ..... 3

VI. RECOMMENDED WEIGHTING ..... 5

VII. CONCLUSION ..... 6

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Harold Walker, III my business address is 1010 Adams Avenue, Audubon, Pennsylvania.

**Q. ARE YOU THE SAME HAROLD WALKER WHO PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?**

A. Yes.

## II. SCOPE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

A. Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") was engaged by the City of Beaver Falls ("City") to perform a fair market value appraisal ("FMV") of their wastewater system assets ("Wastewater System"). The purpose of my rejoinder testimony is to respond to and comment on the surrebuttal testimony submitted by the Office of Consumer Advocate's ("OCA") witness David J. Garrett, OCA Statement 2SR.

## III. RESPONSE TO OCA WITNESS GARRETT

**Q. WOULD YOU PLEASE IDENTIFY THE TOPICS THAT YOU WILL ADDRESS IN YOUR REJOINDER TESTIMONY?**

A. Yes. In his surrebuttal testimony, Mr. Garrett responds and comments on his adjustments to our Income Approach to valuation, his adjustments to our selected transaction method (Market Approach to valuation), and the weightings he applied to each valuation approach. My rejoinder testimony addresses Mr. Garrett's responses and comments that have not been addressed previously.

## IV. INCOME APPROACH

**Q. DO YOU HAVE ANY COMMENTS REGARDING PAGE 9 OF MR. GARRETT'S SURREBUTTAL TESTIMONY, WHERE HE DISCUSSES "A CONSTANT GROWTH DCF MODEL" IN HIS INCOME APPROACH ADJUSTMENT?**

A. Yes. Mr. Garrett is conflating two areas of finance that share similar names but relate to different subject matters. Mr. Garrett discusses a "constant growth DCF Model" which involves the cost of capital from a rate proceeding.[1] The cost of capital is a small part of Mr. Garrett's capitalization of earnings method used in his Income Approach adjustment. On page 9 of Mr. Garrett's surrebuttal testimony, he references a "DCF Model" (lines 14 - 21) which is the capitalization of earnings method used in his Income Approach. By doing so, he commingles "constant growth DCF Model" from a rate proceeding and a "DCF Model" (i.e., capitalization of earnings method) used in his Income Approach adjustment. The former relates to the cost of capital from a rate proceeding and the latter relates to FMV, two distinct areas of finance.

**Q. DO YOU HAVE ANY COMMENTS REGARDING PAGES 10 TO 12 OF MR. GARRETT'S SURREBUTTAL TESTIMONY, WHERE HE RESPONDS TO CRITICISMS REGARDING HIS ESTIMATED DISCOUNT RATE?**

A. Yes. The discount rate used in the Income Approach to valuation under a standard of value of FMV is not calculated in the manner used by Mr. Garrett because the discount rate used in the Income Approach to valuation is the **market rate as of the valuation date**.[2]

[1] The variables used in the constant growth DCF Model, in the context of the cost of capital, are growth of earnings or dividends per share, dividends per share and stock price.

2 National Association of Certified Valuators and Analysts, s.v. "Valuation Date" and "Weighted Average Cost of Capital (WACC)," *The International Glossary of Business Valuation Terms*

Further, Mr. Garrett's discount rate should be reflective of the municipality, rather than a hypothetical buyer, because the cash flow used by Mr. Garrett reflects current ownership, current rates, and current operations as a municipality.

## V. SELECTED TRANSACTION METHOD

**Q. ON PAGE 7 OF MR. GARRETT'S SURREBUTTAL TESTIMONY, HE STATES, "MR. WALKER DOES NOT PROVIDE ANY EVIDENCE AS TO WHY IT WOULD BE UNREASONABLE TO USE THE AVERAGE RATHER THAN MEDIAN CALCULATION FOR THE SELECTED TRANSACTION METHOD." IS MR. GARRETT'S CLAIM TRUE?**

A. No. Although averages are typically not used in appraisals, the real defect in Mr. Garrett's approach is what Mr. Garrett averaged, and what his average represents. Even though Mr. Garrett claims that he gave equal weight[3] to Capital Items and Demographics Items, his "average" is the result of giving 60% weight to Capital Items and 40% weight to Demographics Items based on his approach.[4] Further, since Mr. Garrett's Capital Items only includes 30 observations and his Demographics Items includes 40 observations, his "average" is the byproduct of 2% weight given to each Capital Item observation and only 1% weight given to each Demographics Item observation.[5] Accordingly, Mr. Garrett's "average" does not represent "equal weighting," but rather is heavily skewed with a preponderance of weight given Capital Items (i.e., a 2-to-1 distortion).

[3] OCA Statement No. 2SR, at pp. 6 and 8.
[4] *See* OCA Exhibit DJG-3; had Mr. Garrett given equal weighting to Capital Items and Demographics Items, his average would have been $25.4 million, and if he gave 25% weight to Capital Items and 75% weight to Demographics Items his average would have been $28.7 million.
[5] *See* OCA Exhibit DJG-3; had Mr. Garrett given equal weighting to each Capital Item and Demographics Item observation, his average would have been $26.4 million.

Additionally, since Mr. Garrett used an average of 20 selected transactions, his recommendation gave 60% weight to collection/distribution selected transactions, 30% weight to the integrated systems (excluding wholesale) transactions, and 10% weight to the integrated systems with wholesale transactions. Accordingly, Mr. Garrett's "average" is based primarily on transactions of entities that **did not provide wastewater treatment** (i.e., collection/distribution selected transactions) while the Wastewater System is an integrated system with wholesale service.[6]

The fatal flaw in Mr. Garrett's selected transaction method is **he did not account for the value of the Wastewater System's seven wholesale municipal customers that represent approximately 3,760 equivalent dwelling units ("EDU")** since Mr. Garrett's selected transaction method only included 3,259 domestic customers. Therefore, any debate regarding the merit, or lack thereof, of Mr. Garrett's "average" is moot because **he did not account for the value of 54% of the people served via wholesale service to the seven municipal customers**.[7] Consequently, Mr. Garrett's selected transaction method recommendation cannot be relied upon in these proceedings because Mr. Garrett's selected transaction method recommendation does not include the value of the Wastewater System's 3,760 ultimate wholesale customers.[8]

[6] *See* OCA Exhibit DJG-3; had Mr. Garrett given equal weighting to Capital Items and Demographics Items for just the integrated systems (excluding wholesale) transactions, his average would have been $30.1 million, if he gave 25% weight to Capital Items and 75% weight to Demographics Items his average would have been $30.1 million, and had he given equal weighting to each Capital Item and Demographics Item observation, his average would have been $37.1 million.

[7] The Wastewater System serves 7,019 ultimate customers, comprised of both 3,259 domestic and seven municipal customers that represent approximately 3,760 EDUs. Therefore, Mr. Garrett did not account for the value of 54% of the Wastewater System's customers (3,760 ÷ 7,019 = 54%).

[8] The Wastewater System provides 3,259 domestic customers both collection and treatment service and conveyance and treatment service to seven municipal customers representing 3,760 EDUs.

## VI. RECOMMENDED WEIGHTING

**Q. ON PAGE 4 OF MR. GARRETT'S SURREBUTTAL TESTIMONY, HE STATES, "I CANNOT RECALL A CASE IN WHICH AN APPRAISER APPLIED AN UNEQUAL WEIGHTING TO THE THREE VALUATION APPROACHES THAT DID NOT RESULT IN A HIGHER OVERALL VALUATION THAN HAD EQUAL WEIGHTINGS BEEN APPLIED. THIS PATTERN CONTINUES IN THIS CASE." IS MR. GARRETT'S ASSERTION TRUE?**

A. No. Mr. Garrett and I were involved in the Borough of Shenandoah (Docket No. A-2022-3034143) Section 1329 proceeding. Gannett Fleming **applied identical weightings** in the Borough of Shenandoah (Docket No. A-2022-3034143) Section 1329 proceeding in arriving at our estimate of the FMV conclusion as we have recommended for the Beaver Falls Wastewater System.[9] In the Borough of Shenandoah Section 1329 proceeding, **the Cost Approach produced the highest indication of value** yet was given the least weight of 25%.

Accordingly, Mr. Garrett's accusation of "bias," which he espouses on page 5 of his surrebuttal testimony (lines 1-3), is based on his faulty recollection and not facts. Our weighing given the Cost Approach reflects our concerns regarding the Cost Approach, and are consistent with the application of conclusion of value:

> The selection of and **reliance on appropriate methods and procedures depends on the judgment of the appraiser and not on any prescribed formula**. . .

[9] Gannett Fleming's FMV conclusion reflected a 25.0% weight for the Cost Approach, 37.5% weight for the Income Approach and 37.5% weight for the Market Approach in both the Borough of Shenandoah Section 1329 proceeding and the current proceeding.

> The appraiser must **use informed judgment when determining the relative weight to be accorded to indications of value reached** . . .[10]

## VII. CONCLUSION

**Q. IS THERE ANYTHING PRESENTED IN MR. GARRETT'S SURREBUTTAL TESTIMONY THAT WOULD RESULT IN YOU ALTERING YOUR FMV APPRAISAL OF THE WASTEWATER SYSTEM'S ASSETS?**

A. No, there was nothing presented in Mr. Garrett's surrebuttal testimony which would result in our changing our FMV appraisal of the Wastewater System.

**Q. DOES THAT CONCLUDE YOUR REJOINDER TESTIMONY?**

A. Yes, it does.

[10] American Society of Appraisers, *ASA Business Valuation Standards*, 2022, BVS-VI Reaching a Conclusion of Value, p. 14. (Emphasis added).

**VERIFICATION**

I, Rita F. Black, Director of Community Assistance Programs of Essential Utilities, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 9-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Rita F. Black
Director of Community Assistance Programs
Essential Utilities, Inc.

Dated: March 7, 2025

Docusign Envelope ID: 69BACEDD-11AC-4A63-92D9-C0CD169F1BC7

**VERIFICATION**

I, Mark J. Bubel, Sr., Project Engineer III of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 2 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DocuSigned by:
Mark Bubel
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Mark J. Bubel, Sr.
Project Engineer III
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

Docusign Envelope ID: 69BACEDD-11AC-4A63-92D9-C0CD169F1BC7

**VERIFICATION**

I, Mark J. Bubel, Sr., Project Engineer III of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 2-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DocuSigned by:
Mark Bubel
0AB915AD34C248A...

Mark J. Bubel, Sr.
Project Engineer III
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 4 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 4-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025

## VERIFICATION

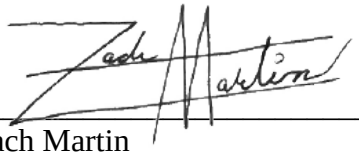
I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Supplemental Direct Testimony, Aqua Statement No. 4-SUPP in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025

**VERIFICATION**

I, Zach Martin, Western Pennsylvania Area Manager of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 3 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

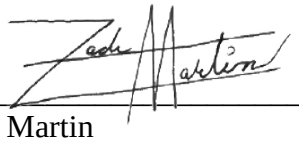


Zach Martin
Western Pennsylvania Area Manager
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, Zach Martin, Western Pennsylvania Area Manager of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 3-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

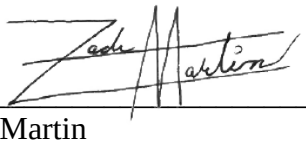


Zach Martin
Western Pennsylvania Area Manager
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, Zach Martin, Western Pennsylvania Area Manager of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Rejoinder Testimony, Aqua Statement No. 3-RJ in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

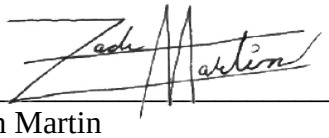


Zach Martin
Western Pennsylvania Area Manager
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, Zach Martin, Western Pennsylvania Area Manager of Aqua Pennsylvania, Inc., hereby state that the facts set forth in my Supplemental Direct Testimony, Aqua Statement No. 3-SUPP in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).



Zach Martin
Western Pennsylvania Area Manager
Aqua Pennsylvania, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, William C. Packer, Vice President, Regulatory Accounting & Regional Controller of Essential Utilities, Inc., hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 1 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

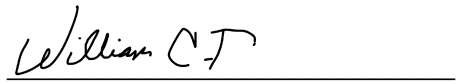


William C. Packer
Vice President, Regulatory Accounting
& Regional Controller
Essential Utilities, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, William C. Packer, Vice President, Regulatory Accounting & Regional Controller of Essential Utilities, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 1-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).



William C. Packer
Vice President, Regulatory Accounting
& Regional Controller
Essential Utilities, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, William C. Packer, Vice President, Regulatory Accounting & Regional Controller of Essential Utilities, Inc., hereby state that the facts set forth in my Rejoinder Testimony, Aqua Statement No. 1-RJ in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

William C. Packer
Vice President, Regulatory Accounting
& Regional Controller
Essential Utilities, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, William C. Packer, Vice President, Regulatory Accounting & Regional Controller of Essential Utilities, Inc., hereby state that the facts set forth in my Supplemental Direct Testimony, Aqua Statement No. 1-SUPP in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

William C. Packer
Vice President, Regulatory Accounting
& Regional Controller
Essential Utilities, Inc.

Dated: March 7, 2025

**VERIFICATION**

I, Harold Walker III, Manager, Financial Studies, of Gannett Fleming Valuation and Rate Consultants, LLC, hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 6 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Harold Walker III
Manager, Financial Studies
Gannett Fleming Valuation and
Rate Consultants, LLC

Dated: March 7, 2025

**VERIFICATION**

I, Harold Walker III, Manager, Financial Studies, of Gannett Fleming Valuation and Rate Consultants, LLC, hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 6-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Harold Walker III
Manager, Financial Studies
Gannett Fleming Valuation and
Rate Consultants, LLC

Dated: March 7, 2025

**VERIFICATION**

I, Harold Walker III, Manager, Financial Studies, of Gannett Fleming Valuation and Rate Consultants, LLC, hereby state that the facts set forth in my Rejoinder Testimony, Aqua Statement No. 6-RJ in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Harold Walker III
Manager, Financial Studies
Gannett Fleming Valuation and
Rate Consultants, LLC

Dated: March 7, 2025

**VERIFICATION**

I, Sandra Wilkins, Chief Financial Officer of the City of Beaver Falls, hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 8 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Sandra Wilkins

Sandra Wilkins
Chief Financial Officer
City of Beaver Falls

Dated: March 7, 2025

**VERIFICATION**

I, Sandra Wilkins, Chief Financial Officer of the City of Beaver Falls, hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 8-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Sandra Wilkins

Sandra Wilkins
Chief Financial Officer
City of Beaver Falls

Dated: March 7, 2025

**VERIFICATION**

I, Dylan W. D'Ascendis, Partner of ScottMadden, Inc., hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 5 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dylan W. D'Ascendis
Partner
ScottMadden, Inc.

Dated: March 7, 2025

## VERIFICATION

I, Dylan W. D'Ascendis, Partner of ScottMadden, Inc., hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 5-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dylan W. D'Ascendis
Partner
ScottMadden, Inc.

Dated: March 7, 2025

## VERIFICATION

I, Dylan W. D'Ascendis, Partner of ScottMadden, Inc., hereby state that the facts set forth in my Rejoinder Testimony, Aqua Statement No. 5-RJ in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dylan W. D'Ascendis
Partner
ScottMadden, Inc.

Dated: March 7, 2025

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Direct Testimony, Aqua Statement No. 4 in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Rebuttal Testimony, Aqua Statement No. 4-R in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025

## VERIFICATION

I, Charles R. Jones, Jr., City Manager of the City of Beaver Falls, hereby state that the facts set forth in my Supplemental Direct Testimony, Aqua Statement No. 4-SUPP in the matter at PaPUC Docket No. A-2022-3033138, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Charles R. Jones, Jr.
City Manager
City of Beaver Falls

Dated: March 7, 2025